Telecom Notice of Consultation CRTC 2023-89

Call for comments –Broadband Fund policy review

Intervention of the First Mile Connectivity Consortium

July 21, 2023

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Executive Summary

Introduction

E1.   Since 2012, the First Mile Connectivity Consortium (FMCC) has participated in CRTC proceedings to demonstrate the essential role that Indigenous and non-profit telecom providers play in providing telecommunications in rural, remote, Northern and Indigenous regions. FMCC has filed extensive evidence regarding the barriers faced by such organizations.

E2.   We welcome the Commission's increasing recognition of and regulatory support for telecommunications infrastructure and services in rural, remote, Northern and Indigenous regions.

E3.   In the following sections, after general comments, we submit specific responses to the CRTC's questions in Appendices 1 and 2 of the Notice of Consultation. We stress that it is challenging for the FMCC, a small, largely volunteer-run association, to track details of the various proceedings and consultations at play. Therefore, we note the importance of referring to key points we raised in other proceedings that are relevant here.

E4.   We recommended creating a rural fund (proposed as the 'Northern Infrastructure and Services Fund) in our interventions in CRTC 2015-134 (Review of Basic Telecommunications Services). We also participated in CRTC 2017-112 (Development of the Commission's Broadband Funding Regime), and CRTC 2019-45 (Call for comments – Application Guide for the Broadband Fund).

E5.   We are very pleased that the Commission did introduce a fund in many ways similar to what we proposed in CRTC 2015-134, and incorporated some of our recommendations in 2017-112 and 2019-45. However, we are concerned that several of these recommendations were not adopted. We outline these specific recommendations, provide our analysis of their adoption in the most recent version of the Broadband Fund Guide, and update our suggestions to fit the context of these present proceedings.

Need for more Indigenous Participation and Successful Applications

E6.   We are concerned that the majority of funding to date has been awarded to major incumbents[1], with few successful Indigenous providers. An analysis of data provided by the CRTC shows that 43.2% of the funding committed through 2022 went to Bell (including

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[1] Data from https://crtc.gc.ca/eng/internet/select.htm. Commitments for satellite-dependent communities are not shown on the CRTC website.

Northwestel) and TELUS, while 50% went to all major incumbents (Bell, TELUS, Rogers, and Shaw (now owned by Rogers). See tables sorted by company/organization and amount committed in Attachment 1.

E7.   The recent report from the Auditor General of Canada on *Connectivity in Rural and Remote Areas* (tabled March 27, 2023) also found that only a very low percentage of available funds is being spent, that application approval timelines were significantly longer than originally estimated (22 months on average compared to the estimated 10 months), and that the CRTC did not notify applicants for applications that were on hold, not selected or deemed ineligible.[2]

E8.   Since the CRTC first established the Broadband Fund, only one FMCC member has received funding. Given their experience and expertise in deploying and operating infrastructure and services in rural/remote regions of Canada, we expected that more FMCC member organizations would have secured support from the Broadband Fund.

E9.   This is not for lack of trying. We note that several other FMCC members applied to the Fund. We discuss the barriers they experienced in our response to Q46.

E10.   FMCC members have been successful in securing funding from other government programs. In particular, FMCC members point to Indigenous Services Canada's First Nations Infrastructure Fund (FNIF) as a beneficial model for projects led by Indigenous and non-profit organizations. In our comments below we point to aspects of the FNIF that would be helpful to consider when developing the Indigenous Funding Stream / Indigenous Broadband Fund.

Barriers to Deployment

E11.   When reviewing issues in these proceedings, the Commission should take into consideration barriers to deployment experienced by small, Indigenous and non-profit providers. The FMCC has filed extensive comments highlighting these barriers. In those parallel proceedings we provided recommendations for regulatory measures that aim to address those issues.

Governance

E12.   We recommend reforming the governance structure of the Fund to include representatives from affected areas, including rural, remote, Northern and Indigenous regions of Canada, and addition of expertise in Northern and Indigenous contexts and requirements.

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[2] See: https://www.oag-bvg.gc.ca/internet/English/parl_oag_202303_02_e_44205.html

Spectrum Sovereignty and Mobile Networks

E13.   We note that this proceeding raises issues under ISED's purview, such as the deployment of mobile wireless services and infrastructure (which are tied to the availability of spectrum licenses). We refer the Commission to comments filed by the FMCC in ISED Consultation SPB-005-22 (Consultation on the Spectrum Outlook 2022 to 2026) and ISED Consultation DGSO-001-23, in which we stress the importance of spectrum sovereignty in the deployment of mobile networks in Indigenous territories across Canada.

Appendix 1: List of other proposed modifications to the Broadband Fund policy

Appendix 2: Responses to Selected Questions

General Response to Advancing Reconciliation: Proposal for an Indigenous Funding Stream

E14.   Substantive reconciliation is supported through enabling the self-determined development goals of Indigenous Communities, including through their ownership and control of telecommunications infrastructure and services.

E15.   In our comments to CRTC 2022-147, we registered our support for the Commission's role in ensuring that principles of equity, substantive equality, and economic reconciliation are reflected in the outcomes of regulatory proceedings. These principles provide useful benchmarks for the Commission to use to assess the outcomes of Broadband Fund projects.

E16.   To date, the Broadband Fund has failed to support the self-determined development goals of Indigenous communities with respect to accessibility, affordability, and quality of high-speed internet and mobile cellular connectivity. We present suggestions on how the revised Indigenous Funding Stream / Indigenous Broadband Fund might address these issues.

Governance of Indigenous Funding Stream / Indigenous Broadband Fund

E17.   It is important that the Indigenous Funding Stream (or a separate Indigenous Broadband Fund) substantively involves Indigenous peoples in overall governance and administration. As we argued in an Undertaking filed in CRTC 2022-147, we believe that the requirement to align Canadian laws with UNDRIP applies to the *Telecommunications Act*. Indigenous peoples are rights holders not stakeholders. Support for the application of these principles can be found in statements issued by mandated Indigenous organizations, such as through resolutions issued by the AFN and Tribal Councils, as well as through mandate letters of Ministers and the CRTC Policy Direction.

Responses to Specific Questions

E18.   Q1 - There are several types of social and/or economic benefits that can be derived from provision of reliable and affordable telecommunications services in Indigenous communities. Northern and Indigenous populations must have opportunities to utilize digital communications infrastructure and services not just as a facilitator of economic development in other industries and services, but also as a locally owned and managed resource in and of itself. Economic benefits can also be enhanced by requirements to include training, local jobs, and local management in funding criteria. We discuss these requirements in responses to Q9, Q18 and Q20-22. Another crucial social and economic benefit involves improved community climate, disaster and emergency preparedness, management and post-event response through resilient infrastructure.

E19.   Q2a - The Commission and/or governing body of the Indigenous Funding Stream/ Indigenous Broadband Fund can draw from prior interventions and examples from Indigenous and public/consumer interest groups to assess economic and social benefits. Specific indicators should be developed through an inclusive and transparent process. These indicators can be used to monitor and assess the benefits of projects providing rural/remote broadband. Additional funding could be offered to providers that propose strategies to enhance the benefits of their networks.

E20.   Q2b - This question is best addressed through engagement with relevant experts such as leaders of Indigenous organizations, Indigenous-mandated organizations, researchers focused on issues of Indigenous politics, and/or government staff (for example, from Indigenous and Northern Affairs Canada and Territorial governments). For example, the CRTC might consider the classes of eligible recipients used by Indigenous Services Canada's First Nations Infrastructure Fund (including for projects located off-reserve).

E21.   Q3 - No, the existing criteria are not appropriate. They should be adjusted to fit the specific contexts and requirements of Indigenous projects, and projects that provide economic and social benefits to Indigenous communities. We address this question in part through our responses to the proposals outlined in Appendix 1. As well, refer to our responses to the Commission's questions about consultation and engagement (Q4; Q20-22) and our comments on training and workforce development (Q18).

E22.   The Commission, in conjunction with the governing body of the Indigenous Funding Stream, should prioritize Indigenous and non-profit service providers for access to the Indigenous-specific funding stream. If a non-Indigenous service provider applies to this funding stream, they must include an Indigenous partner as a partner in the initiative. As well, there

should be an option for the Indigenous partner to take over the operations of the network and obtain an equity interest after a specified period.

E23.   Q4 - The CRTC should do more direct outreach to people living in rural/remote, Northern and Indigenous communities in proceedings focused on issues that affect them. We encourage the Commission to continue providing multiple avenues of participation and offering information in Indigenous languages. This includes continuing to encourage and support the participation of Intermediary Organizations that act as crucial mediators between local residents and government agencies. Staff who can answer questions regarding applications to the Broadband Fund would improve accessibility and understanding of the application requirements and process. More generally, the CRTC can play an important role in institutionalizing substantial Indigenous participation in telecommunications policy and regulation.

E24.   Q5 - Yes, but operational funding should be provided only for Indigenous and non-profit providers. As discussed in detail in our responses to Q9, Q12 and Q18, this should include support for training and workforce development, annual maintenance costs, funding for network resiliency and redundancy, and other required costs.

E25.   Q6 - We discuss specific categories of operating costs in Q9 below. Subsidies to reduce prices for users should be provided directly to *consumers*, not as subsidies to TSPs. In our Interventions to CRTC 2022-147, we provided extensive comments on subsidies, we submitted that an open, portable subsidy for Internet services should be provided to all low-income subscribers in the North. We think the most appropriate way to identify low-income households is to use other eligibility data such as through provincial and territorial Income Assistance Programs. This approach has been used in the U.S. through the Lifeline Program and the more recent Affordable Connectivity Program. Operational subsidies to providers should be examined in the context of modifying or replacing the High Cost Fund, and considered in a separate proceeding.

E26.   Q7 - As discussed in Q6, we believe there should be subsidies for low-income consumers and coverage of specific operational costs for Indigenous and non-profit providers. In our Intervention to CRTC 2022-147 we stated that it is important that subsidy programs define standards of service. Any such standards should be updated to fit the current BSO standards in Canada.

E27.   Q8 - We reserve the right to comment on this question in future stages of these proceedings.

E28.   Q9 - FMCC has submitted comments on this topic in our response to CRTC 2019-45 (section E19, E20 and Appendix 2). We refer the Commission to those responses as they apply

here. We note that Indigenous Services Canada's FNIF includes operational costs that we believe are also relevant. We also submit a list of other operational costs: Wholesale Transport Bandwidth; Insurance and Risk Mitigation; Transportation and Shipping Costs for Replacement Equipment; Funding to Train and Develop Local Technicians (and other employment categories), as well as their staffing costs; Inflation Costs; Satellite Transport Costs; Strategic Planning and Network Development; and Support for Project Administration.

E29.   Q10 - We reserve the right to comment on this question in future stages of these proceedings.

E30.   Q11 - We reserve the right to comment on this question in future stages of these proceedings.

E31.   Q12 - Generally, FMCC agrees with this technical definition of resiliency, with the understanding that systems resilience depends on robustness, flexibility, integration, resourcefulness, and inclusivity. Regarding redundancy, infrastructural outages can have major impacts on communities. FMCC members and colleagues have demonstrated how they can address challenges of resiliency due to the limited availability of regional and local technicians in areas impacted by recent flooding and forest fires. The work of Indigenous service providers helps fill gaps and provide resilient networks and services in these regions.

E32.   Q13 - The CRTC should prioritize remote communities that have fewer redundant connections, suffer longer wait times for technicians to arrive, and have less infrastructure capacity. We note that these regions, many of which are populated by Indigenous peoples, are often vulnerable to the impacts of climate change. Given these circumstances, the Broadband Fund should focus on regional transport redundancy, and any funding program for resiliency projects should prioritize Indigenous and non-profit providers based in and operating from affected regions and communities.

E33.   Q14 - No – the CRTC should coordinate with Indigenous organizations, governments, emergency services, and telecommunications service providers to take inventory of existing assets, and their level of resiliency (i.e., a telecommunications resiliency assessment). Indigenous service providers are well-placed to provide resiliency services in the rural/remote regions they are based in and operate from.

E34.   Q15 - Indigenous or non-profit providers that currently or plan to operate in a specific area should be prioritized over large commercial telecommunications providers for resiliency projects. As noted above, since these providers are based in and operate out of impacted regions and communities, they have a higher likelihood of hiring and maintaining local technicians. They have a demonstrated record of addressing challenges and supporting resiliency and have a strong

localized understanding of climate and disaster risks. Resiliency projects owned and operated by Indigenous parties offer an excellent opportunity for Indigenous groups to gain experience / ownership of infrastructure and services, and can scale up capacity over time.

E35.   Q16 - The CRTC should conduct a network resiliency assessment in rural and remote and Indigenous communities. This assessment will identify areas, projects, and activities that should be prioritized.

E36.   Q17 - See our response to Q12 above for our perspective on resiliency and redundancy.

E37.   Q18 - We submit the following lists of gaps in connectivity funding: Costs of Consultation; Training and Workforce Development; Underserved Communities; and Remote Roads. Indigenous and non-profit service providers require funding for network managers and administrators, including cyber-security staff. The CRTC can also coordinate with other sectors to support resilience through basic network repair and technical training. In Northern remote regions of provinces and Nunavut, the Commission should prioritize upgrading speed and service reliability. We note the CRTC needs better data on speed and QoS than may be available from incumbents serving remote regions, and emphasize the need for funding to support independent data collection. Finally, Mobile coverage should be extended along roads serving remote communities, where drivers are now unable to summon help in emergencies, such as accidents, road outages, delays during bad weather, etc. (See also our response to Q23).

E38.   Q19 - We refer the Commission to our response to Q9.

E39.   Q20 - Meaningful consultation with Indigenous communities is critical and should be mandatory for entities requesting broadband funding. Applicants must demonstrate they have adequately engaged with communities in both initial planning and application stages, and provided opportunities for economic and social community benefits.

E40.   Requirements for meaningful engagement and consultation must be explicit and publicly posted on the Broadband Fund website. Applicants should follow a transparent set of guidelines and information requirements. They should include in-person meetings with leaders of affected communities (or videoconferences if necessary and feasible) and a specific agenda with opportunities for clarification on technical issues, access to land, or other issues, including those related to local economic development opportunities related to infrastructure and service delivery.

E41.   The CRTC should prepare a resource document for communities similar to the BEAD Tribal Engagement Guide, and should also require that a report stating when and where consultations took place, who participated, and what issues were discussed and which required

follow-up, with a copy provided to the community as well as to the CRTC.Along with the CRTC's engagement guidelines, we point to those developed by Indigenous peoples themselves.

E42.   ATRIS may be a useful source of data and information regarding the location of Indigenous communities, contact information, and associated treaty agreements, land claims, etc. It also provides helpful information on issues related to consultations. However, we stress the need for applicants to also engage in direct communication with Indigenous communities in their consultation and engagement activities.

E43.   Q21 - the Commission and/or third parties must monitor consultation requirements to determine whether they have been carried out appropriately and substantively. Applicants should provide a summary of who was consulted, how the consultation was carried out, and relevant findings to the Commission and to the organizations or communities consulted.

E44.   Q22 - The Commission must require more transparency in how applicants engage with Indigenous communities.

E45.   Q23 - No, the Commission should not change the name of the Broadband Fund. We recognize the need for additional investment in rural and remote mobile services, but have several reservations. Mobile wireless projects represent different markets and involve different infrastructure considerations than fixed broadband (such as the requirement and use of spectrum licenses). Mobile/cellular broadband, which requires a spectrum license, limits the ability of some organizations to provide services, therefore blocking innovation and competition. Spectrum sovereignty is a major consideration here. We refer to our Introductory Comments, which summarize recent submissions to ISED regarding spectrum sovereignty.

E46.   We recognize that spectrum management and allocations are the responsibility of ISED, but note the constraints faced by small and Indigenous providers who want to access spectrum. There are existing examples of Indigenous entities such as K-Net Mobile and Eeyou Mobility that utilize spectrum to deliver services. These examples demonstrate innovative uses of spectrum by Indigenous providers to serve their own communities. The Broadband Fund should recognize the need to ensure a more inclusive approach to the allocation of spectrum licenses by ISED that reflects the diversity of providers and prioritizes Indigenous providers.

E47.   Q24 - As noted above in our response to Q23, we think that additional funding or a separate funding window will be required to meet the needs for upgrades to mobile coverage in rural and remote regions. However, if funding is provided to provide rural and remote road coverage, it should include operational costs similar to those we identify in response to Q9.

E48.   Q25 - Applicants to the Broadband Fund should demonstrate a clear understanding of the needs of remote and rural communities, and the terrain and climactic conditions by including the following data.

E49.   Q26 - Satellite systems play an essential role in connecting rural and remote communities. We agree with CRTC's point that "Given the limitations of satellite technology and the capacity currently available to service providers using the community aggregator model, households in these communities do not have universal service objective-level plans available through their local service providers" (NOC, CRTC 2023-89, para 22). FMCC member organizations have experienced this challenge. Instead of relying on major incumbents such as Northwestel/Bell, Indigenous ISPs could operate LEO satellite services themselves. Based on the current status of satellite technologies and pricing of satellite connectivity, we recommend that the Broadband Fund cover 100% of satellite costs for Indigenous and non-profit providers operating in satellite-dependent communities.

E50.   Q27 - See our response to Q26 above. Operational funding should be provided to Indigenous and non-profit service providers in satellite-dependent communities. Since these organizations operate on a not-for-profit basis, they could then lower the cost of service to their subscribers. We also propose that the Commission consider treating satellite capacity as an upfront cost, to allow the funded provider to lease several years of capacity at one time (and likely at a lower than annual rate).

E51.   Q28 - Affordability remains a critical issue for Northern consumers, as do these metrics. In our Intervention to CRTC 2022-147 we submitted that the Commission should establish an "affordability standard" and provide guidance on what constitutes an affordable retail telecommunications service in the Far North. The CRTC should subsidize broadband service for households in remote First Nations with limited family income. Factors used in assessing this standard should include income levels, family sizes, and monthly charges including ancillary fees (e.g., data overages; mandatory landline telephone services). Consumer affordability should be measured according to 'baskets' of services and indexed to household spending, cost of living, and employment and income levels. Pricing of services should be monitored – including the affordability of transport services purchased by local providers, as well as of retail services purchased by individual consumers. This monitoring of prices should include all relevant costs, including co-location and access fees, etc.

E52.   Q29 – Q32 - We reserve the right to comment on these questions in future stages of these proceedings.

E53.	Q33a - The glossary used in the Connect to Innovate program is a useful resource with respect to this question.[3] A Point of Presence (PoP) is a demarcation point between communicating entities. In the context of the Broadband Fund, a single main distribution point with a direct connection to the transport network in a community allows users to connect to the Internet with their Internet Service Provider (ISP). A secondary distribution point in the same community connected to the main distribution point is an Access Point, not a Point of Presence.

E54.	Q33b - Yes, in connecting of the [2] two transport networks together, each may have active equipment to regenerate and/or boost the signal.

E55.	Q33c - The PoP contains active equipment and connects the transport network to the end user or an Access Point(s) that connects to the end user.

E56.	Q34 - The demarcation point is the location at which the transport network ends and connects with the access network on-premise cabling. In the case of a transport network where the fibre cable from one owner connects to the fibre cable with a different owner, a demarcation point is the dividing line between the [2] two transport segments if different parties are responsible for the different parts of the same transport network.

E57.	Q35 - We reserve the right to comment on this question in future stages of these proceedings.

E58.	Q36 - No; for example, a community may have installed a local fibre network without sufficient transport capacity to meet projected needs. Also, the cost of accessing the existing transport network may be prohibitive to provide the level of service that the community needs.

E59.	Q37 - Yes, it should be considered, but it should not be a determining factor for eligibility.
E60.	Saturation of capacity should be considered in an application to upgrade or overbuild transport networks.

E61.	Q38 - We reserve the right to comment on this question in future stages of these proceedings.

E62.	Q39 - The location of spare equipment varies among projects. As we noted in our response to Q9 above, shipping costs to remote communities can vary greatly.

E63.	Q40 - The Commission should allow Indigenous and non-profit provides up to $75,000 per year for the first 5 years of a project to purchase spare equipment to store locally in rural,

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[3]See: https://ised-isde.canada.ca/site/connect-to-innovate/en/glossary-connect-innovate

remote, Indigenous and Northern communities they service. This amount should be scalable based on the geographic reach of the project and number of communities served.

E64.   Q41-Q45 – We reserve the right to comment on these questions in future stages of these proceedings.

E65.   Q46 - Small Indigenous and non-profit providers have limited resources and experience in completing CRTC funding applications. The level of business and financial detail required is significant for smaller projects and Indigenous and non-profit organizations. There should be a funding level threshold that triggers the requirement of lengthy supporting documentation. Having access to staff who can answer questions would improve accessibility and understanding of application files. Mapping continues to be improved, however in many cases it remains inaccurate in the remote North of Canada and Ontario; inaccuracies lead to ineligibility of some projects. A site visit by a CRTC representative at the outset of the application process would go a long way towards rectifying mapping anomalies.

E66.   Q47-48 - We reserve the right to comment on these questions in future stages of these proceedings.

Introduction

1.   The First Mile Connectivity Consortium (FMCC) is an incorporated independent not-for-profit national association. Our members are First Nations Internet service providers known as "community/regional intermediary organizations." Our associate members are university and private sector researchers and others interested in Indigenous and community communications and telecommunication services for the public good. Our work focuses on innovative solutions to digital infrastructure and services with and in rural and remote regions and communities across Canada. More details about our members and activities are available: http://firstmile.ca

2.   Since 2012, we have participated in CRTC proceedings to point out that digital infrastructures and services are essential for the social, cultural, and economic development of rural and remote Indigenous communities and their residents. For over 10 years we have stressed the **essential** role that Indigenous and non-profit telecom providers play in providing telecommunications in these communities and regions.

3.   Unlike large commercial Telecommunication Service Providers (TSPs), non-profit and Indigenous organizations exist to serve the regions and communities they are located in. FMCC member organizations represent an alternative approach to telecommunications deployment and operations. Their work foregrounds sustainable local and regional enterprise development in rural and remote regions, including the Far North and the Northern regions of provinces.

4.   We welcome the Commission's increasing recognition of and regulatory support for telecommunications infrastructure and services in rural, remote, Northern and Indigenous regions.

5.   In the following sections, after general comments, we submit specific responses to the CRTC's questions. We stress that it is challenging for the FMCC, a small, largely volunteer-run association, to track details of the various proceedings and consultations at play. Therefore, we note the importance of referring to key points we raised in other proceedings that are relevant here.

6.   We recommended creating a rural fund (proposed as the 'Northern Infrastructure and Services Fund)in our interventions in CRTC 2015-134 (Review of Basic Telecommunications Services). We also participated in CRTC 2017-112 (Development of the Commission's Broadband Funding Regime), and CRTC 2019-45 (Call for comments – Application Guide for the Broadband Fund).

7.   We are very pleased that the Commission did introduce a fund in many ways similar to what we proposed in CRTC 2015-134. However, we are concerned that several of these recommendations were not adopted.

8.   For example, the following elements that we proposed should be included in the fund have not been addressed to date:

- Focus on northern/remote regions (including northern parts of the provinces as well as the northern territories);
- Focus on community providers, particularly Indigenous regional community intermediary organizations;
- A governance structure that includes representatives from these regions and communities;
- A funding mechanism that provides ongoing operating support where needed, and not simply one-time infrastructure funding;
- Inclusion of funding for digital literacy and training local residents in IT skills needed by providers and other organizations; and
- Inclusion of funding for monitoring of service quality in remote/isolated communities.[4]

9.   Subsequently, we participated in CRTC 2017-112: Development of the Commission's broadband funding regime. The key criteria we proposed includes topics examined in the current proceedings that have not been included in the Broadband Fund's initial criteria. For example:

Sustainable Community Benefits
Proposals [should] demonstrate sustainable community and economic development benefits such as: the extent of community ownership and control of local broadband infrastructure; local employment and jobs created; environmentally-friendly practices and local materials used to build the infrastructure where possible.

Sustainability: The Need for Operational Subsidies
…we note that *operating subsidies may also be required in some regions to complement this infrastructure funding* to ensure that the broadband services resulting from this investment are sustainable (emphasis added).[5]

10. These suggestions are now listed as topics in this proceeding.

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[4] FMCC, "Final Comments", CRTC 2015-134, para 113.
[5]See FMCC Intervention, 2017-112, para 12.

11.   Finally, in CRTC 2019-45: Review of the [draft] Application Guide for the Broadband Fund, we proposed the following changes (*our comments on whether these have been incorporated in the most recent version of the Guide are noted in italics*):

- **Scope of applications:** requirements should vary depending on the status of the organization (e.g., corporation vs. non-profit).
    - o   *There is still no mention of the status of the organization.*

- **Allow in-kind contributions in lieu of cash (for small non-profit and Indigenous providers).** This is to address the limited cash reserves available to smaller and non-profit organizations.
    - o   *The current Guide still requires all applications to invest "more than a nominal amount" and states that "past or existing investments and in-kind contributions will not count towards meeting this criteria".*

- **Language in community consultation requirements must specify appropriate community spokespersons/representatives and consultation requirements.** The term "attempt to consult" should be removed, as should mention of a "market study" as a means of consultation, since both imply that applicants would not have to actual visit a community.
    - o   *The current Guide still includes the term "attempt to consult". It does not include mention of a "market study". However, consultation can still be carried out through a telephone call, virtual meeting, and most problematically, a "notification letter". The Guide does note that: "Applicants are reminded that, in some cases, contact by email will not be appropriate".*

- **Consultation should be framed as an ongoing process rather than a one-time activity held at the start of a project.** This was proposed to ensure that projects support long-term social and economic benefits for communities.
    - o   *This suggestion was adopted. The description of consultation processes states: "Meaningful consultation entails approaching communities early, openly, and respectfully. Communities should have the opportunity to communicate specific priorities and identify any concerns associated with the project". There is language specifying that projects with ongoing benefits to communities will be viewed favourably.*
- **Consultations should include rights and language from** *Aboriginal Consultation and Accommodation - Updated Guidelines for Federal Officials to Fulfill the Duty to Consult* **(March 2011).**We maintain this suggestion is still important; however, it should be updated to address the current context of UNDRIP requirements as well as

consultation protocols and processes developed by and for Indigenous Peoples themselves. We provide updated language in our responses to Q20-Q22.

- o *The Guide includes language regarding Aboriginal and treaty rights, and refers to the Aboriginal and Treaty Rights Information System (ATRIS). See Q20 for our comments on the ATRIS system. We stress it should also include language referring UNDRIP and associated legislation.*

- **Specific language concerning Indigenous land and treaty rights and procedures, and rights-of-way, should be included in the Broadband Fund**.
  - o *The Guide does include specific language about Aboriginal and treaty rights but there is no mention of rights-of-way.*

- **Communities impacted by projects supported by the Broadband Fund should receive a Broadband Fund Overview Document**. This document should provide an overview of the proposed project as well as issues and questions that communities should be aware of in their negotiations with applicants. It is essential that the Commission moves beyond outreach to communities, to provide informational resources necessary in understanding the potential risks, benefits and opportunities of infrastructure projects supported by the Broadband Fund.
  - o *There is no mention of an overview document for communities. However, the Guide states that applicants must notify the community about project details. It includes the following language: "Applicants should, at a minimum (a) identify the proposed project and provide key project details, (b) invite community representatives to discuss the proposed project, (c) request information regarding potentially adversely impacted Aboriginal or treaty rights, and (d) provide the CRTC's contact information so that applicants can directly contact the CRTC if they wish to do so". notification to the community of the proposed project and an invitation for the community to communicate any comments or concerns it may have to the applicant and the CRTC."*

- **When considering affordability among different areas of Canada, the Guide should include additional cities in provinces to allow comparability for projects proposed for remote regions of the provinces.**
  - o *This is not specifically stated in the Guide.*

- **Applicants should not be evaluated solely on the number of households served, particularly in rural, remote, Northern and Indigenous regions and communities** with diverse population densities, geographical features, topographies, and access to existing infrastructure, anchor institutions, and households (including household size).

- o *The Guide now considers various factors, including number of communities and households that could be served, but also technical merit, financial viability, anchor institutions, and open access service offerings.*

- **Small Indigenous and non-profit providers should receive funds as a contribution agreement rather than a reimbursement of costs.** This is because these organizations lack access to capital required to make purchases in advance. This results in unnecessary barriers to funding that disproportionately impact small and medium-size Indigenous and non-profit providers.
  - o *The Guide does not provide applicants with access to up-front funding.*

- **The deadline for applications should be set at 6 months or more after a call is announced.** This is because small Indigenous and non-profit organizations lack access to staffing capacity to respond quickly to funding calls.
  - o *In the first two calls, 2019 & 2021, the timeline between the initial call for applications and the deadline was4 months (120 days).For the third call (2022), the timeline was over 6months (November to June 15, 2023).*

12.   As noted above, the Commission did not incorporate these recommended changes in the most current version of the Guide. Therefore, we re-iterate these proposals here.

Need for more Indigenous Participation and Successful Applications

13.   We are concerned that the majority of funding to date has been awarded to major incumbents[6], with few successful Indigenous providers. Specifically, an analysis of data provided by the CRTC shows that 43.2% of the funding committed through 2022 went to Bell (including Northwestel) and TELUS, while 50% went to all major incumbents (Bell, TELUS, Rogers, and Shaw (now owned by Rogers). See tables sorted by company/organization and amount committed in Attachment 1.

14.   Also, we note that the recent report from the Auditor General of Canada on *Connectivity in Rural and Remote Areas* (tabled March 27, 2023) found that only a very low percentage of available funds is being spent, that application approval timelines were significantly longer than originally estimated (22 months on average compared to the estimated 10 months), and that the CRTC did not notify applicants for applications that were on hold, not selected or deemed ineligible.[7]

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[6] Data from https://crtc.gc.ca/eng/internet/select.htm. Commitments for satellite-dependent communities are not shown on the CRTC website.

[7] See: https://www.oag-bvg.gc.ca/internet/English/parl_oag_202303_02_e_44205.html

15.   Since the CRTC first established the Broadband Fund, **only one FMCC member has received funding**: Broadband Communications North ($5.8M). Given their experience and expertise in deploying and operating infrastructure and services in rural/remote regions of Canada, we expected that more FMCC member organizations would have secured support from the Broadband Fund.

16.   This is not for lack of trying. We note that several other FMCC members applied to the Fund. For example:

- Clear Sky Connections (MB) applied and although they have not received official notice, their project is not listed in recent announcements of funded projects.
- K-Net Services (ON) was not successful in their application to build marine fibre to replace satellite infrastructure in the First Nations of Fort Severn and Peawanuck.
- Eeyou Communication Network (QC) applied to the Fund, but was not notified of their progress or why they were not approved. ECN was subsequently approved for funding from ISED's Universal Broadband Fund (UBF).

17.   We discuss challenges FMCC members experienced during the Broadband Fund application process, as well as suggestions to improve the process, in our response to Q46 below.

18.   FMCC members have also experienced the challenges outlined in the Auditor General's report. For example, as noted in the examples above, they did not receive any or timely notification of whether their projects were approved.

19.   FMCC members have been successful in securing funding from other government programs. These include the Universal Broadband Fund, Connect to Innovate, Improving Connectivity for Ontario, Indigenous Services Canada (First Nations Infrastructure Fund), FedNor, and the Northern Ontario Heritage Fund. FMCC members who received funding from these other programs include: K-Net Services, Eeyou Communication Network, Matawa First Nations Management, FNEC's member First Nations, and Western James Bay Telecom Network.

20.   In particular, FMCC members point to Indigenous Services Canada's First Nations Infrastructure Fund (FNIF)as a beneficial model for projects led by Indigenous and non-profit organizations. In our comments below identify aspects of the FNIF that would be helpful to consider when developing the Indigenous Funding Stream / Indigenous Broadband Fund.

Barriers to Deployment

21.   When reviewing issues in these proceedings, the Commission should take into consideration barriers to deployment experienced by small, Indigenous and non-profit providers, including those operating in rural/remote regions. In CRTC 2019-406, CRTC 2020-366, CRTC 2020-367, and CRTC 2023-56, the FMCC filed extensive comments highlighting the barriers that FMCC members and other small ISPs face as service providers attempting to build new facilities to interconnect with or access existing facilities. In those parallel proceedings we have provided recommendations for regulatory measures that aim to address those issues.

Governance

22.   We also recommend reforming the governance structure of the Fund to include representatives from affected areas, including rural, remote, Northern and Indigenous regions of Canada, and addition of expertise in Northern and Indigenous contexts and requirements to the Commission.

23.   Also, we point out that as of the dates of the hearing in Whitehorse (CRTC 2022-47, April 2023), the commissioners responsible for the Northwest Territories and Nunavut had never visited these territories (as stated in their comments during the public hearings for CRTC 2022-147). Further, we have found that commissioners responsible for provinces are generally not familiar with conditions in the remote and primarily Indigenous regions of their provinces.

Spectrum Sovereignty and Mobile Networks

24.   We note that this proceeding raises issues under ISED's purview, such as the deployment of mobile wireless services and infrastructure (which are tied to the availability of spectrum licenses). We refer the Commission to comments filed by the FMCC in ISED Consultation SPB-005-22 (Consultation on the Spectrum Outlook 2022 to 2026) and ISED Consultation DGSO-001-23, in which we stress the importance of spectrum sovereignty in the deployment of mobile networks in Indigenous territories across Canada. In particular, in our intervention to the Spectrum Outlook Consultation, we submitted that:

> "ISED must revisit, review and redefine decision-making processes related to spectrum in a way that upholds First Nations' rights, title and treaty rights and Canada's obligation to bring federal ways, policies and other collaborative initiatives and action into alignment with the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), the Crown's legal duty to consult and collaborate with Indigenous Peoples, and free, prior and informed consent.

Given this context we express our concerns with contributing to these consultations. While we assert Indigenous sovereignty over spectrum covering Indigenous territories, we present several recommendations for ISED to consider until that matter is resolved. ISED should:

- set affordable access for all Canadians as its primary goal;
- along with other government departments and agencies, initiate a separate forum to review the broad issue of Indigenous spectrum sovereignty and related matters;
- be more proactive and transparent in publishing information associated with the spectrum licensing process – including for satellite licensing;
- introduce an Indigenous Priority Window for spectrum;
- consider requiring an amount of reserve capacity on satellite systems for Public Benefit;
- work with the CRTC to hold additional consultations with respect to licensing conditions for LEO satellite systems, with a specific focus on Public Benefit requirements that could be included as terms of these licenses" (para 3-4).

25.   In these and related matters, we also refer to a draft resolution passed at the AFN Special Chiefs Assembly, April 3-6, 2023, Ottawa. This resolution, titled *Government Support for First Nations Digital Connectivity and Spectrum Sovereignty (DR-09)*,[8] calls for the Government of Canada to:

- Cease all sales and renewals of spectrum licenses and permits on First Nation territories until consultations have been completed with First Nations governments and mandated organizations;
- Along with other government departments and agencies, initiate a forum to review the broad issue of Indigenous spectrum sovereignty and related matters;
- Contribute capital and operational investment to support First Nation management of spectrum resources;
- Eliminate fees for First Nations entities to access spectrum licenses in their territories and communities; and
- Support First Nations in ventures and partnerships to deliver services to their own communities, including the use of fixed wireless connectivity in 2300 MHz and 3500 MHz bands.

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[8]See Resolution #09: https://www.afn.ca/wp-content/uploads/2023/03/23-03-27-April-2023-SCA-Draft-Resolutions_eng.pdf

General Response to Advancing Reconciliation: Proposal for an Indigenous Funding Stream

26.   Substantive reconciliation is supported through enabling the self-determined development goals of Indigenous Communities, including through their ownership and control of telecommunications infrastructure and services.

27.   The most recent *Mandate Letter* for the Minister of Innovation, Science and Economic Development (December #, 2021) notes that "we must move faster on the path of reconciliation with First Nations, Inuit and Métis Peoples". This includes specific reference to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the need to address systemic inequities and disparities by working in partnership with Indigenous Peoples to advance their rights.

28.   The 'Objectives' section of the *Mandate Letter* specifically refers to the need for immediate and long-term investments to close the infrastructure gap experienced by Indigenous peoples by 2030:

> "With the Minister of Crown-Indigenous Relations, Minister of Northern Affairs, Minister of Housing and Diversity and Inclusion, and Minister of Indigenous Services, and in partnership with First Nations, Inuit and Métis communities, continue to make immediate and long-term investments to support ongoing work to close the infrastructure gap by 2030".

29.   We refer throughout this intervention to Indigenous Services Canada's First Nations Infrastructure Fund (FNIF), which presents important considerations to support the development and sustainability of connectivity infrastructure and services in Indigenous contexts.

30.   In our comments to CRTC 2022-147, we registered our support for the Commission's role in ensuring that principles of equity, substantive equality, and economic reconciliation are reflected in the outcomes of regulatory proceedings. These principles provide useful benchmarks for the Commission to use to assess the outcomes of Broadband Fund projects for both consumers and service providers based in and operating from Indigenous communities.

31.   However, to date, the Broadband Fund has failed to support the self-determined development goals of Indigenous communities with respect to accessibility, affordability, and quality of high-speed internet and mobile cellular connectivity.

32.   Findings of the report from the Auditor on Connectivity in Rural and Remote Areas (tabled March 27, 2023) support the following points:

- By 2021, the overall Internet connectivity of households across the country was 90.9%, but connectivity in rural and remote communities lagged at 59.5%, and at 42.9% in First Nations reserves.[9]
- There is a persistent digital divide for people living on First Nations reserves and in rural and remote communities, compared to people who live in urban areas.
- Affordability is not measured by CRTC.
- Out of the available federal broadband funding initiatives, a very low percentage has been spent (I.e., of the $226 million that was available in 2022- 2023 fiscal year, only $58 million (26% was spent).
- Funding application approval timelines were significantly longer than originally estimated (22 months on average compared to the estimated 10 months).
- For applications that were on hold, not selected or deemed ineligible, the CRTC did not notify applicants of their application status.
- The National Broadband Internet Service Availability map was out-of-date and sometimes inaccurate, putting the onus on stakeholders to demonstrate that the mapping information was incorrect before any funded projects could be approved.[10]

33.   Establishing an Indigenous Funding Stream under the Broadband Fund as proposed by this proceeding (CRTC 2023-89) will not substantively rectify the digital inequities in the existing structure and management of the Broadband Fund, nor advance substantive reconciliation until and unless it incorporates, at minimum, the following elements and others raised by other Indigenous organizations:

- A governance structure where the majority of decision-making authority is held by representatives of mandated Indigenous organizations or their designates;
- That the administrative components of the fund, including but not limited to policies and processes related to eligibility, fund management, consultation and engagement, and disbursal mechanisms are co-developed with the aforementioned fund governance body.
- That the funding stream:
  - Prioritizes Indigenous communities as service providers (suppliers) as well as consumers of telecommunication services;
  - Is established with an initial endowment from the existing Broadband Fund with a retroactively equitable proportion dating from the Broadband Fund's inception, followed by annual top-up installments as an equitable proportion of the annual contribution monies provided into the larger Broadband Fund;

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[9]We note that the percentage of First Nations reserves does not include many jurisdictions where Indigenous communities reside that are not located on Indigenous reserves or settlement lands. For example, many rural NWT communities with majority First Nations, Inuit, and Metis populations. Therefore, we submit that the actual Internet connectivity of households in these communities is likely lower than 42.9%.

[10]See: https://www.oag-bvg.gc.ca/internet/English/parl_oag_202303_02_e_44205.html

- That any funds remaining as a result of the differential between available funds and funds spent in any given fiscal year are to be retained for future allocation for Indigenous projects under the above guidelines and governance structure. Funding should be made available for:
  - new, maintenance or upgrading projects;
  - supporting and compensating Indigenous communities (consumers) and Indigenous service providers in applying for funding (capacity funds);
  - projects that serve Indigenous reserves and settlement lands, and other jurisdictions where Indigenous communities reside that are not located on Indigenous reserves or settlement lands;
  - Capital and operational activities;
  - Social and economic advancement opportunities such as: digital literacy and training local residents in IT skills needed by providers and other organizations; and
  - Monitoring of service quality.

Governance of Indigenous Funding Stream / Indigenous Broadband Fund

34.   It is important that the Indigenous Funding Stream (or a separate Indigenous Broadband Fund) substantively involves Indigenous peoples in overall governance and administration. The Broadband Fund is currently administered by the Commission, with monitoring and oversight provided by the Canadian Telecommunications Contribution Consortium (CTCC). Our understanding is that subject to Commission approval, CTCC is responsible for, among other things, the Procedures for the Operation of the National Contribution Fund (NCF) [the Procedures][11]1 and for contracting a company to act as the Central Fund Administrator (CFA).

35.   As discussed below, UNDRIP requires Canada to cooperate and collaborate with Indigenous Peoples on any laws, policies, regulations or administrative measures that affect them. As inherent right holders, Indigenous Peoples have the right to own, control, access, influence, and steward digital technology; to influence and benefit from participation the technology sector and all sectors that are impacted by, or that rely on, digital technology; and to **provide leadership in the reformation and/or development of laws, policies and regulations concerning digital technologies where they impact, or have the potential to impact, First Nations interests, Title, Rights and/or Treaty Rights.** (UNDRIP Articles 3, 5, 20(1), 21(1), 23, 34).

36.   **Recommendation: Indigenous peoples must be involved in the governance and administration of any proposed Indigenous Funding Stream / Indigenous Broadband Fund.**

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[11]See: https://crtc.gc.ca/partvii/eng/8638/crtc/ncf2007a.htm

37.   The membership of any structure governing an Indigenous Funding Stream / Indigenous Broadband Fund should consist of representatives from both the public and private telecommunications industry, including small providers and community and regional representatives. The Board must include membership from underserved regions, including Northern and Indigenous communities. Knowledge of and experience in the regions and communities, especially with Indigenous communities, should be important criteria for Board membership.

38.   For example, the Board must include representation from Indigenous service providers. For years, these organizations have developed and delivered broadband infrastructure services in rural, remote, Northern and Indigenous regions; as residents, their staff know these regions best. Furthermore, these organizations have advocated for the need to include Indigenous peoples in decision-making about broadband development taking place in their territories and communities.[12] Inclusion in the Board governing this Fund is one important step in institutionalizing this activity at the CRTC.

39.   The process used by the CRTC to select representatives to the Board should:

- be open, transparent and public;
- ensure balanced representation of cultural populations and geographic regions across the North (in particular, including people from Indigenous and remote regions);
- be based on nomination, including self-nomination;
- include endorsements from at least three appropriate regional or community digital technology groups with a demonstrated engagement with digital infrastructure and/or services;
- include enough positions to ensure that directors are representative of the diverse communities and entities involved; and
- include representatives from private, public and civil society organizations with ties to rural, remote and northern regions and/or communities.

40.   As signatory to the United Declaration of the Rights of Indigenous Peoples ("the UN Declaration"), Canada is bound to the principles of UNDRIP including articles describing free, prior and informed consent (FPIC). The United Nations Declaration of the Rights of Indigenous Peoples Act ("the Act") (2021) obligates the Government of Canada to ensure that its federal laws and practices are consistent with the UN Declaration. To fulfil the spirit and intent of

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[12]See Report of the National Broadband Task Force (2001); and comments submitted to Industry Canada's 2010 'Digital Economy 150' consultation (2010). This includes two papers submitted by FMCC members: "Ensuring Aboriginal Involvement in Canada's National Digital Strategy" (https://www.ic.gc.ca/eic/site/028.nsf/eng/00448.html) and "Aboriginal Connectivity Strategy" (https://www.ic.gc.ca/eic/site/028.nsf/eng/00397.html).

Canada's commitment to the UN Declaration, the Act, and support Canada's commitment to substantive reconciliation, the Broadband Fund must establish aligned provisions for observing free, prior and informed consent with Indigenous Peoples irrespective of the nature and extent of established Aboriginal title or not.

41.   As we argued in an Undertaking filed in CRTC 2022-147, we believe that the requirement to align Canadian laws with UNDRIP applies to the *Telecommunications Act*. Indigenous peoples are **rights holders** not **stakeholders**. This means that First Nations and other Indigenous governments must guide and participate in policy/regulatory discussions and exercise their rights in a substantive way. The current approach adopted by both the CRTC, and industry treats Indigenous peoples as one of many stakeholders in projects impacting their communities and territories– rather than as distinct rights-holders exercising a government-to-government relationship.

42.   **Recommendation: The Commission must fulfill its obligations under the UNDA and ensure that Indigenous peoples are treated as rights holders not stakeholders in the development of telecommunications infrastructures and services in their territories and communities.**

43.   With respect to how these objectives might be achieved, we refer the Commission to the First Nations Information Governance Centre (FNIGC). A National Action Plan (NAP) to implement the UNDA is being developed by the FNIGC to:

1. Identify for amendment any laws that offend the Declaration
2. Identify measures to address failures to honour the rights
3. Monitor progress in implementation

44.   The FNIGC has identified legislative and non-legislative measures required to respect First Nations data sovereignty as the UNDA is implemented by the federal government.[13] The rationales for these measures are summarized in our Undertaking filed in CRTC 2022-147.

45.   FMCC members would be willing to contribute to next steps on ensuring UNDRIP requirements are including in CRTC processes and decisions.

46.   Additionally, where community-level stewardship laws or similar Indigenous articulations of what meaningful consultation is and how it can be achieved are available in respect of the project area, the Broadband Fund must both exercise Canada's legal duty to consult, and respect and uphold Indigenous parameters for meaningful consultation. Mechanisms

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[13]First Nations Information Governance Centre (2023). *Possible measures for respecting rights to data sovereignty in the implementation of* The United Nations Declaration on the Rights of Indigenous Peoples Act.

to achieve this can include but are not limited to mutually developed and co-signed Consultation Protocols between the affected Indigenous group and the Government of Canada.

47.   **Recommendation: The Commission should ensure that Broadband Fund projects, supported through an Indigenous Funding Stream or otherwise, support economic and social benefits to communities in ways that respect principles of equity, substantive equality, and economic reconciliation. Support for the application of these principles can be found in statements issued by mandated Indigenous organizations, such as through resolutions issued by the AFN and Tribal Councils, as well as through mandate letters of Ministers and the CRTC Policy Direction.**

48.   Our brief comments on Appendix 1 are presented preceding our responses to the Commission's specific questions in Appendix 2. Rationales for these comments are provided in response to questions in Appendix 2.

49.   Note that our responses to the questions below are not separate and distinct from our framing of the proposed Indigenous Funding Stream / Indigenous Broadband Fund.

List of other proposed modifications to the Broadband Fund policy

50. *In addition to the potential areas for modification of the Broadband Fund policy discussed above, the Commission intends to make the changes outlined in this table. Parties may comment on these proposed modifications.*

51. **Below are FMCC's comments on these proposed modifications. Text to be added or substituted is shown in Bold. Text to be deleted is crossed out. Rationale for proposed changes is shown in *italics*. Additional rationale is provided in responses to Appendix 2.**

Description of change	Source of current policy	Current policy
1.**Remove evaluation criteria:**~~ransport projects may also include transport infrastructure that will serve anchor institutions located in or near an eligible transport community served by the project and that offer a public function to that community.~~**(delete)** **Transport infrastructure built to connect a new or upgraded point of presence (PoP) to other telecommunications service providers that operate within the community and provide residential, business, anchor institutions and/or mobile wireless services to the public and that will be served by additional transport capacity is** ~~also~~ **eligible for funding.**~~Transport infrastructure connecting to anchor institutions that are located within a community that is ineligible for transport funding will not be eligible for funding~~ **Rationale:** The criterion should be **"a majority of anchor institutions to be served", not the number,** as the number may be very small in some small communities.	Telecom Regulatory Policy 2018-377, paragraph 243	**Transport projects – Presence, type, and number of anchor institutions to be served** The objective of this criterion is to ensure that broadband services are provided to important elements of the community so that residents can benefit from transport projects. The Commission will consider a project to be of higher quality based on how many anchor institutions would be served. The types of anchor institutions to be served, such as schools or medical facilities, could also result in an assessment that a project is of higher quality.
2. Remove the demonstration of applicant investment eligibility criteria. **The fundamental criterion should be availability of connectivity. If the community or region lacks connectivity (including broadband) it should be funded.**	Telecom Regulatory Policy 2018-377, paragraph 147	In light of the above, the Commission confirms that to be eligible for funding, applicants must specify the amount of investment in their project that is more than a nominal amount given the nature of the project. The Commission determines that the level of the applicant's investment

Description of change	Source of current policy	Current policy
Funding from other sources should not be required for small, non-profit, and Indigenous providers. **Rationale:** *Connecting the unconnected is crucial for fostering inclusive growth and reducing inequalities in the digital age. Connecting communities without an immediate return on investment is challenging for commercial providers that rely on profitability. In such cases, the government plays a crucial role in bridging the digital divide and ensuring universal access to the Internet. Governments must step in where the private sector refuses to go to bridge the digital divide and connect the unconnected* *As we have noted above and in previous submissions, Internet connectivity is an essential utility and a driver of economic, social, and educational development.* *By committing funds and taking proactive measures, governments can help bridge the digital divide and ensure that all communities have access to the opportunities and benefits of the Internet.*		will be further evaluated as an assessment criterion.
3. See our response to the proposed modification above: **Funding from other sources should not be required for small, non-profit, and Indigenous providers.** **Applications from non-profit and Indigenous organizations should be prioritized, and should receive 100 percent funding.**	Telecom Regulatory Policy <u>2018-377</u>, paragraph 234	**All projects – Level of funding from other sources** The objective of this criterion is to measure whether the applicant has successfully raised funds for the proposed project and how much was raised, to ensure that telecommunications companies and various levels of government continue to invest in robust broadband infrastructure and that funding from the Broadband Fund is used efficiently. The Commission will consider a project to be of higher quality based on a greater level of funding received from sources other than the Broadband Fund towards total project costs. These sources include both the public and private sectors. The Commission will evaluate this criterion based on the percentage of the amount requested from the Broadband Fund.

Description of change	Source of current policy	Current policy
4. **ADD: Recipients should be advanced a significant amount of the approved budget BEFORE work commences.** **For additional expenses,** allow recipients to claim costs for reimbursement either when paid or when incurred, as agreed to with the Commission in the statement of work. Recipients will be required to submit claims in the format determined by the Commission and to demonstrate that the costs claimed have been incurred or paid, as appropriate. **Approval and payment should be completed within 30 days of date claims are submitted.** **Rationale:** *A significant amount of the budgeted funds should be disbursed before expenses are incurred, so funds are not lost to bank interest and contract penalties. Bank interest and contract penalties are not eligible expenses.*	Telecom Regulatory Policy <u>2018-377</u>, paragraph 326	To determine the amount of payment to be made every three months, recipients will be required to file a claim that has been certified by their chief financial officer (CFO) or CFO-equivalent, with supporting documentation (invoices, receipts, etc.) for the eligible costs incurred. The format of this claim will be set out in the application guide. Recipients will also be required to demonstrate that all the costs claimed have been paid and are related to the activities described in the project plan and the estimated budget in the funding decision.
5. Remove the requirement of the submission of a business plan in funding applications in favour of more current additional financial information during the evaluation phase. **We concur with this proposed modification.**	Telecom Regulatory Policy <u>2018-377</u>, paragraph 232	[…] The Commission will assess the financial viability of proposed projects based on the following: […] The business plan of the applicant, which includes, but is not limited to, business assumptions of the market for the services to be provided within the eligible geographic area and the applicant's marketing strategy to gain subscribers in the first year.
6. Specify that all mobile wireless projects must provide broadband Internet access service and voice services to be eligible for funding. *We concur that this functionality should be provided, but point out that Transport funding should be separate from Internet Service Provider (ISP) and other services such as Mobile and Voice Services.* *Mobile wireless, Internet, Television, Voice, Transport, Gateway are all*	Telecom Regulatory Policy <u>2018-377</u>, paragraph 109	The Commission considers that as set out in the universal service objective, the deployment of the latest mobile wireless technology is a sufficient eligibility criterion for mobile wireless service projects. The Commission determines that only proposed projects that use at a minimum the latest generally deployed mobile wireless technology, currently LTE [long-term evolution], will be eligible for funding.

Description of change	Source of current policy	Current policy
separate/different services and can be provided by separate/different companies/providers. *A transport network for mobile or any other service should be directly accessible by any other transport providers and other service providers to connect.*		
7. Modify the list of information the Commission may disclose about applications to include the total project costs, the eligible geographic area(s) to be served, and once the project is underway, the implementation status of the projects. **Funding must be included to cover these reporting costs.**	Telecom Regulatory Policy 2019-190, paragraph 18	[…] The CRTC may at its discretion disclose certain application information in its funding decisions and in public reports, as necessary, to identify and describe the approved project and the broad reasons for its selection, including the name of the funding recipient, the number of households served, the amount of funds awarded, the geographic area(s) of the project, the technology implemented, and assessment criteria and selection considerations that supported the selection of the project.
8. Require that when an applicant, member, or partner in a group application submitted financial statements with the application, but the financial statements are no longer current, the applicant, member, or partner must submit new financial statements if requested by the Commission. **We concur.** **Financial reports should be provided for two consecutive fiscal years of the last three fiscal years.**	Telecom Regulatory Policy 2018-377, paragraph 155	[…] An applicant that is not a provincial, territorial, or municipal government entity is required to file independently prepared financial statements for the last three years. If an applicant is a partnership, joint venture, or consortium, the applicant is required to file financial statements as set out above for each member or partner that is not a provincial, territorial, or municipal government entity. […]
9. Specify that while the Commission is conducting the evaluation of applications, consideration of the most recent data available on services in operation and funded projects is critical to mitigate the risk of overbuilding in a given area and to allow for the efficient use of funds across the country. Therefore, the Commission will conduct its evaluation and selection of applications based on the most current	Noted in the Application Guide for each call	N/A

Description of change	Source of current policy	Current policy
verified data available at that time. These data may constitute publicly available information announced by companies or governments or information that the Commission has collected in confidence (e.g., information collected in the Commission's Annual Facilities Survey and information provided by other government departments and agencies). **ADD:** **The Commission should request information from Indigenous communities that may be included or impacted by the proposed project before the project is considered for approval.** **If a project is found to overlap (overbuild) another project, the applicant must provide justification for the need to overbuild such as to provide network redundancy.**		

Appendix 2 to Telecom Notice of Consultation CRTC 2023-89

Q1. Beyond the benefit of better telecommunications services, what types of economic and social benefits could projects provide within Indigenous communities?

- *How could those benefits be assessed when evaluating projects?*

52. There are several types of social and/or economic benefits that can be derived from provision of reliable and affordable telecommunications services in Indigenous communities:

- Job creation in the sector, such as local people hired to manage and maintain the network and for other telecom and IT-related jobs in the community (such as IT support for schools, clinics, and government services;
- Jobs created and/or new and expanded businesses as a result of improved telecommunications; for example, in tourism, in more sales or better prices for locally produced products (fish, furs, handicrafts, etc.); and
- Improved services such as telehealth consultations, access to online government services, access to online education and training.

53.   Thus, in addition to benefits of access to broadband networks, economic benefits can also be enhanced by requirements to include training, local jobs, and local management in funding criteria. We discuss these requirements in responses to Q9, Q18 and Q20-22 below.

54.   Another crucial social and economic benefit involves improved community climate, disaster and emergency preparedness, management and post-event response through resilient infrastructure. For example, recent studies by the Asian Development Bank and the World Bank have found that taking a resilience-first approach to infrastructure development would cost only three percent more at the project level and return an estimated 4:1 benefit for each dollar invested. [14] **It is paramount that the Broadband Fund adopt a resilience first approach, not least for the collective social and economic benefits that it provides**.

55.   We **strongly agree** with CRTC's statement on para 23 of CRTC 2023-89 that:

> "*Creating a supportive climate for economic partnership is a key element of reconciliation.* Many First Nations, Métis, and Inuit have expressed the clear desire to lead or partner in the construction, ownership, and/or operation of the broadband Internet access and mobile wireless networks serving their communities. While many

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[14] Hallegatte, Stephane, Jun Rentschler, and Julie Rozenberg. 2019. *Lifelines: The Resilient Infrastructure Opportunity. Sustainable Infrastucture Series*. Washington, DC: World Bank. doi:10.1596/978-1-4648-3. License: Creative Commons Attribution CC BY 3.0 IGO.

communities have provided letters of support for broadband improvements proposed by non-Indigenous providers, ***participation in the deployment and operation of the local infrastructure by Indigenous communities*** *offers additional social and economic benefits beyond improved connectivity*" (*emphasis added*).

56.   Our past interventions have consistently pointed out that economic and social benefits apply to **both consumers and service providers**. Northern and Indigenous populations **must** have opportunities to utilize digital communications infrastructure and services not just as a facilitator of economic development in other industries and services, but also as a locally owned and managed resource in and of itself.

57.   The evidence is clear that broadband has truly become an essential service for Indigenous communities – particularly in rural/remote communities whose residents rely on adequate, affordable, reliable telecommunications infrastructure and services to access services otherwise unavailable in their communities. For example, a 2021 Bank of Canada report confirms the impacts of limited access to banking/financial services and cash sources in rural/remote areas both due to the long travel distances to bank branches and to unreliable broadband for online banking.[15]Peer-reviewed publications from FMCC-affiliated researchers found that compared to urban/central residents, rural/remote residents of the NWT submitted more comments to the CRTC regarding certain concerns, such as running small and medium size enterprises, online businesses, and working from home.[16]

58.   Another example of indicators of economic development was raised by Manitoba Keewatinowi Okimakanak (MKO) during the BSO hearings (CRTC 2015-134). MKO stated that a necessary component of any broadband development funding mechanism "is supporting opportunities for development and growth of First Nations and Aboriginal businesses. This can be done through the implementation of a Procurement Strategy for Aboriginal Businesses [PSAB] or a PSAB-like policy."[17]

59.   In CRTC 2020-367 and CRTC 2022-147 we filed extensive comments demonstrating the significant economic and social benefits that telecommunications infrastructure and services provide within Indigenous communities in the Far North, and in the northern regions of provinces. These Indigenous and non-profit organizations have innovated to develop and

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[15]Chen, H., Engert, W., Huynh, K.P., O'Habib, D., (2021). An Exploration of First Nations Reserves and Access to Cash. Bank of Canada, Ontario, Canada.

[16]McMahon, R., & Akcayir, M. (2022). Investigating concentrated exclusion in telecommunications development: Engaging rural voices from Northern Canada. *Journal of Rural Studies*.

[17]Procurement Strategy for Aboriginal Business. See http://www.aadncaandc.gc.ca/eng/1100100032802/1100100032803

implement digital infrastructure and services in rural and remote regions.[18] These providers operate in and with the communities they serve; they provide local employment and without a fiduciary obligation to shareholders, can re-invest revenues back into communities and regions.

60.   Concerning methodology on identifying and assessing socio-economic benefits of networks in remote communities, we refer to a recent paper by Professor Heather Hudson presented at the 2022 Telecommunications Policy Research Conference (TPRC)[19] and examples of benefits of telecommunications in rural Alaska in her book *Connecting Alaskans*.[20]

61.   **Recommendation: The Commission and/or governing body of the Indigenous Funding Stream/ Indigenous Broadband Fund can draw from prior interventions and examples from other Indigenous and public/consumer interest groups to assess the economic and social benefits that communities may accrue from projects supported by the Broadband Fund.**

62.   **Recommendation: Specific indicators should be developed through an inclusive and transparent process. These indicators can be used to monitor and assess the benefits of projects providing rural/remote broadband. Additional funding could be offered to providers that propose strategies to enhance the benefits of their networks.**

Q2. How should the Commission identify the Indigenous communities eligible for this stream?

- *In particular, how could Indigenous communities that are not located on Indigenous reserves or settlement lands be identified?*

63.   This is an important question, particularly in those areas with significant Indigenous populations that are not formally classified as Indigenous reserve lands. For example, the Northwest Territories includes only two First Nations reserves, but Indigenous peoples form a majority of the population of most of the smaller communities.

64.   In our Response to RFIs in CRTC 2017-112, we provided the following response to the Commission's question regarding the definition of an 'Indigenous community'. We submitted

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[18] For an overview of projects, see: http://firstmile.ca/wp-content/uploads/Stories-from-the-First-MIle-2018.pdf

[19] Hudson, Heather E. "Research on Community Networks: What's Old is New Again." https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4212025

[20]Hudson, Heather E. (2016) *Connecting Alaskans: Telecommunications in Alaska from Telegraph to Broadband.* Fairbanks: University of Alaska Press.

that this question could be best addressed through engagement with relevant experts such as leaders of Indigenous organizations, Indigenous-mandated organizations, researchers focused on issues of Indigenous politics, and/or government staff who work directly with such organizations (for example, from Indigenous and Northern Affairs Canada and Territorial governments). For example, the definition of a 'First Nation' can refer to the mandate provided by Chiefs in Assembly; that is, the local Indigenous elected political organizations (Chief and Council) who govern First Nations communities.

65.   For example, the CRTC might consider the following classes of eligible recipients used by Indigenous Services Canada's FNIF:[21]

- **Indigenous beneficiaries**
    - First Nations or Inuit governments
    - bands or settlements such as land, reserves, trusts
    - district councils
    - chief councils
    - tribal councils
- **Organizations**
    - societies
    - institutions
    - corporations where the major stakeholders are First Nations, Innu or Inuit
    - partnerships, such as public-private partnerships
- **Private and public groups**
    - associations
    - corporations
    - universities, colleges and training institutions[22]
    - local authorities
    - municipalities
    - provincial and territorial governments and agencies

66. Regarding Indigenous communities not located on reserves, the FNIF criteria state:

"Proposals for off-reserve projects can be considered if the primary beneficiary is a participating First Nation community or communities. Proposals will also be considered if the off-reserve project will be cost-shared between an on-reserve First Nation and non-First Nations partners, such as nearby municipalities or other Indigenous partners, such as self-governing First Nations or Inuit organizations."[23]

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[21]See: https://www.sac-isc.gc.ca/eng/1497275878022/1533645265362
[22]Not appropriate for the Broadband Fund, but could be recipients for technological training, digital literacy, etc.
[23]See: https://www.sac-isc.gc.ca/eng/1497275878022/1533645265362

67.   We add that the Commission should reach out to Métis organizations to determine their interest in this program, and to consult with them on developing appropriate eligibility criteria.

68.   **Recommendation: The Commission, in conjunction with the suggested governing body of the proposed Indigenous Funding Stream / Indigenous Broadband Fund, should conduct direct consultations with Indigenous experts, governments and mandated organizations to identify the Indigenous communities eligible for this funding stream. Indigenous Services Canada's FNIF provides relevant guidance.**

Q3. Are the criteria used to evaluate other Broadband Fund applications appropriate for this funding stream?
- *Should some criteria be removed, added, or changed to better reflect what is needed to serve Indigenous communities?*
- *If some criteria should be removed, added, or changed, identify which ones and the reasons for the change.*

69.   **No, the criteria are not appropriate.** We believe that the criteria used to evaluate Broadband Fund applications for an Indigenous Funding Stream should be adjusted to fit the specific contexts and requirements of Indigenous projects, and projects that provide economic and social benefits to Indigenous communities, particularly those proposed by Indigenous service providers.

70.   We address this question in part through our specific responses to the proposals outlined in Appendix 1 below. As well, please refer to our responses to the Commission's questions about consultation and engagement requirements (Q4; Q20-22) and our comments on training and workforce development (Q18).

Indigenous Service Providers

71.   We support the Commission's statement in CRTC 2018-377 (Development of the Commission's Broadband Fund) that: "The Commission considers that it could be appropriate to take various social policy considerations into account when selecting between high-quality projects. In particular, the Commission considers that, when selecting projects for funding, *it may give special consideration to proposed projects that would serve Indigenous communities*" (para 277).

72.   However, this statement appears to focus only on projects that "would serve Indigenous communities"; reflecting a definition of Indigenous communities as consumers of infrastructure and services. This framing is reflected in a later statement that considers whether the communities "**affected by proposed projects**" are Indigenous communities (para 279).

73.   Therefore, the Commission should prioritize Indigenous service providers (ISPs), including through special consideration for proposed projects that are owned and managed by Indigenous communities, such as by Indigenous service providers.

74.   As stated above (para 13 and Appendix 1, we emphasize that 50% of the Broadband Fund's commitments have gone to major incumbents.

75.   As we discuss in our response to Q46, many Indigenous providers operate on a non-profit basis, and lack the internal staff and resources of large commercial telecommunications providers. Local and regional innovation should not be constrained by the limited ability of smaller non-profit and Indigenous organizations to apply for funding due to a lack of staff and internal resources.

76.   Therefore, the Commission must ensure that there are opportunities for Indigenous and other small and regional ISPs to access the Indigenous Funding Stream / Indigenous Broadband Fund. This includes offering priority access to this fund for Indigenous service providers based in and operating from Indigenous communities and regions. Funding allocations in this context will need to be substantial, in order to cover planning, capital builds, and ongoing operational costs.

77.   **Recommendation: The Commission should expand its consideration of Indigenous communities beyond consumers of services to recognize and support their role as providers of services. For example, by including offering priority access and additional funding for training and workforce development for Indigenous service providers based in and operating from Indigenous communities and regions.**

78.   Clear and transparent criteria are required for any priority access to a specific class of service provider. In the past the CRTC has asked for clarity regarding the definition of an "Indigenous service provider". In our Intervention to 2017-112 (para 103), along with the Commission's definitions of "Aboriginal governments; community entities; and non-profit organizations", we proposed another important type of entity: "community/regional intermediary organizations". These entities are community-based digital technology organizations that contribute to the public good by:

- Owning, Controlling, Accessing, and Possessing the digital infrastructure required to support community needs and future desires;[24]
- having their legal membership open to citizens of their community;
- providing equitable Internet access to all citizens in their community; and
- empowering citizens by offering Internet related education and support systems.

79.   In CRTC 2017-112, the Eeyou Communication Network (ECN) addressed proposed groupings of potential applicants to prioritize for the CRTC's Broadband Fund. FMCC stressed that such an approach requires recognition of varying levels of Indigenous/ community involvement, as well as the need for applicants to recognize community engagement and the provision of public/community benefit impacts or outcomes of projects.

80.   FMCC proposed the following minor modifications changes to the groups suggested by the ECN:

> Group 1: *Any of the following - community-owned and user-operated services; non-profit corporations with predominantly local and regional Board members; locally-based cooperatives*;

> Group 2: *Any applicant who has the approval of local council and anchor institutions. In the context of First Nations communities, this approval should be reflected through a Band Council Resolution issued by Chief and Council.*

> Group 3: *Any applicant who can gather a petition of the majority of residents and of the majority of anchor institutions*.

> Group 4: *Any commercial telecommunications operator who will offer open access to its network and who will provide at-cost rates to anchor institutions. Note: the definition of 'open access' must be clearly defined.*

81.   We note that non-profit organizations are required to provide transparent financial information (as described in the *Not-for-Profit Act*).[25] Non-profit organizations are also directly accountable to the people receiving services, and not shareholders.

82.   **Recommendation: The Commission, in conjunction with the governing body of the Indigenous Funding Stream, should prioritize Indigenous and non-profit service providers for access to the Indigenous-specific funding stream.**

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[24]As reflected in the First Nations principles of OCAP™; see: https://fnigc.ca/what-we-do/ocap-and-information-governance/

[25]See: https://ised-isde.canada.ca/site/corporate-insolvency-competition-law-policy/en/not-profit-corporations

Partnerships and Indigenous Equity in Funded Projects

83.   We also suggest that if a non-Indigenous service provider applies to this funding stream, they must include an Indigenous partner as a partner in the initiative. As well, there should be an option for the Indigenous partner to take over the operations of the network and obtain an equity interest after a specified period.

84.   As noted above, 50% of the Commission's funding commitments from the Broadband Fund to date (end 2022) have gone to major incumbents, with limited partnership or equity opportunities.

85.   **Recommendation: Non-Indigenous applicants to the Indigenous Funding stream must demonstrate substantial involvement of Indigenous communities (e.g., co-ownership or partnership). This should include a training component and an option for the Indigenous party to take over ownership/operations or obtain financial equity in the system after a period of time.**

86.   These additional requirements placed on the applicant are designed to ensure that Indigenous consumers and communities secure long-term economic and social benefits from the outcomes of the funded infrastructure.

87.   In the next section, we comment on specific sections of the existing Broadband Fund criteria. We provide suggestions on updating criteria that the Commission, in conjunction with the proposed governing body of the Indigenous Funding Stream, should use to evaluate applications in the Indigenous Funding Stream.

Eligibility criteria — applicant investment

88.   The most recent version of the Guide (Call for Applications issued in November 2022) states that "Applicants must specify the amount they will invest in their project, which *must be more than a nominal amount* given the nature of the project. Applicants must also demonstrate their ability to secure this amount. Past or existing investments and *in-kind contributions will not count towards meeting this criterion.*"

89.   We comment on the Commission's proposed language and propose modifications in responses to Telecom Regulatory Policy 2018-377, paragraph 147 and paragraph 234 in our responses to Appendix 1 below:

90.   **Recommendation: Remove the demonstration of applicant investment eligibility criteria. The fundamental criterion should be availability of connectivity. If the community**

or region lacks connectivity (including broadband) it should be funded. Funding from other sources should not be required for small, non-profit, and Indigenous providers.

91.   In the past, ISED and other funders have provided exemptions for First Nations projects. For example, the *Connecting Canadians* contribution limit was higher for projects serving Indigenous communities.[26]Similarly, for the UBF, very remote, Indigenous areas, satellite-dependent areas, or mobile benefiting Indigenous peoples are eligible to receive up to 90% of project funding.[27]

6.1.2(b) Eligibility criteria — Community consultation

92.   See our responses to Q20-22 for details on consultation and engagement requirements regarding Canada's legal duty to consult, as well as its obligations with respect to UNDRIP, the UNDRIP Act, and reconciliation.

Transport project assessment criteria – Number of communities and households that could be served (2-T3)

93.   The most recent Guide (Nov 2022)states that "A project will be considered to be of higher quality based on a greater number of communities and households that would likely benefit from it".We comment on the Commission's proposed language on this matter in our response concerning Telecom Regulatory Policy 2018-377, paragraph 243 in Appendix 1.

94.   **Recommendation: Remove evaluation criteria: "Transport projects – Presence, type, and number of anchor institutions to be served."**

95.   **Recommendation: Insert: "Transport infrastructure built to connect a new or upgraded point of presence (PoP) to other telecommunications service providers that operate within the community and provide residential, business, anchor institutions and/or mobile wireless services to the public and that will be served by additional transport capacity is ~~also~~ eligible for funding."**

96.   The most recent Guide (Nov 2022)states that "A project will be considered to be of higher quality based on a greater number of communities and households that would likely benefit from it".

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[26]According to the program's FAQ website: "The program provided up to 75 percent of eligible project costs, compared to 50 percent for the rural component of the program. In addition, projects that serve Indigenous communities may receive up to 100 percent of eligible costs from federal sources if they are able to obtain complementary funding from other federal departments or agencies". See section titled, "How much funding does the program provide?" here: https://www.ic.gc.ca/eic/site/028.nsf/eng/50010.html

[27]See: https://ised-isde.canada.ca/site/high-speed-internet-canada/en/universal-broadband-fund-application-guide#t2

97.   In past interventions we argued that since Northern and Indigenous regions typically have small populations clustered in isolated communities, and these communities are also generally dispersed over large regions, the number of households served is not the appropriate metric to use when assessing projects. Further, we noted that the presence or absence of existing infrastructure affects how households, businesses and organizations may be served.

9.3 Claims and payments for eligible costs incurred

98.   The most recent Guide (Nov 2022)states that "Claims to recover eligible costs can be made only in respect of costs that are actually incurred*; payments will not be made in advance"*.

99.   In our Intervention to CRTC 2019-45, we disagreed with this approach of disallowing payments made in advance. It does not work in the case of under-resourced not-for-profit applicants, who require upfront payment to commence a project.

100.   One of the major reasons why FMCC members have focused their application efforts on programs such as Indigenous Service Canada's First Nations Infrastructure Fund (FNIF) is that it provides upfront funding. For example, Matawa First Nations Management did not apply to the CRTC Broadband Fund after evaluating the probability of an award compared to pre-application costs, because they concluded that that the CRTC preferred applications submitted by well capitalized providers for projects that would cover more premises than an application for remote, and/or sparsely populated First Nations communities.

101.   Non-profit and Indigenous providers, unlike for-profit providers, have historically encountered difficulty obtaining commercial working capital lines of credit. When they have been able to obtain a credit line, draws on the line are limited to only the amount that can be reimbursed by the federal and provincial ministries within 60 days, and the total available amount of the line may be limited to less than one month's invoices for a large capital project.

102.   This means that non-profit and Indigenous providers must internally fund all charges, or the portion of charges exceeding their credit line, pending reimbursement.

103.   Matawa points out that depending on the size of the project, monthly invoices for infrastructure projects could exceed $6 million. Suppliers must be paid within 30 days, and contractors must be paid within 60 days under Ontario's Construction Act, but reimbursements from a federal ministry may take longer to approve and process. Ontario provincial ministries have been able to provide advance payments for materials and pre-construction charges such as mobilization, but these have been limited to $2 million per contribution agreement.

104.   Following the process established by the FNIF, the CRTC Broadband Fund should advance a portion of start-up funds for small Indigenous and non-profit providers. While the specific amount would depend on the scope of the project, we recommend that this initial start-up portion of the approved project funding should be up to 15 % of total approved funding.

105.   We propose the following modifications to Telecom Regulatory Policy 2018-377, paragraph 326 in Appendix 1 below:

106.   **Recommendation: Recipients should be advanced a significant amount of the approved budget BEFORE work commences.**

107.   **For additional expenses, allow recipients to claim costs for reimbursement either when paid or when incurred, as agreed to with the Commission in the statement of work. Recipients will be required to submit claims in the format determined by the Commission and to demonstrate that the costs claimed have been incurred or paid, as appropriate.**

108.   **Approval and payment should be completed within 30 days of date claims are submitted.**

Funding conditions set out in funding decisions

109.   The most recent Guide (Nov 2022) states that:

> "The *recipient must file a Quarterly Progress Report*, in the format provided by the CRTC, outlining the progress made in the implementation of the project and any variances in the project schedule included in the Statement of Work. *This report is to be filed every three months* beginning on the date established in Statement of Work.
>
> This report must include certification by a chief financial officer & quarterly progress report.
>
> The *recipient must file for CRTC approval a Final Implementation Report within 90 days of completion of the final milestone* in the Statement of Work. In the report, the recipient must confirm that project construction is complete and that broadband services are being offered.
>
> The recipient *must file a project Holdback Report one year after the project completion date* demonstrating to the CRTC's satisfaction that the recipient has offered broadband services for one year in accordance with the conditions of service established in the funding decision and described in the approved Statement of Work."

110.   These requirements suggest an attempt to ensure that funding recipients are accountable. However, they are onerous for small Indigenous and non-profit networks that lack full-time staff to focus on funding applications. FMCC member WJBTN stated that ISED's reporting requirements for a Connect to Innovate fund took up a large proportion of the amount of the budget requested in the application. While the organization received approximately 9% of their project budget from ISED, they needed to pay someone to prepare required reports on the progress of their project.

111.   A model for monitoring accountability is present through the FCC's Rural Broadband Accountability Plan. The FCC requires annual reports for some infrastructure projects, with quarterly reports only if projects are out of compliance. The Universal Service Administrative Company (USAC) monitors compliance with broadband build-out obligations for carriers that receive Connect America funding to ensure that carriers are using this funding to deploy high-speed Internet access that meets minimum speed and latency standards to the required number of locations by deployment milestone deadlines in rural areas eligible for support. USAC states: "This compliance framework… is critical to safeguarding the accountability, transparency and integrity of the Connect America Fund program."[28] It consists of three steps:

- Annual Reports: Tracking Broadband Deployment
- Verification Reviews: Confirming Broadband Deployment
- Network Performance Testing: Measuring Speed and Latency

112.   Compliance requirements also include enforcement penalties. Carriers that are found to be out of compliance with deployment obligations face increased reporting requirements and potential withholding/recovery of support.

113.   The FCC has established four compliance gap tiers, with penalties tied to the percent of the deployment shortfall (as measured against total deployment obligations):

Non-Compliance Tier	Compliance Gap	Non-Compliance Measure

[28] See:https://www.usac.org/high-cost/resources/fcc-rural-broadband-accountability-plan/

N1	5 percent to less than 15 percent	Require quarterly reporting
2	15 percent to less than 25 percent	Require quarterly reporting and withhold 15 percent of monthly support
3	25 percent to less than 50 percent	Require quarterly reporting and withhold 25 percent of monthly support
4	50 percent or more	Require quarterly reporting and withhold 50 percent of monthly support; after six months, withhold 100 percent of monthly support and recover percent of support equal to compliance gap + 10 percent of support disbursed to date[29]

USAC will recover support from carriers that miss their final deployment milestone.

114. **Recommendation: The Guide states that the CRTC may conduct periodic audits and require measurements, etc. That is a much better strategy than requiring small Indigenous and non-profit organizations to provide continual progress reports. Instead, in such cases the Commission should state that all projects will be subject to an audit at some point during and/or after construction.**

Timeline for funding applications

115. FMCC submitted in the past that the deadline for funding applications should be not less than six months after the call for proposals is announced. FMCC members indicated that between 8 and 18 months may be required to develop a proposal of the complexity required for the Broadband Fund. If environmental and engineering studies have been completed, the bill of materials has been prepared and bids evaluated, the proposal could possibly be completed in six months or less. A business plan can take two to three months to complete properly.

116. We are pleased to see that the most recent (Nov 2022) Call for Broadband Fund Applications was in November 2022 with a deadline of June 15, 2023. We encourage the CRTC to continue this process of offering applicants enough time to prepare a comprehensive application.

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[29] See:https://www.usac.org/high-cost/resources/fcc-rural-broadband-accountability-plan/

Compliance and Enforcement of Funded Projects

117.   Finally, the Indigenous Funding Stream (and the Broadband Fund more generally), must include specific compliance requirements and enforcement mechanisms. We generally agree with the CRTC's proposed addition to the *Application Guide* regarding the consideration of the most recent verified data, including publicly available information announced by companies or governments or information the Commission has collected in confidence (as noted in CRTC 2023-89 NOC, Appendix 1).

118.   In Appendix 1, we propose additional language:

> **The Commission should request information from Indigenous communities that may be included or impacted by the proposed project before the project is considered for approval.**

> **If a project is found to overlap (overbuild) another project, the applicant must provide justification for the need to overbuild such as to provide network redundancy.**

119.   However, we also stress the importance of considering end-user service levels including Quality of Experience indicators. The Commission should work with third parties including researchers, community members, intermediary organizations, and local leadership to collect and assess data on telecommunications services; it is important to avoid relying on supply-side data.

Q4. How can the Commission reach out to Indigenous communities to ensure they are aware that this funding is available?

120.   The Commission should prepare and distribute notices of funding in English, French and Indigenous languages. These notices should be publicized over news and social media, including via CBC, APTN, local community radio stations, other Indigenous media and local/regional newspapers. Information should also be distributed to all Indigenous organizations.

121.   **Recommendation: The CRTC should do more direct outreach to people living in rural/remote, Northern and Indigenous communities in proceedings focused on issues that affect them. We encourage the Commission to continue providing multiple avenues of participation and offering information in Indigenous languages. This includes continuing to encourage and support the participation of Intermediary Organizations that act as crucial mediators between local residents and government agencies.**

122.   Small Indigenous and non-profit providers have limited resources and experience in completing CRTC funding applications. Staff who can answer questions regarding applications to the Broadband Fund, including the Indigenous Funding Stream / Indigenous Broadband Fund would improve accessibility and understanding of the application requirements and process. For example, the online workshops and webinars provided by ISED's Universal Broadband staff provided were an effective method of providing information. The CRTC Broadband Fund Frequently Asked Questions are also very helpful.

Institutional Support for Indigenous Participation

123.   More generally, we submitted in past interventions that the CRTC can play an important role in institutionalizing substantial Indigenous participation in telecommunications policy and regulation. For many years our FMCC members have advocated for the need to include Indigenous peoples in decision-making about the broadband development requirements and activities taking place in their territories and communities, starting with our intervention in the review of Northwester's Modernization Plan in 2012-699. We noted that such engagement should include recognition of the need for appropriate consultation with Indigenous communities by various entities:

   a. **CRTC Indigenous Engagement Office**. This approach might be modelled after the Office of Native Affairs and Policy developed by the FCC.
   b. **CRTC Broadband Fund Administrator,** such as through Indigenous representation on the Board of Directors, and through expert advisors and Indigenous Elder advisors (to review community consultations)who can work with the Board.
   c. **Broadband Fund Applicants,** such as through requirements for community engagement and demonstration of economic and social benefits of projects, as described in our answer to Q1.

124.   **Recommendation: Drawing from the example of ONAP in the U.S. the Commission should set up a dedicated office and hire more staff with experience in issues related to Indigenous contexts both concerning the Far North and in other rural/remote and Northern regions of Canada. Any such office should reflect the rights-holders relationship between the Government of Canada and Indigenous Peoples.**

125.   In the recent proceedings related to telecommunications services in the Far North (2022-147) the CRTC has included an "online engagement platform" encouraging participants to take a survey or contribute their stories. Registered parties can present in-person or remotely during a public hearing. We also noted the inclusion of Indigenous-language translations of information regarding the consultations. We appreciate these efforts.

126.   However, we are concerned that low levels of participation in methods such as the online engagement platform and in public hearings (such as for CRTC 2022-147) may result from lack of awareness of proceedings among Northern and Indigenous communities, as well as lack of capacity to contribute. The CRTC's outreach strategies should be evaluated after the conclusion of the CRTC 2022-147 hearings to determine whether Northerners knew about this consultation, knew how to submit their views, and used the materials in Indigenous languages.

Q5. Should the Commission provide operational funding support to TSPs serving rural and remote areas?

127.   Yes, but operational funding should be provided only for Indigenous and non-profit providers.

128.   Indigenous and non-profit providers serving remote, sparsely populated communities have a limited number of premises across which costs can be spread, and the cost to serve such areas is higher in terms of operating and maintenance costs, as well as upstream connectivity costs.

129.   Most new broadband service providers willing to service such areas will have operating deficits in the early years as new customers are still being connected and service provisioned. Financial assistance for operating and maintenance costs would make all the difference to small and Indigenous providers during the start-up phase.

130.   As discussed in detail in our responses to Q9,Q12 and Q18, this should include support for training and workforce development, annual maintenance costs, funding for network resiliency and redundancy, and other required costs.

Q6. What mechanism(s) would be appropriate for funding operational costs, either within the Broadband Fund framework or as part of a broader operational funding program?

131.   We propose that specific operational costs should be funded by the CRTC's Broadband Fund. We discuss specific categories of operating costs that could be included in Q9 below.

132.   Subsidies to reduce prices for users should be provided directly to *consumers*, not as subsidies to TSPs.

133.   In our Interventions to CRTC 2022-147, we provided extensive comments on subsidies. We submitted that a targeted subsidy for Internet services should be provided to **all low-income subscribers in the North**. It should be an open, portable subsidy that includes all regions and communities in the Far North, as well as the northern territories of Yukon, Northwest Territories and Nunavut as well as the northern parts of the provinces and the regions of Nunavik and Nunatsiavut, which include remote communities similar to those in the territories. Regions outside of the Far North face similar challenges to access to affordable, adequate infrastructure and services. This geographic focus includes communities in northern parts of provinces without year-round road access as well as other isolated communities.

134.   This subsidy should:

- Be available to use with any provider or any technology
- Include both voice service and Internet access

135.   We think the most appropriate way to identify low-income households is to use other eligibility data such as through provincial and territorial Income Assistance Programs.[30] Social service officers in the communities could verify eligibility. Special outreach efforts will be needed to ensure that low-income households know about and can access subsidies. For example, Band councils or other local governments could certify eligible residents for such subsidies.

136.   This approach has been used for eligibility for Lifeline services in the U.S. **The Lifeline Program,** which has provided subsidies for voice service for low-income subscribers since 1985, now also provides subsidies for broadband access.[31]The FCC relies on evidence that consumers have qualified for other federal income assistance programs (unemployment, Tribal, Medicaid, disability assistance, etc.).

137.   This subsidy should be portable to allow consumer choice and stimulate competition. The FCC Lifeline subsidy is portable; it can be used with any provider that meets program criteria.[32] The subsidy should go directly to consumers who can then choose how to spend it on communication services.

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[30] See: https://maytree.com/social-assistance-summaries/nunavut/ and https://www.ece.gov.nt.ca/en/services/income-security-programs/income-assistance-program
[31] FCC, "Lifeline Program for Low-Income Consumers." Accessed Oct. 5, 2022. https://www.fcc.gov/general/lifeline-program-low-income-consumers.
[32] Federal Communications Commission. FCC MODERNIZES LIFELINE PROGRAM FOR THE DIGITAL AGE: *New Rules Will Help Make Broadband More Affordable for Low-Income Americans* WASHINGTON, March 31, 2016**.**

138.   Also, the FCC's Affordable Connectivity Program (ACP) is the sequel to the Emergency Broadband Benefit Program, which implemented additional subsidies for broadband services to low-income and Tribal Households in 2021, following the greatly increased demand for broadband access for online education and access to other services during the COVID-19 pandemic.[33] Participating providers are to make available discounts of up to $30 per month for Internet service and associated equipment to eligible households. On Tribal lands, the monthly discount may be up to $75 per month. Participating providers that also supply an eligible household with a laptop, desktop computer, or tablet may receive a single reimbursement of up to $100.64.[34]

139.   We note that while Canada has a small high-cost fund, most funding programs in Canada provide only Capex (capital expenditure or infrastructure funds), and do not provide any funding sources to cover operating and maintenance costs (Opex). Other subsidies may reduce retail Internet costs for subscribers. A revised high-cost subsidy that could be available to any qualified provider could address the problem of high operating costs from the providers' perspective and high prices from the users' perspective.

140.   **Recommendation: Operational subsidies to providers should be examined in the context of *modifying or replacing the High Cost Fund* and considered in a separate proceeding.** We are concerned that any operational subsidies to incumbent TSPs and other large providers would be very difficult to monitor in identifying actual (as opposed to inflated) costs and ensuring that any subsidies were passed on to consumers in the form of lower rates.

141.   We also filed an Undertaking in CRTC 2022-147 focused on consumer subsidies in the context of social assistance programs. We pointed out the challenges with programs such as Connected Families with regard tocompetition in the Far North, and in particular the barriers it may raise for Indigenous service providers.FMCC members are concerned that this requirement will prevent Northern consumers from switching providers, including to Indigenous non-profit providers, and therefore limit competition in the Far North. We therefore believe that portable subsidies made available to all low-income residents are a preferable solution.

142.   Concerning sources of funding, we believe that a small percentage of revenues for all telecommunications services in Canada should be made available for this purpose. All revenues of all telecommunications services (including Internet and mobile) should be subject to the overall subsidy regime – with a key exception. The Commission should maintain the exemption for telecommunications providers with revenues under $10 million. This figure of $10 million should be adjusted for higher cost of service delivery and infrastructure in the North.

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[33]"Consolidated Appropriations Act, 2021." Legislation. 2019/2020. Accessed Oct. 5, 2022 https://www.congress.gov/bill/116th-congress/house-bill/133/text.
[34] FCC, "Emergency Broadband Benefit. Accessed Oct. 5, 2022. https://www.fcc.gov/broadbandbenefit

Q7. If funding for operational costs is provided, the Commission expects that there would be improvements to TSPs' available service packages and pricing offered to subscribers in rural and remote areas. How can the Commission ensure that any reductions in prices or improvements in service packages are offered and maintained?

143.   As discussed in Q6 we believe there should be subsidies for low-income consumers and coverage of specific operational costs for Indigenous and non-profit providers, not a general operational subsidy to providers.

144.   As discussed above (Q6) a revised high-cost subsidy that could be available to any qualified provider could address the problem of high operating costs from the providers' perspective and high prices from the users' perspective. Necessary costs should be calculated using a 'bottom up' approach that first determines the requirements of providers (as expressed, for example, in feasibility studies) and then generates estimated costs based on this information.

145.   In our Intervention to CRTC 2022-147 we stated that it is important that subsidy programs define standards of service. Any such standards should be updated to fit the current BSO standards in Canada.

Q8. How should the Commission determine applicant and geographic eligibility for operational funding if it is not tied to an eligible capital project?
- *How should the Commission consider applications from more than one service provider offering service in the same geographic area?*
- *Should TSPs be able to apply for operational funding alone, or should operational funding be tied to an eligible capital project?*

146.   We reserve the right to comment on this question in future stages of these proceedings.

Q9. If the Commission funds TSPs' operational costs, what operational costs should be eligible for funding?

147.   FMCC has previously submitted comments on this topic in our response to CRTC 2019-45 (section E19, E20 and Appendix 2). We refer the Commission to those responses as they apply here.

148.   We note that Indigenous Services Canada's FNIF includes the following operational costs that we believe are also relevant for Indigenous and non-profit providers applying to the Indigenous Funding Stream / Indigenous Broadband Fund:

- Capital costs of acquiring, constructing or renovating a tangible capital asset – up to 10% *of such costs can include training for the construction, renovation, operations and maintenance of the asset*(emphasis added)

- Fees paid to qualified professionals, technical personnel, consultants and contractors specifically engaged to undertake the surveying, design, engineering, manufacturing or construction of a project infrastructure asset and related facilities and structures

- Costs of environmental assessments, monitoring, and follow-up programs, as required by the Impact Assessment Act for an eligible project

- Incremental costs related to *strengthening the ability of First Nations communities* to develop their:
  - infrastructure *maintenance capacity*
  - *planning capacity*
  - First Nation Infrastructure Investment Plans (under the *planning and skills development* category) (emphasis added)

- Other costs that are considered to be direct and necessary for the successful implementation of a project, and that have been approved in advance by ISC

- Incremental costs of the First Nation employees or equipment if all to the following conditions are met:
  - the First Nation has determined, and ISC's regional office agrees that it is not economically feasible to tender a contract
  - the employee or equipment are employed directly in respect to the work that is the subject of the contract
  - the arrangement is approved in advance and is outlined in writing by ISC's regional office

- Salary costs to support planning and skills development projects are also permitted if all of the following conditions are met:
  - the salary is incremental to existing funded positions
  - the tasks to be performed by the position are well-defined and related to the project

- the arrangement is approved in advance and is outlined in writing by ISC's regional office"[35]

149.   Recommendation: The CRTC should include the operational costs currently supported by FNIF for Indigenous and non-profit applicants to the Indigenous Funding Stream / Indigenous Broadband Fund (see list above). We emphasize the availability of funding for training and planning and skills development.

150.   We also submit that the following operational costs that should be made eligible for funding for Indigenous and non-profit providers based in and operating from rural, remote, Northern and Indigenous regions.

Wholesale Transport Bandwidth

151.   As noted in our response to Q7, the high cost of wholesale transport bandwidth capacity remains a significant barrier to Indigenous and non-profit providers, if they are to provide affordable services to their subscribers. This should therefore be made an eligible cost, subject to regulated 'just and reasonable' rates set by the Commission.

Insurance and Risk Mitigation

152.   Rural, remote, Northern and Indigenous regions are disproportionally impacted by climate change and other emergencies (as discussed below in Q12-17). Therefore, Insurance and Risk Mitigation becomes a major consideration for Indigenous and non-profit service providers operating in these regions. To support equitable costs for operations across regions of Canada, insurance should be subsidized when costs are disproportionately high in certain regions.

153.   Some FMCC members hold insurance(fire/theft/liability) for items such as equipment, towers, shelters, and fibre. For example, ECN use a Cree insurance company, Creeco.

154.   Individual First Nations benefit from economies of scale when purchasing bulk insurance in collaboration with a regional community intermediary organization. For example, FNEC in Quebec works closely with its member First Nations in this area. Individual First Nations own and control network infrastructure, but as the non-dominant career for local public sector networks, FNEC incorporates insurance coverage.

155.   Given this context, insurance should be made an eligible cost for Indigenous and non-profit providers operating in rural/remote regions.

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[35]See: https://www.sac-isc.gc.ca/eng/1497275878022/1533645265362

Transportation and Shipping Costs for Replacement Equipment

156.   Shipping costs for equipment are generally included in costs of infrastructure projects. However, additional shipping costs are likely to be necessary to replace equipment once the projects are operational.

157.   Indigenous providers typically operate in regions of Canada with very high costs for transportation and shipping materials. Costs typically increase the more geographically remote a community is, and some shipping is seasonal (such as in fly-in communities reliant on winter roads).

158.   In Manitoba, there can be major discrepancies in shipping costs among First Nations. For example, 2023 estimates per shipping loads (48 foot, or 53 foot flat bed truck)from Winnipeg to various First Nations range from $1,330 to $19,300:

- Sayisi Dene (Tadoule Lake):   2023 estimate per load is $19,360
- Garden Hill: 2023 estimate per load is $16,192
- Wuskiwi Sipihk (Indian Birch):   2023 estimate per load is $3,400
- Fisher River Cree Nation: 2023 estimate per load is $1,331

159.   The Government of the Northwest Territories provides Marine Transportation Services Cargo Rates for 2023showing the differential shipping costs among communities in the North, which vary greatly.[36]For example, container shipped from Hay River to Kuglutuk costs$9,142, with overweight and oversize shipments subject to additional charges.

160.   FMCC member WJBTN provides an example of high shipping costs after an AC unit stopped working in one of the critical shelters in Moosonee. Replacing the router and repairing the AC unit would cost more than $30,000, much of which is for shipping costs. The router alone costs $250 to $300 to ship from Timmins to Moosonee (excluding costs for FedEx from Montreal to Timmins, and installation, etc.),and then WJBTN must contract someone to pick it up and keep it safe until there is a technician in the community who can install it. The AC unit must be transported by charter plane to Moosonee, accompanied by two people who will assess the problem and may have to return to fix it with the correct parts, and tools, etc. These kinds of high unexpected repair and shipping costs significantly impact the operational costs of the network.

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[36]See: https://www.inf.gov.nt.ca/sites/inf/files/mts_cargo_rates_2023_en.pdf

Funding to Train and Develop Local Technicians, Digital Stewards, Network Managers and Cyber-Security Staff

161.   As discussed in Q18 below, funding should be available for digital literacy, training, and data collection as well as deploying infrastructure. This includes support for local technicians, digital stewards, network managers, and cyber-security professionals.

Staffing Costs for Local Technicians and Digital Stewards

162.   As noted in our response to Q12, local technicians provide essential support to rural, remote, Indigenous and Northern communities – particularly given challenges that arise from climate and environmental emergencies, and the costs and delays of relying on fly-in technicians from urban centres.

163.   As well, the Commission should consider support for and placement of "digital stewards" or "technology champions" in these communities. These people could serve as a source of information about available funding programs as well as more general information about telecommunications infrastructure and services, including complaints processes.

164.   Funding for operating costs should therefore include staffing costs for local technicians and digital stewards/technology champions, whose training costs should be covered as part of the initial project budget.

Inflation Costs

165.   The costs of spare parts, shipping, and repair services may increase significantly after the initial network is installed. Inflation factors should be included in funding for these operational costs. This should include a consideration of fluctuating currency exchange rates; for example, many FMCC members use suppliers based in the U.S. for required equipment.

Satellite Transport Costs

166.   As discussed in our response to Q26, the Commission should cover at least a significant portion of satellite transport costs where required by Indigenous and non-profit providers Satellite transport should be considered a multi-year project expense rather than an annual operational expense, to allow for planning and operational certainty.

Strategic Planning and Network Development

167.   FMCC member organizations noted that many First Nations organizations require management and operational support, including funding for community outreach and training to

develop or expand services using the network, such as working with anchor tenants offering public services such as health and education, or with local governments and businesses. Such partnerships are required to aggregate demand from multiple low-population communities to achieve economies of scale in the purchasing of hardware, software and bandwidth (including satellite bandwidth and/or mobile spectrum).

Support for Project Administration

168.   The Fund should include an Administration fee of 10% to 15% per year for each year of the project.

169.   We also note that the FNIF works with First Nations to coordinate infrastructure funding with their existing 5-year community investment plans. These plans are considered on an annual basis. As noted in the FNIF information webpage:

> "ISC uses First Nations Infrastructure Investment Plans (FNIIPs) to identify projects for potential FNIF funding. Each year, First Nations communities develop infrastructure investment plans and share them with their ISC regional office. In their FNIIPs, First Nations provide a detailed list of their 5-year community infrastructure plans, including information about projects that have been completed, multi-year projects that are underway and future infrastructure investment needs proposals.[37]

170.   The CRTC should coordinate with ISC's FNIF to identify projects that could be eligible for funding, such as through annual First Nations Infrastructure Investment Plans submitted to ISC. Doing so helps align connectivity infrastructure projects with other initiatives underway in Indigenous communities, as well as reduces the administrative burden for communities.

Q10. Assuming an application-based process, what criteria should be used to assess an application for operational funding?

171.   We reserve the right to comment on this question in future stages of these proceedings.

Q11. If the Commission funds operational costs, how long should operational funding be provided? Should a new application be required to extend funding?

172.   We reserve the right to comment on this question in future stages of these proceedings.

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[37]Ibid

Q12. Is the proposed definition appropriate for resiliency projects under the Broadband Fund?
- *Should additional types of projects be considered for resiliency funding?*

Proposed definition: *"The Commission takes the preliminary view that a resiliency project should be defined as one that will provide redundant data paths to an existing transport network by introducing geographic redundancy to a community or communities that already have high-capacity transport infrastructure and are otherwise ineligible to receive funding as a transport project. A resiliency project can do this by (i) closing a loop or ring by building infrastructure between two communities, thereby increasing the resiliency in one or more communities; (ii) building a second set of parallel but geographically diverse transport infrastructure to a community where completing a ring or loop is not feasible or possible; or (iii) funding satellite operational expenses to establish an alternative data path for essential services, such as voice and emergency services."*

173.   Generally, FMCC agrees with this technical definition of resiliency with the understanding that redundancy is one aspect among many of a resilient project.

174.   FMCC submits that systems resilience depends on robustness (infrastructure that can withstand the impacts of hazard events without significant damage or loss of function), flexibility (the ability to adapt and be modified as new technologies arise and our understanding of local environmental change improves), integration (with other infrastructure systems), resourcefulness (the ability to quickly identify and mobilize resources to maintain or restore network functionality), and inclusivity (of all stakeholders and their unique and collective sensitivity to shocks or stresses within a connectivity network).[38]

175.   With this broader understanding of resiliency, the types of eligible resiliency projects expand to include but not be limited to: climate-smart network systems planning, climate and disaster risk assessment and fortification activities, contingency planning, protective infrastructure including nature-based solutions, diligent maintenance and continuity practices, and more.

176.   **Recommendation: the CRTC should expand the definition of resiliency (with major attention to disaster and climate risk, climate adaptation and climate change mitigation), and thereby expand the eligibility type/s of resilient projects eligible for Broadband Fund support.**

177.   Regarding redundancy, infrastructural outages can have major impacts on communities, particularly if they rely on connectivity for public or commercial services. In rural/remote

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[38] See ARUP Cities Resilience Index.

regions, connection problems can last days, or even weeks. For example, in Ulukhaktok, NWT, the Internet was cut out for 8 days in March 2021.[39]

178.   A recent network outage in Jean Marie River First Nation, a small community of around 40 households and 77 people in the NWT illustrates these issues.[40] Katlotech, a small Indigenous-owned and operated technology company based in Yellowknife, has been supporting connectivity in Jean Marie River. In 2018, Katlotech worked with the community to install Wireless Access Points (WAPs) to distribute internet in the community from a connection provided by Northwestel. Since then, Katlotech has been involved in maintaining the system – including being prepared for emergencies.

179.   When the community flooded on Tuesday, May 12, 2021, they lost Internet and electrical power for three days. During that time Katlotech worked with the local leadership to fix their system and ensure they didn't lose essential financial and business data. This work was done in cooperation with Northwestel, which repaired the main connection to/from the community; Katlotech was able to fix the local access network. Since the community owned and maintained their local network, they were not dependent on Northwestel technicians who can take days to arrive.

180.   While this example presents an extreme flood event, we can anticipate more similar events in the future as climate change continues to affect communities in the Far North, including the Northern regions of provinces. As well, even during non-emergencies, Jean Marie River experiences ongoing reliability challenges due to a lack of local technicians. Residential customers have reported waiting 3-4 months for a Northwestel technician to arrive in town to fix their service.

181.   Along with Katlotech, other FMCC members and colleagues have demonstrated how they can address challenges of resiliency due to the limited availability of regional and local technicians in areas impacted by events including recent flooding and forest fires. The work of Indigenous service providers helps fill gaps and provide resilient networks and services in these regions.

182.   In Northern Ontario, the Indigenous-owned network CreeCable has been contracted to provide technicians to support Ontera, which no longer has a team of in-house technicians that work in the region. This is despite the fact that Ontera does not otherwise collaborate or partner with CreeCable in service provision.

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[39]See: https://www.cbc.ca/news/canada/north/ulukhaktok-without-reliable-internet-for-8-days-1.5937597
[40]For the full story, see: https://www.digitalnwt.ca/local-indigenous-technology-company-helps-address-power-and-internet-access-shortages

183.   Given this context, we stress that resiliency in rural, remote, Northern and Indigenous regions is not just about infrastructure, but also about local organizational and staff redundancy, including local technicians. A diversity of providers – and particularly providers based in and operating from rural, remote, Northern and Indigenous regions – can support network resiliency.

184.   We discuss **redundancy** in responses to the questions below.

Q13. How should eligible geographic areas and types of projects for resiliency funding be determined?
* *Do certain geographic areas have a greater need of resiliency projects than others?*
* *What is the impact on resiliency when existing transport capacity in an area is fully saturated?*

185.   The CRTC should prioritize remote communities that have fewer redundant connections, suffer longer wait times for technicians to arrive, and have less infrastructure capacity. We note that these regions, many of which are populated by Indigenous peoples, are often vulnerable to the impacts of climate change.

186.   For example, the Western James Bay Telecom Network in Northern Ontario is operating in a region that lacks any redundancy. There is a single transport line that runs from North Bay to Timmins and then Moosonee. If the line is cut anywhere along its path from North Bay to Moosonee, the entire region will lose service. Given these circumstances, the Broadband Fund should focus on regional transport redundancy.

187.   These conditions are due to the lack of business case for large commercial providers to build – and operate – infrastructure and services in these areas. Therefore, any funding program for resiliency projects should prioritize Indigenous and non-profit providers based in and operating from affected regions and communities.

188.   The CRTC should also prioritize Indigenous communities that are vulnerable to disaster and climate risks such as wildfires, flooding, severe storms, melting permafrost, etc.

Q14. Is the existing competitive application process suitable for funding resiliency projects?

189.   **No** –the CRTC should coordinate with Indigenous organizations, governments, emergency services, and telecommunications service providers to take inventory of existing assets, and their level of resiliency, based in regions and communities (i.e., a telecommunications resiliency assessment).The identified locations, assets and projects should require include local technicians and other staff who can support network resiliency or funding to train and hire local technicians.

190.   As noted above, Indigenous service providers are well-placed to provide resiliency services in the rural/remote regions they are based in and operate from.

Q15. Should existing TSPs in a specific area be prioritized for resiliency projects?

191.   Indigenous or non-profit providers that currently operate or plan to operate in a specific area should be prioritized over large commercial telecommunications providers for resiliency projects. As noted above, since these providers are based in and operate out of impacted regions and communities, they have a higher likelihood of hiring and maintaining local technicians. They have a demonstrated record of addressing challenges and supporting resiliency when large commercial telecommunications providers are unable to provide services or repair infrastructure during emergencies. They also have a stronger localized understanding of climate and disaster risks that telecommunication infrastructure might be exposed to, and thereby are better able to develop robust and reflective approaches to resilient projects.

192.   Along with sharing their capacity with other telcos, resiliency projects owned and operated by Indigenous parties offer an excellent opportunity for Indigenous groups to gain experience / ownership of infrastructure and services, since they can scale up capacity over time. This is one important avenue for economic reconciliation.

193.   We are concerned that prioritizing **any existing** TSP in a specific area, such as large incumbent commercial providers, may result in further entrenching existing service monopolies and reducing competition.

Q16. How could resiliency funding apply in areas with more than one service provider?

194.   FMCC submits that the CRTC should conduct a network resiliency assessment in rural and remote and Indigenous communities. This assessment will identify areas, projects, and activities that should be prioritized to establish resiliency. In the event that more than one service provider is available and eligible to carry out the resiliency project, local Indigenous and/or non-profits service providers should be prioritized for aforementioned reasons, and thereafter a merit-based scoring criteria should be applied.

Q17. What criteria could be used to assess resiliency projects?

195.   See our response to Q12 above for our perspective on resiliency and redundancy.

Q18. Are there remaining gaps in connectivity funding in Canada that are regional or based on specific types of projects that are not currently the focus of significant funding?

196.   We submit the following lists of gaps in connectivity funding:

Costs of Consultation with Communities to be Served

197.   As we have noted above and in previous CRTC proceedings, applicants should be required to consult with communities to be served. The Commission should provide Indigenous and non-profit providers with funding to support required consultation activities.

Training and Workforce Development

198.   As noted above, training – along with general planning and skills development – is considered an eligible cost for projects funded by Indigenous Services Canada's FNIF.

199.   However, there is a requirement for more funding to support training and workforce development for local technicians based in and operating from rural, remote, Indigenous and Northern regions. At present, the Broadband Fund provides some funding to support training for local technicians in satellite-served communities. However, there are few other opportunities for Indigenous communities to access funding to support training for local technicians.Training helps ensure that infrastructure will be installed by local technicians, and can be maintained and effectively meet the BSO goals long-term.

200.   We note that ISED's UBF fund supports both training and wages for local technicians in First Nations. For example, KNet has an approved project (2023-2024) to install routing

equipment in remote First Nations in Northwestern Ontario. The UBF has approved short term local technician contracts, and the technical training of local Indigenous technicians to assist with the installation of this equipment. There are cost savings through the reduction of the number of technicians that need to be flown to the remote locations. The local technicians are also more familiar with their infrastructure, can complete site assessments without the need for travel, and can access support equipment (e.g., ladder, forklift, truck, etc.) to ensure the work is completed efficiently.

201. In Manitoba, FMCC member Broadband Communications North (BCN) provides training to support local technicians. For example, Nisichawayasihk Cree Nation (Nelson House) owns and operates a local ISP in partnership with BCN. Rather than send technicians to the community from Winnipeg, BCN is working with the community to develop a team of local technicians. BCN has developed a suite of 4-6 courses for local technicians. With funding support for tuition and travel, BCN could provide training to additional communities.

202. In Quebec, FNEC works with Keyano College to coordinate training for local technicians and network staff. Costs include tuition, support for housing, and salary for co-op training placements in communities.

203. Indigenous and non-profit service providers require funding for network managers and administrators who support operations in these regions, including cyber-security staff. In some cases, First Nations have experienced ransomware and other attacks that have resulted in high costs and challenges to data security. First Nations are looking into cyber-security insurance, but in order to purchase insurance, require a level of cyber-security expertise and staffing, as well as ongoing training and required software and organizational processes.

204. A recent presentation from the 2023 Canadian Rural Remote Broadband Conference (CRRBC) Eastern Canada conference shared a figure illustrating the significant potential of enhancing digital skills for Indigenous peoples and communities in the Tech sector.[41]

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[41]See: https://img1.wsimg.com/blobby/go/74a62fbc-730e-4aa1-8ecd-a69451c36727/downloads/CRRBC%20Talent%20Attraction%20Project%20Update.pdf?ver=1684856131310

PROPORTION OF WORKERS IN KEY OCCUPATIONS IN CANADA'S DIGITAL ECONOMY WHO IDENTIFY AS INDIGENOUS PEOPLE LIVING IN CANADA

Occupation	NOC	%
Telecommunications installation and repair workers	NOC 7246	2.7%
Electrical and electronics engineering technologists and technicians	NOC 2241	2.5%
Computer network technicians	NOC 2281	2.2%
User support technicians	NOC 2282	2.1%
Graphic designers and illustrators	NOC 5241	2.0%
Graphic arts technicians	NOC 5223	1.8%
Web designers and developers	NOC 2175	1.6%
Database analysts and data administrators	NOC 2172	1.6%
Information systems testing technicians	NOC 2283	1.6%
Information systems analysts and consultants	NOC 2171	1.3%
Computer and information systems managers	NOC 0213	1.2%
Computer programmers and interactive media developers	NOC 2174	1.1%
Engineering managers	NOC 0211	1.1%
Computer engineers (except software engineers and designers)	NOC 2147	0.8%
Software engineers and designers	NOC 2173	0.6%

National average, across all occupations

Figure 6: Proportion of Indigenous people living in Canada in key tech roles in Canada compared to non-Indigenous people living in Canada. Statistics Canada Census, 2016. For an online version, visit https://www.datawrapper.de/_/QkOQO/

205.   As well, the First Nations Technology Council prepared a report on the involvement of First Nations in B.C.'s technology sector titled "Indigenous Leadership in Technology: Understanding Access and Opportunities in British Columbia". The report summarizes some of the current barriers and enablers Indigenous peoples experience in building technological capacity as well as their vision for the future of technology in British Columbia.[42] The report's findings include that funding should be directed to communities and community-led initiatives; and Indigenous leadership in technology must include Indigenous-led design of education, skill-building, and career pathways.

206.   In the U.S., the Broadband Equity, Access, and Deployment (BEAD) Program is a recent federal grant program that aims to get all Americans online by funding partnerships between states or territories, communities, and stakeholders to build infrastructure where needed and increase adoption of high-speed internet.

207.   BEAD projects eligible for funding include:

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[42]See the report here: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.technologycouncil.ca/wp-content/uploads/2023/02/FNTC_ILIT_eport_2022.pdf

- Planning for the deployment of high-speed Internet, including conducting research, collecting data, outreach, and training;
- Deploying or upgrading Internet in unserved or underserved areas or improving service to community anchor organizations;
- *Adoption and digital equity programs*; and
- *Workforce development programs and vocational training*[43](Italics added).

208. Recommendation: To support workforce development, funding should be available for training, digital literacy, and data collection as well as deploying infrastructure.

209.   Along with dedicated funding for training and workforce development, the CRTC can coordinate with other sectors to support resilience through basic network repair and technical training. For example, basic training for Canadian Rangers based in rural/remote regions of Northern Canada includes communications. According to the Canadian Rangers website:

> "Canadian Rangers also receive 12 days of collective patrol sustainment training each year which may involve advanced levels of first aid, flood and fire evacuation, search and rescue, disaster assistance, communications, marksmanship exercises, navigation, and setting up bivouac sites."[44]

210.   The Canadian Military's Aerospace division also has extensive training for telecommunications and information systems.[45]

211.   **Recommendation: The Commission should reach out to the Department of National Defense and telecommunications service providers located in rural/remote regions to assess whether they can liaise with Canadian Rangers and other military and public safety personnel to provide technical support in emergency situations such as floods and fires.**

Underserved Communities

212.   Some northern remote regions of provinces and Nunavut have low available speeds and poor QoS. A priority should also be upgrading speed and service reliability in these communities. For example, the U.S. BEAD program prioritizes unserved locations (with no internet access or less than 25/3 Mbps) and underserved locations with access *under 100/20*

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[43] The Broadband Equity, Access and Deployment (Bead) Program Overview.
https://www.internetforall.gov/sites/default/files/2022-05/BEAD%20Info%20Sheet%20-%20IFA%20Launch%20-%20Final.pdf
[44]See: https://www.canada.ca/en/army/corporate/canadian-rangers/training.html
[45]See: https://forces.ca/en/career/aerospace-telecommunication-and-information-systems-technician/

Mbps (italics added: we note the much higher speed benchmark for BEAD project funding than the CRTC requirement).

213.   We also note that the CRTC needs better data on speed and QoS than may be available from incumbents serving remote regions. We therefore emphasize the need for funding to support independent data collection (see the discussion in our 'General Response' above)

Remote Roads

214.   Mobile coverage should also be extended along roads serving remote communities where drivers are now unable to summon help in emergencies, such as accidents, road outages, delays during bad weather, etc. See also our response to Q23 below.

Q19. Are there constraints or unfunded costs in the current Broadband Fund or the funding landscape that prevent projects in certain areas or certain types of projects from being sustainable, even where some funding may be available?

215.   We refer the Commission to our response to Q9.

Q20. What form of engagement with an affected Indigenous community should applicants be required to demonstrate?

216.   As we have pointed out in other proceedings, meaningful consultation with Indigenous communities is critical and should be mandatory for entities requesting broadband funding to serve Indigenous communities and regions.

217.   The most recent version of the Guide (Call for Applications issued in November 2022) includes the following language:

> "Where a project presents a risk of an adverse impact on an established or asserted Aboriginal or treaty right, a constitutional duty to consult and accommodate may arise"

> "Other obligations to consult with Indigenous people may arise by statute or pursuant to a treaty. Applicants must indicate whether their proposed project will adversely impact any established or asserted Aboriginal or treaty rights."

"An adverse impact may be triggered by a project being built on land subject to an established or asserted Aboriginal or treaty right. Applicants must conduct all necessary consultations and demonstrate how they will address any potential adverse impacts."

"Applicants are encouraged to communicate early, openly, and directly with potentially affected Indigenous groups to inform them of the proposed project" [footnote indicates that "engagement" does not arise from a constitutional duty to consult]

"If a risk of a potential adverse impact on Aboriginal or treaty rights is identified, the applicant is required to provide details of how it has consulted or will consult with affected Indigenous communities to develop an appropriate resolution."

218.   We support the CRTC's statement in 2018-377 that it "expects applicants to identify any established or asserted Aboriginal or treaty rights that might be affected by the proposed project and to commit to undertaking any further consultations that may be necessary" (paras 219-224).

219.   However, this language should apply to applicants for *all projects* that involve providing services on or accessing Indigenous lands. Also, the language above should be strengthened from "Applicants are encouraged …" to "**Applicants are required…**" and require evidence that they have done so.

220.   In 2019, participants at the Indigenous Connectivity Summit raised issues regarding the placement of infrastructure on Indigenous lands without consent and without benefit to the occupants of the land. In several cases, participants noted examples of when fibre backhaul has run through Indigenous territories, but occupants had no access to it or benefit from it. Indigenous connectivity advocates have also pointed out that some rights-of-way and other agreements regarding Indigenous territories were negotiated decades ago, before increased legal recognition of Indigenous rights.

221.   In CRTC 2022-147, we provided the example of K'atlodeeche First Nation's (KFN) meeting with the CRTC in 2013 regarding Northwestel's access to a highway right-of-way that ran through KFN territories without any consultation with the Nation. Despite the fibre backbone running along this right-of-way in KFN traditional territories, the First Nation was prevented from accessing the infrastructure to develop their own network. This prevented the Band from utilizing it to provide economic and social benefits to its citizens. Northwestel did not provide opportunities to the community for gainful employment or to partner on the infrastructure project.

222.   Applicants must demonstrate they have adequately engaged with communities in both initial planning and application stages, and also provided opportunities for economic and social community benefits. It is important to ensure communities know and understand possible

development opportunities and be included in the planning and operational aspects of these projects. Community engagement must not be treated as an early-stage opportunity for communities to comment on decisions, but rather an ongoing relationship between equal parties.

223.   We strongly resist any suggestion that community involvement in the strategic planning, deployment, and ongoing management, operations and maintenance of telecommunications infrastructure and services is not administratively or economically efficient. Consultation is not a barrier to efficiency – in fact it increases efficiency and stewardship of public funds by reducing duplication and supporting strategic planning. It provides additional checks and balances to ensure that funding is coordinated across different entities, including government departments. It ensures communities are obtaining the services they require for their long-term development, including economic and social benefits.

224.   We refer to the Calls to Action issued by the Truth and Reconciliation Commission of Canada for guidance on economic reconciliation, and highlight in particular #92, on "Business and Reconciliation":

> "92. **We call upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources.** This would include, but not be limited to, the following:
>
> i. Commit to **meaningful consultation**, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects.
>
> ii. Ensure that Aboriginal peoples have **equitable access to jobs, training, and education opportunities** in the corporate sector, and that Aboriginal communities **gain long-term sustainable benefits** from economic development projects (**Emphasis added**).[46]

225.   The CRTC should therefore require service providers to undertake **meaningful engagement and consultation** with Indigenous communities. In CRTC 2017-112, we suggested that any discussion of "meaningful consultation" in this context must:

- **Be inclusive of the whole community**, for example hosting a public community meeting. These community-level events should provide opportunities for residents

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[46]See: http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf, p.9.

to meet, learn, share, and understand local needs, priorities and desires with regard to the strategic development of telecommunications infrastructure.

- **Lead to new economic and social opportunities and innovation**, such as operation and management of the infrastructure and network services. Economic development and the digital economy refer not only to the ways that people use existing telecommunications infrastructure, services and applications, but also the jobs that emerge when people are involve in the development, management, operations and maintenance of those resources.

226.   As a starting point, discussions with communities could consist of the following criteria:

- Applicants and representatives of the affected communities should co-determine the level and style of consultation or information sharing;
- Applicants clearly explain the proposal, outlining public/community benefits, and gain an understanding of community concerns and priorities.
- Consultations should include discussion of services to be provided, technologies to be used, and local considerations such as hiring and training of local residents, interconnections with existing or planned local facilities, and economic development opportunities.
- The applicant should provide a copy of their application to the leadership of all communities it proposes to serve, as well as a report of the consultation. This consultation report should include a summary of who was consulted, how the consultation was carried out, and relevant findings and how the findings will be addressed.
- This report of the consultation should be included in the application to the fund. It should be distributed for review to the Proposal Review Committee and associated advisors (as described in our response to Question 5).
- Depending on the nature of the community, the project application should be endorsed through either a formal BCR or vote of council (or authorized committee of council), as reflected in a letter from the local leadership entity.
- The fund administrator should also provide a copy of its decision concerning the application to the communities that the applicant proposes to serve.

227.   In our Final Comments for CRTC 2017-112, FMCC stated that the Fund should endeavour to include <u>all</u> of the following ways that applicants consult and engage with communities:

- Consultation prior to an application being filed to serve a local community (e.g., an eligibility requirement of engagement or support);

- Local community ownership or participation to serve a community;
- Support to assist local communities to file applications for funding;
- 'Consultation' during the application (e.g., provide notice that an application has been filed and/or an opportunity to comment on an application filed related to a community);
- Explicit terms that allow funds to be used for accommodations (e.g., revenue sharing, training, local benefits, etc.); and
- Local community approval of project plans and implementation.

228.   We recognize that higher levels of engagement with communities may increase project costs, particularly for consultations located in remote and Northern regions. Therefore, eligible costs for the Fund should support appropriate consultation with communities to be served.

229.   **Recommendation: Requirements for meaningful engagement and consultation must be explicit. Applicants should follow a transparent set of guidelines and information requirements. Consultation requirements should be publicly posted on the Broadband Fund website. They should include in-person meetings with leaders of affected communities (or videoconferences if necessary and feasible) and a specific agenda with opportunities for clarification on technical issues, access to land, or other issues, including those related to local economic development opportunities related to infrastructure and service delivery.**

230.   As an example of the elements that could be included in a formulation of the requirements and expectations, we refer to requirements in the U.S. The FCC established a Native Nations Communications Task Force (NNCTF) that adopted a requirement for service providers that receive federal funds to meet with Tribes. Service providers must demonstrate they have coordinated with the Tribal government and provide a report documenting their compliance.[47]

231.   To qualify for federal funding, carriers providing services on Tribal land must show that they have fulfilled a Tribal Government Engagement Obligation. They must demonstrate that they have coordinated with the Tribal government and provide a report documenting the following:

- Needs assessment and deployment planning with a focus on Tribal community anchor institutions;
- Feasibility and sustainability planning;
- Marketing services in a culturally sensitive manner;

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[47] Form available at: https://www.usac.org/wp-content/uploads/high-cost/documents/Forms/FCC-Form-481-Template.pdf (Accessed Oct. 5, 2022).

- Compliance with Rights of way processes;
- Compliance with Land Use permitting requirements;
- Compliance with Facilities Siting rules;
- Compliance with Environmental Review processes;
- Compliance with Cultural Preservation review processes; and
- Compliance with Tribal Business and Licensing requirements. (p. 7)[48]

232.   More recently, the U.S. federal BEAD broadband funding program specifically requires formal Tribal Consultation(s) as part of the grant process. It also states that Tribal Governments should be regularly engaged to establish equities and interests, in addition to this Consultation requirement.

233.   BEAD tools include a Tribal Engagement Guide with background on the importance of consultation and on Tribal governments, and specific examples of agendas, logistics, a discussion guide, and best practices for successful engagement.[49]

234.   **Recommendation: The CRTC should prepare a similar document as the BEAD Tribal Engagement Guide, and should also require that a report stating when and where consultations took place, who participated, and what issues were discussed and which required follow-up, with a copy provided to the community as well as to the CRTC.**

235.   Along with the CRTC's engagement guidelines, we point to those developed by Indigenous peoples themselves.

236.   The Navajo Nation Telecommunications Regulatory Commission (NNTRC)developed consultation and engagement requirements in its negotiations with service providers through its Application for Certificate of Convenience and Necessity, which outlines the process and rules associated with the provision of telecommunications infrastructure and services in Navajo territories. Details about this Certificate (CCN) are available in Section 510 of the documentation of the Navajo Tribal Utility Authority.[50]The process rewards those carriers that demonstrate they have provided public/community benefits to residents of communities affected by telecommunications projects.

237.   A second example of engagement and consultation guidelines developed by Indigenous peoples is from Northern Ontario. The *Manito Ski Naakonigewin Toolkit* was developed by the

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[48] Form available at https://www.usac.org/wp-content/uploads/high-cost/documents/Forms/FCC-Form-481-Template.pdf   (Accessed Oct. 5, 2022).

[49]https://broadbandusa.ntia.doc.gov/sites/default/files/2022-10/SBO_Engagement_Tribal_Entities.pdf

[50]See: https://www.navajonationcouncil.org/wp-content/uploads/2021/04/V0040.pdf

Grand Council of Treaty #3.[51]Based on the law of the Nation, this *Toolkit* is an educational resource for groups including communities, leadership, government, and proponents operating within Treaty #3 territories. Its purpose is to build relationships and partnerships, guide communications, and protect the environment, sacred sites, and ceremonial grounds. The *Toolkit* states:

> "Following Manito Aki Inaakonigewin, it is possible for development to occur with the least amount of uncertainty and conflict. This process has the potential to maximize cooperation and fair sharing of economic opportunities throughout the Nation." (p.14).

238.   The *Toolkit* provides further details regarding community-led and nation-led decision-making processes, as well as regarding funding to support protocol and the decision-making process. It also includes a list of mutually agreed upon benefits that may apply to telecommunications infrastructure and services. Key recommendations regarding consultation and engagement include:

- Describe the proponent's activity and project of plan in sufficient detail;
- Location of site/impacts on a sufficiently detailed map;
- Proponent must be prepared to share engineering and environmental reports with the community representatives;
- Highlight primary and secondary economic benefits in sufficient detail;
- Be transparent about impacts to the environment, lands, and resources;
- Contact Grand Council early regarding pre-consultation meetings and be open about expected timeframes and real deadlines;
- Be culturally sensitive and open to learning about traditional protocols and respectful relations with community members, Elders, and leadership;
- Be resourceful and helpful to our decision makers, you are building a long-term relationship;
- Contact Grand Council Treaty #3 if there are any misunderstandings, additional information requirements, unexpected delays with our communities, or changes with the plan/budget (p.54).

239.   In our Intervention to CRTC 2017-112, FMCC proposed guidelines regarding Consultation with Communities to be served.

240.   Applicants should also provide a copy of its application to the communities it proposes to serve. The FCC requires a common carrier seeking designation as an eligible telecommunications carrier (ETC) for any part of Tribal lands "must provide a copy of its

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[51]See: http://gct3.ca/wp-content/uploads/2023/02/MAI-Toolkit.pdf

petition to the affected tribal government and tribal regulatory authority... at the time it files its petition with the Federal Communications Commission."[52]

241.   The Commission should also provide a copy of any decision concerning the application to the communities the applicant proposes to serve. We further noted that in the U.S., the FCC must "send any public notice seeking comment on any petition for designation as an eligible telecommunications carrier on Tribal lands, at the time it is released, to the affected tribal government and tribal regulatory authority, as applicable, by the most expeditious means available."[53]

242.   **Recommendation: A specific definition of meaningful engagement and consultation, and associated performance indicators based on community context, desires and needs, clear project timelines, and mutually understood goals and definitions is necessary. Guidelines established by Indigenous peoples themselves, as well as examples such as the FCC's Tribal Government Engagement Obligation and Tribal Engagement Guide provide templates to consider when developing and refining consultation requirements for the Broadband Fund.**

243.   The Commission also needs to require clearer definitions of the roles and responsibilities of staff working on Indigenous consultation and engagement. For example, it is unclear what their level of decision-making power is concerning the outcomes of project planning and implementation. Without details on how consultation and engagement feedback are applied by service providers, consultation can be treated more like a 'sales pitch' than a reciprocal partnership.

244.   **Recommendation: The Commission should require commercial service providers to publicly post details on the scope of work, roles and responsibilities and contact information of staff members working on Indigenous consultation and engagement to provide Indigenous participants withal clearer understanding of what is possible during consultations.**

245.   The Commission should prepare (or review and approve) a Broadband Fund Overview Document (FAQ for Community Engagement).This document should be distributed by applicants to communities at least three (3) weeks prior to any planned community engagement activities. The information contained in this Document should clearly outline the following points:

     a.   Summary of the proposed project and its impact on the community.

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[52] Telecommunications Act, Title 47, Section 54.201, as amended October 1, 2012
[53]Ibid.

b. Adequate notice of the consultation, including a clear timeline for the consultation process, the date the consultation will begin (at least three weeks after the applicants' Overview Document is submitted to the community), and when the consultation period is expected to end.

c. Information that a community representative should be aware of during consultation with fund applicants.

d. A set of questions that applicants must address in consultations with communities.

e. Reference to consultation requirements of the Fund, including Aboriginal and treaty rights.

f. Terms and conditions of any proposed partnership, joint venture or consortium involving the community. This includes identifying which entity will: retain ownership of the network assets; be responsible for building the network; and be responsible for the network's operation. We note that the defined list of roles and responsibilities noted above in our discussion in paras 31-33 will be useful to parties to community engagement.

g. Contact information that the community can use to request more details.

246.   Recommendation: The Commission should develop and distribute a guide for communities to inform them of any forthcoming consultations associated with projects receiving support from the Broadband Fund.

- *Should applicants use the information available in the [Aboriginal and Treaty Rights Information System](#) (ATRIS) or another source to identify and contact potentially affected Indigenous communities?*

247.   ATRIS isa Web-based information system intended to map the location of Aboriginal communities and display information pertaining to their potential or established Aboriginal or treaty rights. The ATRIS website states that: "ATRIS, and any information contained in it, is not intended to provide or constitute legal advice on section 35 rights or duty to consult, ***nor is it intended to replace direct communication, partnerships, or collaboration with Indigenous communities***".

248.   ATRIS may be a useful source of data and information regarding the location of Indigenous communities, contact information, and associated treaty agreements, land claims, etc. It also provides helpful information on issues related to consultations. However, we stress the need for applicants to also engage in direct communication with Indigenous communities in their consultation and engagement activities.

249.   We suggest that information related to consultation and engagement in the context of telecommunications infrastructure and services be added to the ATRIS system, for the benefit of communities and service providers.

Q21. How should applicants demonstrate support from an affected Indigenous community?

250.   We emphasize that the Commission and/or third parties must monitor consultation requirements to determine whether they have been carried out appropriately and substantively. They could request, for example, the services of an Indigenous Elder advisor to assess the quality of community consultation processes. As noted in our response to Q22, some details on past consultations with Indigenous communities have been highly redacted by commercial service providers.

251.   **Recommendation: Applicants should provide a summary of who was consulted, how the consultation was carried out, and relevant findings to the Commission and to the organizations or communities consulted.**

Q22. How should the Commission assess engagement with Indigenous communities when evaluating applications?

252.   The Commission must require more transparency in how applicants engage with Indigenous communities. For example, in CRTC 2022-147 we commented on the highly redacted version of Northwestel's community consultation report provided in the public record of CRTC 2020-367.[54]Without being able to read the full report, it is challenging to assess the extent to which Northwestel's consultations indeed reflect "meaningful engagement" as well as address issues related to "duty to consult" and "free, prior and informed consent".

253.   Redacted information included feedback on issues such as employment, training, and business opportunities, which in our opinion demonstrates the "social and economic benefits" to Indigenous communities referenced in Q1. As well, recommendations for improving engagement practices were provided by participants and presented in Northwestel's report, but these details were also redacted.

254.   **Recommendation: The Commission should require that applicants are transparent about their consultation and engagement activities, such as by publicly releasing unredacted engagement summary reports.**

255.   In our intervention to CRTC 2019-45, we registered our concerns with respect to the specific language in the Guide regarding Community Consultation (as discussed in our response to Q3). It is not sufficient to state that applicants "attempted" to consult. They must provide evidence that they have consulted with communities and provided clear information about proposed projects.

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[54] The report is titled: "Northwestel Engagement Report: Broadband Fund Projects" and dated Dec. 1, 2020.

256.   An example of an infrastructure funding program that takes community engagement into consideration is the Canadian Internet Registration Authority's (CIRA)Grant Program. CIRA's grant review committee includes several members of FMCC, as well as members from other Indigenous communities and organizations.

257.   The **Infrastructure** component of CIRA's Grant Program states:

> "Through our Grants, we fund community-led connectivity research, network planning and solutions. Infrastructure solutions that CIRA will consider funding with Grants must be community-led and community-owned, contributing to long-term community development."[55]

258.   CIRA guidelines to assess Community Engagement in proposed projects are as follows:

Community Engagement
- Project is community-led, demonstrates community ownership, and contributes towards long-term community development.
- Project shows clear engagement by community stakeholders in development, delivery, financing, etc.
- Letter(s) of support from community partners and/or beneficiaries are provided.[56]

Q23. Should the Commission increase emphasis on mobile wireless funding in the Broadband Fund, including incorporating mobile wireless into the name of the Fund?

259.   No, the Commission should not change the name of the Broadband Fund.

260.   We recognize the need for additional investment in rural and remote mobile services, but have several reservations:

- Significant additional funding will be required in addition to the projected funding from the Broadband Fund (as indicated in Q18).
- Funding for additional mobile infrastructure should be considered as part of a national plan with specific goals, projected funding levels, and identified sources of funding (CRTC, ISED, other federal agencies, public/private partnerships, etc.)

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[55]See: https://www.cira.ca/netgood/grants/what-we-fund
[56]See: https://www.cira.ca/netgood/grants/how-apply#evaluation

261.   We also have concerns specific to Indigenous communities and regions. In our responses to RFIs in CRTC 2017-112, FMCC stated that we recognize that mobile services are important for underserved and unserved communities, as well as along the transportation roads used to access these communities. However, in general we recommended prioritizing fixed broadband projects over mobile projects and new builds over upgrades.

262.   Mobile wireless projects represent different markets and involve different infrastructure considerations than fixed broadband (such as the requirement and use of spectrum licenses). Mobile/cellular broadband, which requires a spectrum license, limits the ability of some organizations to provide services, therefore blocking innovation and competition. As well, mobile/cellular projects also limit the public services that are available to users – if mobile/cellular infrastructure is developed as the sole connectivity solution in a region, limited bandwidth and current pricing models can access to public services such as health and education is limited.

263.   A related consideration with regard to spectrum is the length of time a spectrum license holder has obtained the rights to an underserved area without acting upon them by deploying service. In such cases where a licence holder has 'sat' on spectrum, one solution may be to transfer the spectrum license and associated rights to another organization based in the region that wishes to act on it themselves. In such cases, that organization could be eligible for associated infrastructure funds through the Commission's Fund.

264.   Spectrum sovereignty is a major consideration here. We refer to our Introductory Comments, which summarize recent submissions to ISED regarding spectrum sovereignty. In our Intervention in 2019-45, we argued that with respect to mobile wireless projects, effective spectrum management and regulation should support small and non-profit community operators and not only incumbents and other large providers.[57] We recognize that spectrum management and allocations are the responsibility of ISED, but note the constraints faced by small and Indigenous providers who want to access spectrum.

265.   There are existing examples of Indigenous entities utilizing spectrum to deliver services. Examples include: K-Net Mobile which has provided 3G cellular services in 15 rural/remote First Nations in Northern Ontario through a subordinate licensing agreement with Rogers;[58] and Eeyou Mobility which offers 4G-LTE mobile services for 9 Cree communities and 5 non-Indigenous communities through partnership with SSi Micro and subordinate licensing with

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[57]Organizations including the International Telecommunications Union (ITU) Development Bureau have recommended that administrations consider mechanisms to facilitate the development of broadband services in rural and remote areas by small and non-profit community operations. Recommendation ITU-D 19. WTDC 2017 report. https://www.itu.int/en/ITUD/Conferences/WTDC/WTDC17/Documents/WTDC17_final_report_en.pdf
[58]https://knet.ca/mobile/

Rogers.[59] These examples demonstrate innovative uses of spectrum by Indigenous providers to serve their own communities.

266.   The Broadband Fund should recognize the need to ensure a more inclusive approach to the allocation of spectrum licenses by ISED that reflects the diversity of providers and prioritizes Indigenous providers.

Q24. Should the Commission provide funding for operational costs related to mobile wireless projects, particularly those serving eligible major transportation roads?

267.   As noted above in our response to Q23, we think that additional funding or a separate funding window will be required to meet the needs for upgrades to mobile coverage in rural and remote regions.

268.   However, if funding is provided to provide rural and remote road coverage, it should include operational costs similar to those we identify in response to Q9 above.

Q25. Should the Commission change any of the eligibility or assessment criteria related to mobile wireless projects?

269.   Challenges identified by K-Net to providing mobile coverage along year-round and seasonal roads in northern Ontario include:

- Costs involved in developing and maintaining reliable power supply for the radio equipment required to distribute the signal and the IP connection to the network. While advances in wind and solar energy systems might address this challenge, proposals must demonstrate how they would ensure 24/7 operation;

- Very challenging terrain with many obstacles (hills, rocks, trees) requiring high towers and high construction costs; and

- Very low revenue / usage which would require substantial public investment for construction as well as ongoing operation of such mobile/cellular systems.

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[59]https://www.eeyoumobility.com/our-network/#communities

270.   We therefore suggest that applicants to the Broadband Fund should demonstrate a clear understanding of the needs of remote and rural communities and the terrain and climactic conditions by including the following data:

- Distance travelled on the transportation road without coverage;
- Distance from the unserved/underserved portion of the transportation road to the nearest served community;
- Type of road service available to access the communities to be served (i.e., Seasonal/winter roads, all-season road, paved, gravel, etc.); and
- Type of energy source available and/or required to support operation of tower sites.

Q26. Should additional capital and operational funding be allocated for TSPs serving satellite-dependent communities, particularly capital funding for the latest satellite technologies, which are currently low-Earth orbit satellites?

271.   Satellite systems play an essential role in connecting rural and remote communities. In 2014, the Commission's *Satellite Inquiry* report outlined two primary deployment models for satellite systems, and their implications for communities.[60] The **community aggregator model** provides a single point-of-presence in a community that allows for local control of connectivity distribution. The **direct-to-home model** delivers services directly to households, cutting out the 'local loop'.

272.   The "local loop" community aggregator model provides more opportunities for local ownership and control of connectivity assets and services. Local providers can utilize this deployment model to generate economic opportunities for community members and can circulate revenues within rural/remote regions, thereby contributing to the development of a sustainable economic base. Some LEO satellite providers such as Telesat may allow for local access networks via satellite backhaul. An example of a satellite backhaul network that utilizes a community aggregator model is Tamaani Internet Services in Nunavik.[61] Another is K-Net services.

273.   The "direct-to-home" model removes the possibility of Community Networks since the connectivity distribution system is completely owned and controlled by a centralized entity; in this case the LEO operator. Direct-to-home networks cut out local distribution by providing

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[60]See: https://crtc.gc.ca/eng/publications/reports/rp150409/rp150409.htm

[61] See: https://tamaani.ca/about/tamaani-internet-history/

services directly to households and other end-users, thereby also limiting local opportunities to manage bandwidth and services.

274.   We **agree** with CRTC's point that "Given the limitations of satellite technology and the capacity currently available to service providers using the community aggregator model, households in these communities do not have universal service objective-level plans available through their local service providers" (NOC, CRTC 2023-89, para 22).

275.   For example, FMCC member BCN is a First Nations non-profit service provider that provides Internet services to more than 50 rural, northern, and remote communities in Manitoba.BCN currently provides C-Band satellite services to 18 communities. Connectivity is locally distributed from a C-Band point-of-presence through a fixed wireless network. Ninety percent (90%) of the costs for this C-Band service is covered by current ISED funding agreements at $2million per year, a total of $6.3million over 3 years). However, the C-Band connections are slow, unreliable, and expensive. Nursing stations and other public services in the communities have told BCN that the C-Band connections are not adequate for their needs.

276.   Of BCN's 18 satellite-served communities, the majority (14) are now preparing for transition to fibre connections. These infrastructure upgrades are funded through ISED's UBF and the CRTC's Broadband Fund. However, at least 3 (and possibly 4) of these communities are too expensive to connect to a regional fibre backbone, and so will have to rely on satellite services at least until 2030. Therefore, BCN is now exploring LEO satellite options to connect these communities, instead of C-Band services that have limited capacity, are outdated, and fail to meet the 50/10 standard.

277.   BCN was hoping to transition to Telesat's subsidized LEO option "Northern Lights", which they understood would cost $15/ per Megabyte per month. However, they are unsure when or if those options will be available. In contrast, the OneWeb system will cost $1,000 per Megabyte per month. Even with a UBF subsidy to cover 90% of connectivity costs, reducing costs to $100 per Megabyte per month, these bandwidth costs will be almost 7 times higher than Telesat plans to charge.

278.   In Winter/Spring 2023,FMCC reached out to some communities in the Far North where Northwestel has migrated service to OneWeb. Local residents told us that Northwestel's OneWeb service had not resulted in any material changes to their Internet services, with prices and speeds remaining the same as before the transition to OneWeb.

279.   Instead of relying on major incumbents such as Northwestel/Bell, Indigenous ISPs could operate LEO satellite services themselves.

280.   **RECOMMENDATION: Based on the current status of satellite technologies and pricing of satellite connectivity, we recommend that the Broadband Fund cover 100% of satellite costs for Indigenous and non-profit providers operating in satellite-dependent communities.**

Q27. Should additional operational funding be provided to TSPs for projects in satellite-dependent communities to alleviate the cost of providing broadband Internet access service and to improve pricing for their subscribers?

281.   See our response to Q26 above.

282.   **Operational funding should be provided to Indigenous and non-profit service providers in satellite-dependent communities. Since these organizations operate on a not-for-profit basis, they could then lower the cost of service to their subscribers.**

283.   **We also propose that the Commission consider treating satellite capacity as an upfront cost, to allow the funded provider to lease several years of capacity at one time (and likely at a lower than annual rate).**

Q28. What criteria should the Commission use to determine if service plans are reasonably priced and if the rates are comparable to the same services offered in specified urban areas?

- *In particular, if a TSP plans to offer services for which no comparable service is offered by a facilities-based provider in a designated urban area, how could the reasonableness of the rural service's costs be assessed?*

284.   In our previous comments in CRTC 2012-699, we emphasized: "Ensure that communication services are AFFORDABLE in the North, using data on Northern costs of living, incomes, and household size to determine affordability." Today, affordability remains a critical issue for Northern consumers, as do these metrics.

285.   In our Intervention to CRTC 2022-147 we submitted that the Commission should establish an "affordability standard" and provide guidance on what constitutes an affordable retail telecommunications service in the Far North. The CRTC should subsidize broadband service for households in remote First Nations with limited family income.

286.   Factors used in assessing this standard should include income levels, family sizes, and monthly charges including ancillary fees (e.g., data overages; mandatory landline telephone services). Consumer affordability should be measured according to 'baskets' of services and

indexed to household spending, cost of living, and employment and income levels. The type of devices and services people use (and pay for) is also important. For example, household Internet requires a computer but is more functional than mobile Internet, which requires a mobile phone device and expensive monthly data caps.

287.   Specific factors to consider when establishing an affordability standard may include:

- Geography (North/South; North-North; within Communities);
- Household income, and percentage of low-income households;
- Household size;
- Bandwidth / 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.

288.   Although the CRTC now requires more information on data charges to be provided to subscribers, data caps remain an issue. Unlimited plans are now available, but they are far too expensive for many, particularly low-income households.

289.   **Recommendation: in establishing an affordability standard, the Commission should use costs for a basket of services including a reasonable estimate for streaming or video downloads.**

290.   In our Intervention to CRTC 2017-122, we noted that pricing of services should be monitored – including the affordability of transport services purchased by local providers, as well as of retail services purchased by individual consumers. This monitoring of prices should include all relevant costs, including co-location and access fees, etc. (see: para 37).

291.   In our Intervention to 2019-45, we raised concerns with the language regarding comparative pricing between urban and rural regions that appeared in the draft version of the Guide:

Section 6.1.3(f) – Access project eligibility criteria – Pricing and affordability

This Section notes that: "These packages must include rates that are identical to or lower than those offered by a facilities-based service provider in one of the major urban centres or communities listed in Appendix 3, in the project's province or territory for reasonably comparable speed and capacity packages."

We note that provinces include remote regions similar to those in the Territories. We therefore believe that additional cities in the provinces should be included for

comparability for projects proposed for remote regions of the provinces. For example, for remote projects in BC, include Prince George and Fort St. John. For remote regions in Ontario, include Thunder Bay and Sudbury.

Conversely, we note that in the Territories, the "major urban centres" particularly Iqaluit, have prices significantly higher than those in major urban centres in the provinces. Using these benchmarks will result in a permanent broadband affordability divide. Applicants for Nunavut, for example, should use benchmarks required for Labrador or Nunavik in northern Quebec.

Q29. Should applicants that operate facilities in the specified urban areas be able to commit to matching their own urban pricing for rural subscribers—particularly for mobile subscribers—rather than committing to specific rates?

292.   We reserve the right to comment on this question in future stages of these proceedings.

Q30. Should the lack of available service plans offering unlimited data capacity for fixed Broadband Internet access services be a criterion, in addition to the lack of plans offering universal service objective-level speeds, in determining eligible geographic areas for access projects?

293.   We reserve the right to comment on this question in future stages of these proceedings.

Q31. Should the definition of eligible transportation roads be expanded?

294.   We reserve the right to comment on this question in future stages of these proceedings.

Q32. Should alternative classifications be used to determine eligibility for mobile wireless projects proposing to serve eligible transportation roads?

295.   We reserve the right to comment on this question in future stages of these proceedings.

Q33. What criteria are appropriate to determine if a transport network endpoint is a PoP in the context of the Broadband Fund?

296.   The glossary used in the Connect to Innovate program is a useful resource with respect to this question.[62]

297.   A Point of Presence (PoP) is a demarcation point between communicating entities. In the context of the Broadband Fund, a single main distribution point with a direct connection to the transport network in a community allows users to connect to the Internet with their Internet Service Provider (ISP).

298.   A secondary distribution point in the same community connected to the main distribution point is an Access Point, not a Point of Presence.

- *Should only transport network end-points with active equipment be considered PoPs capable of delivering transport capacity to a community?*

299.   Yes, in connecting of the [2] two transport networks together, each may have active equipment to regenerate and/or boost the signal.

- *Are there any additional criteria that need to be met to classify a site as a PoP capable of delivering transport capacity to a community?*

300.   The PoP contains active equipment and connects the transport network to the end user or an Access Point(s) that connects to the end user.

Q34. What is the appropriate demarcation point between transport and access networks, particularly for fibre networks?

301.   The demarcation point is the location at which the transport network ends and connects with the access network on-premise cabling. The demarcation point may be outside the building, usually in a box attached to the side of the building or maybe inside the building on a patch panel. The demarcation point is the dividing line determining who is responsible for installing and maintaining cable and equipment.

302.   In the case of a transport network where the fibre cable from one owner connects to the fibre cable with a different owner, a demarcation point is the dividing line between the [2] two transport segments if different parties are responsible for the different parts of the same transport network.

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[62]See: https://ised-isde.canada.ca/site/connect-to-innovate/en/glossary-connect-innovate

Q35. Does two kilometres remain an appropriate distance to use when considering if a community is served by a PoP?

303.   We reserve the right to comment on this question in future stages of these proceedings.

Q36. Does the availability of service that meets the universal service objective (based on the universal service objective at the time of the call and including an unlimited monthly data allowance) within a community indicate that it has sufficient transport capacity and therefore should not be eligible for funding for transport projects?

304.   No; a community may have installed a local fibre network for example, without sufficient transport capacity to meet projected needs (see the example of K'atlodeeche First Nation above in our response to Q20).

305.   Also, the cost of accessing the existing transport network may be prohibitive to provide the level of service that the community needs.

Q37. Should saturation of existing transport capacity into a community be considered when determining eligibility?

306.   Yes, it should be considered, but it should not be a determining factor for eligibility. Saturation of capacity should be considered in an application to upgrade or overbuild transport networks.

Q38. Should additional eligibility criteria be used to ensure that eligible projects are in areas that would not be likely to receive broadband improvements without Commission funding?

307.   We reserve the right to comment on this question in future stages of these proceedings.

Q39. How do TSPs maintain spare equipment inventories?
- *What level of replacement equipment is typically acquired and maintained for a new project?*

- *What spare equipment inventory is maintained near local project sites in rural and remote areas?*
- *To what extent does maintaining spare equipment differ between different project types (e.g., between urban and rural or remote project sites or between marine and land-based networks)?*
- *To what extent does maintaining spare equipment differ between the type and category of equipment (e.g., between microwave or fibre transport, or between fibre-to-the-home, fixed wireless access, and DOCSIS [Data Over Cable Service Interface Specification] equipment)?*
- *To what extent does the availability of spare equipment impact network resiliency and network recovery time in the event of an outage?*

308.   The location of spare equipment varies among projects. For example, BCN houses replacement equipment in Montreal, which must be transported to Northern communities.

309.   FNEC tries to work with communities to have spare equipment on-site, but also has to transport equipment to communities. This takes time. For example, shipping to Obedjiwan takes two days. Replacement equipment would be helpful to house in isolated communities but is too expensive to maintain.

310.   As we noted in our response to Q9 above, shipping costs to remote communities can vary greatly.

311.   We reserve the right to provide additional comments on this question in future stages of these proceedings.

Q40. Should costs for some replacement equipment be explicitly included as eligible costs for capital projects?
- *What conditions, if any, should determine whether replacement equipment is eligible for funding?*

312.   WJBTN's network is located in a remote region (inaccessible by road). The organization stores spare electronics equipment in their Timmins office. WJBTN also stores spare reels of fibre and splicing machines in each community. The ability to store additional replacement equipment in small remote communities would improve network reliability and resilience.

313.   WJBTN also works closely with other Indigenous providers such as KNET and CreeCable to share inventory and arrange for equipment sharing in the event of network issues.

314.   **Recommendation: The Commission should allow Indigenous and non-profit provides up to $75,000 per year for the first 5 years of a project to purchase spare equipment to store locally in rural, remote, Indigenous and Northern communities they service. This amount should be scalable based on the geographic reach of the project and number of communities served.**

315.   We reserve the right to comment further on this question in future stages of these proceedings.

Q41. What financial viability eligibility criteria should be used to determine whether a project would not be viable without funding from the Broadband Fund?

316.   We reserve the right to comment on this question in future stages of these proceedings.

Q42. When assessing the financial viability and return on investment of projects assuming Broadband Fund funding is approved, what investment timeline should the Commission use for various types of projects?
  - *Does the appropriate investment timeline vary between project components (transport projects, mobile projects, access projects, satellite projects), between technology implemented (fibre-based projects, wireless projects, satellite projects), or on some other basis?*

317.   We reserve the right to comment on this question in future stages of these proceedings.

Q43. How should applicants demonstrate the long-term financial viability of projects that receive Broadband Fund funding to ensure that operational costs can be met by the revenues generated by the project, or that some other source of funding is in place to meet the operational requirements of the project?
  - *If the use of operational funding in the Broadband Fund is expanded (as proposed in paragraph 29 of this notice), how should applicants demonstrate the long-term financial viability of projects when the applicant has requested operational funding?*

318.   We reserve the right to comment on this question in future stages of these proceedings.

Q44. Should demonstrated project management experience be a requirement for all applicants?

319.   Project management can be demonstrated in a number of ways – by citing experience of the applicant in managing similar projects, or other types or infrastructure projects, and/or by partnering with an organization that has the necessary management skills. If the latter, the proposal should include a significant training component to build this capacity in the Indigenous or other smaller partners.

320.   We reserve the right to comment further on this question in future stages of these proceedings.

Q45. Should project risk be an assessment criterion independent from the financial viability of a project?
- *If so, what criteria should be used to assess project risks and risk mitigation plans?*
- *What criteria should be used to assess portfolio risk and mitigation plans if more than one project could be selected for funding?*

321.   We reserve the right to comment on this question in future stages of these proceedings.

Q46. In what ways could the Commission streamline the application process?
- *In particular, are there existing Broadband Fund application eligibility and assessment criteria that should be modified or removed? If so, why?*
- *Is there additional information that the Commission should request or unnecessary information that the Commission should no longer request in order to assess the eligibility and assessment criteria? If so, which information and why?*

322.   Small Indigenous and non-profit providers have limited resources and experience in completing CRTC funding applications. We note several barriers faced by rural and remote not-for-profit regional organizations and communities, which are dealing with the realities of delivering services, being under-resourced, and dealing with the day-to-day operations. It takes time and resources to identify and apply to different funding streams. As well, funding programs often shift over time, as do criteria or requirements for applicants.

323.   WJBTN has never applied for the CRTC's broadband fund but currently has funding from Canada's Connect to Innovate fund. The work it requires to maintain this is onerous; it requires a full-time staff member to deal with the audit, finances, claims, applications, and other requirements, including responding to calls and requests for information from the federal

government. This is accompanied with other costs: for example, Connect to Innovate funding requested an engineer to sign off on the claim, and this alone costs $20,000.

324.   Other FMCC members suggested limits to reporting requirements and length of application for smaller applicants, such as Indigenous non-profit providers. Also, see our responses to Q3.

325.   **Recommendation: The level of business and financial detail required is significant for smaller projects and Indigenous and non-profit organizations that lack internal staffing capacity. There should be a funding level threshold that triggers the requirement of lengthy supporting documentation.**

326.   Having access to staff who can answer questions would improve accessibility and understanding of the application files. For example, the webinars that ISED's Universal Broadband staff provided were an effective method of providing information. We recognize that having staff answer all applicants' questions can be overwhelming; however, FMCC members find in-person meetings extremely helpful in preparing successful funding applications. The CRTC Broadband Fund Frequently Asked Questions are very helpful.

327.   Mapping continues to be improved, however in many cases it remains inaccurate in the remote North of Canada and Ontario. Inaccuracies lead to ineligibility of some projects. Allowing a process to include justification could improve the inconsistency of mapping. ISED's UBF also had a process to provide proof of mapping corrections within the application process.

328.   As well, a site visit by a CRTC representative at the outset of the application process would go a long way towards rectifying mapping anomalies.

Q47. In what ways could the Commission improve the technical evaluation of projects?
- *Are there any technical merit criteria that should be added, modified, or removed? If so, why?*
- *What information should be required in an application to the Broadband Fund in order for the Commission to accurately assess each of the technical merit criteria?*

329.   We suggest the following criteria be included in the technical evaluation of projects:

- 10-year bandwidth forecast.
- Estimated cost to upgrade the solution to meet the 10-year bandwidth forecast.
- Suitability of proposed technology/technologies for context (topography, climate, population distribution, etc.)
- The estimated total cost of ownership over the projected life of the solution.

- Estimated replacement cost of the solution.

330.   We reserve the right to comment further on this question in future stages of these proceedings.

Q48. What is the appropriate maximum annual amount of funding the Commission should set to be distributed for the Broadband Fund in future years, particularly in light of the potential expansions in scope proposed above?

> *"The Commission will therefore continue to apply the $150 million cap in years four (2023) and five (2024). This will give contributors to the Broadband Fund greater certainty regarding the annual amount of funds to be distributed for years four and five and allow the Commission to gather information through this proceeding on the impact of any proposed changes to the policy on the amount of funding required" (para 81).*

331.   The amount of funding should be budgeted based on a government policy to implement affordable access to broadband for all Canadians -- including funding not only from the CRTC, but from ISED and possibly other federal agencies such as ISC, and should include both mobile and fixed services, projected operational costs, and projections of future bandwidth demand.

332.   We reserve the right to comment further on this question in future stages of these proceedings.

Concluding Comments

333.   We appreciate the opportunity to contribute to this proceeding.

Attachment 1 to FMCC's Intervention to Telecom Notice of Consultation CRTC 2023-89

Attachment 1: Broadband Fund Commitments through 2022 (excluding satellite-only communities)

Sorted by Company/Organization				Major Incumbent Recipients		
Recipient	**Amount**	**Location**		**Recipient**	**Amount**	**Percentage**
ATG	$ 7,200,000	AB		Northwestel	$ 64,200,000	28.3
ATG	$ 6,400,000	AB		Bell	$ 9,214,000	4.1
ATG	$ 4,300,000	AB				
ATG	$ 4,000,000	AB		TELUS	$ 25,100,000	11.1
ATG	$ 3,800,000	AB				
ATG	$ 2,500,000	AB		Shaw	$ 13,800,000	6.1
ATG	$ 1,500,000	AB		Rogers	$ 1,095,000	0.5
ATG	$ 997,000	AB				
Base Technology	$ 750,000	BC				
BCN	$ 5,800,000	MB		TOTAL		50.1%
Bell Canada	$ 5,600,000	QC				
Bell Canada	$ 863,000	MB				
Bell Canada	$ 751,000	QC				
Bell Canada	$ 550,000	NL				
Bell Canada	$ 487,000	MB				
Bell Canada	$ 465,000	NL				
Bell Canada	$ 248,000	ON				
Bell Canada	$ 214,000	NB				
Bell Canada	$ 36,000	NL				
BH Telecom	$ 9,500,000	SK				
Cogeco	$ 570,000	ON				
Cogeco	$ 478,000	ON				
Cogeco	$ 279,000	ON				
Columbia Basin	$ 3,200,000	BC				
Columbia Basin	$ 1,700,000	BC				
East Internet Society	$ 1,500,000	BC				
Kativik Regional Govt	$ 37,700,000	QC Nunavik				
Regional Govt	$ 17,100,000	QC Nunavik				
Nexicom	$ 1,300,000	ON				
Northwestel	$ 40,400,000	YT				
Northwestel	$ 16,800,000	NT				
Northwestel	$ 4,100,000	NT				
Northwestel	$ 2,900,000	YT				
Rogers	$ 964,000	NB				
Rogers	$ 131,000	ON				
Shaw	$ 13,800,000	BC				
Sichuun, Naskapi et al.	$ 297,000	NL/QC				
Sogetel	$ 364,000	QC				
South Kountry Cable	$ 1,000,000	BC				
TELUS	$ 7,400,000	BC				
TELUS	$ 4,000,000	QC				
TELUS	$ 3,200,000	QC				
TELUS	$ 2,500,000	AB				
TELUS	$ 2,500,000	QC				
TELUS	$ 2,400,000	QC				
TELUS	$ 1,600,000	BC				
TELUS	$ 1,500,000	BC				
Tough Country	$ 55,000	BC				
We'koqma'q FN et al.	$ 915,000	NS				
TOTAL	**$226,614,000**					

Source of data: https://crtc.gc.ca/eng/internet/select.htm

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