Telecom Notice of Consultation CRTC 2017-112

Development of the Commission's broadband funding regime

Reply Comments of the First Mile Connectivity Consortium

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General comments, summary and introduction

1. The First Mile Connectivity Consortium (FMCC) is an incorporated independent not-for-profit national association of Indigenous broadband service providers. Our members are First Nations Internet service providers – what we call "community/regional intermediary organizations." Our work focuses on innovative solutions to digital infrastructure and services with and in rural and remote regions and communities across Canada.

2. The FMCC is seeking means to ensure access to reliable, affordable and scalable broadband in rural, remote, northern and Indigenous communities, in ways that involve residents of these communities in the provision of digital services. This reflects our position on the need for "first mile" solutions in the design, development and operations of telecommunication infrastructure and services – that is, those which invest in connections and organizations based in affected communities and regions. This is contrasted against "last mile" initiatives that focus on upgrades to urban-based infrastructures in the belief that they will eventually serve the remote and rural regions; an approach that has not worked for rural, remote, Northern and Indigenous communities, despite years and billions of public dollars invested in corporate telecom "last mile" solutions. Importantly, our FMCC member organizations provide and support the delivery of broadband-enabled public services such as online education and telehealth, as well as entertainment services for household consumers.

3. In this filing we comment on the statements made by other parties in their interventions. We first propose guiding principles based on concepts of reconciliation, community engagement, and community development. We then follow the general outline of issues in Appendix 2 to Telecom Notice of Consultation CRTC 2017-112, addressing selected topics related to:

   • Governance, operating, and accountability frameworks;
   • Eligibility criteria; and
   • Assessment criteria.

4. We also submit some proposed questions for the Commission to include in its Requests for Information to parties. These questions are listed in Appendix 1.

5. We also point the Commission to our support for the *Non-profits' Consensus Broadband Fund Design Principles* developed by NPF-PIAC. We include these Principles in Appendix 2 of this submission. We generally agree with the stated Principles, which we think reflect an appropriate policy direction for the fund; however, we want to note some clarifications and elaborations we have regarding some of these Principles:

   • Principle 1: We are concerned that an arbitrary designation of a fixed percentage of the fund for the remote and rural regions could result in insufficient funds to serve communities that should be prioritized.

   • Principle 1: The term "meaningful consultation" needs to be fully addressed by the Commission to determine how exactly "meaningful consultation" is to be defined in this context. For one definition of "meaningful consultation" used by the Government of Canada, please see para 56 in this submission.

- Principle 5: Our position is that the Commission <u>must</u> promote a high standard of service. To deliver long term solutions that adequately accommodate the 50/10 bandwidth requirement, infrastructure and operation strategies must address current and future needs. For example, using "current average subscriber usage" of an antiquated and poor delivery network service as a means to justify upgrading and expanding the same inadequate infrastructure using public resources is wrong. The CRTC broadband fund needs to ensure this type of design and engineering is prevented from being funded again.

- Principle 6: We stress that the multi-stakeholder administrator that includes representatives from rural, remote, Northern and Indigenous must contribute in funding decisions on a substantive basis. We are concerned that a lesser role for these representatives, such as on an advisory board, would have no official power, leaving decision-making to the formal administrative board.

- Principle 7: We point to the need to consider other metrics beyond household-level data, as outlined in our original Intervention.

6. We note that other signatories also elaborate on their positions in their respective Reply submissions.

7. The following FMCC Reply Comments reflect our position on the issues discussed.

1. FMCC Guiding Principles

8. Before addressing specific issues organized by theme, we note that we agree with several parties, including TSPs Rogers and TELUS, that remote and Indigenous communities should be prioritized in awards for the new fund.

9. However, we stress that community-based organizations must be supported in accessing the new funding mechanism <u>as providers and not just consumers</u> of telecommunications infrastructure and services. As argued in interventions by FMCC and many other participants in these and other proceedings, community-based organizations are engaged in building, operating and maintaining infrastructure and services, which contribute to long-term economic and community development benefits for residents of rural, remote, Northern and Indigenous regions.

10. We note statements made by some parties to these proceedings, such as TELUS, that acknowledge the development of telecommunications infrastructures and services in these regions as a means to support reconciliation with Indigenous parties. Specifically, TELUS states that:

"[T]he Commission should prioritize underserved First Nations communities. In order to work towards achieving the objectives of reconciliation with Canada's Indigenous peoples, the Commission should emphasize projects that focus on the provision of last mile and transport broadband services to rural and remote Aboriginal communities" (para 15).

"The Federal Government has indicated that First Nations projects should be viewed with critical importance. The Truth and Reconciliation Commission of Canada ("TRCC"):

Calls to Action report calls upon the Federal Government to work with Aboriginal groups to eliminate gaps in educational, employment and health outcomes between Aboriginal and non-aboriginal Canadians. Broadband connectivity provides a key and unique opportunity to reach these objectives. In order to work towards achieving the objectives of reconciliation with Canada's indigenous peoples, an emphasis should be placed on broadband funding for projects that focus on the provision of last mile and transport broadband services to rural and remote Aboriginal communities. Project assessment criteria for the Commission's broadband fund should include special consideration for projects that can demonstrate strategic objectives in support of or in partnership with Aboriginal groups in the provisioning or upgrading of services to underserved, remote communities" (para 42).

11. We stress that the implications of such statements, and the use of words like "partnership", must be clearly defined in submissions to these proceedings. That is because this rationale may be used to support different development paths: as a means for companies to enable community-driven efforts to build and operate infrastructures that support self-determined economic and community development initiatives; or primarily as a means for private companies to use the new fund to secure access to new customers and revenues.

12. Therefore, we want to be very clear about this language: in particular, what do statements of reconciliation tell us about the provision, ownership, and control of infrastructure and services?

13. We note that the primary fiduciary obligations of major TSPs are to shareholders typically located in southern and urban centres, not to residents of rural, remote, Northern and Indigenous communities. TELUS itself states in its submission to the Local Subsidy Proceeding (CRTC 2017-92): "Because providing service is by definition unprofitable and unsustainable at a regulated price set below cost, no telephone company would serve these areas absent some other compensation" (para 2).[1]

14. We therefore have little trust in the long-term commitment of TELUS to these communities. Other interveners representing Indigenous communities express similar concerns. For example, the All Nations Trust asks: "How do we ensure this fund does not become an 'in and out' vehicle, in which the telcos fund the program at the front end and then draw down those same funds at the back end via complex and sophisticated proposals that overstate the nature of their 'partnerships' with First Nations?" (para 7).

15. Another concern is that pricing of services should be affordable for residents of remote and Indigenous communities. Yet TELUS asks for significant price increases to serve these regions in its submission in the Local Subsidy Proceeding (2017-92) where it states: "The Commission can discharge its responsibilities under the *Telecommunications Act* while still eliminating subsidies by affording ILECs greater technological and pricing flexibility to meet their regulatory obligations in these areas (ibid, para 1).

16. TELUS states that: "the Commission should afford the ILECs pricing flexibility to charge rates that will allow them the opportunity to recover their costs" (ibid, para 4). Through this

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[1] Telecom Notice of Consultation CRTC 2017-92: Phase-Out of the Local Service Subsidy Regime. Intervention of TELUS Communications Company, June 15, 2017.

submission, TELUS is requesting that it be allowed to charge more than $10 more per month per line:

> "[T]o the extent that the Commission removes subsidies, it must afford ILECs sufficient rate and technological flexibility to make up for the loss of subsidy. One way to do this is to cap rates in regulated exchanges at the sum of the current rate *plus* the average per line subsidy paid to that ILEC. TELUS' current subsidy amounts to an average of $10.59 per line per line per month. According to its own recent press release, SaskTel's subsidy amounts to approximately $13.33 per customer per month. In order to maintain the regulatory compact *while eliminating subsidies*, the Commission must give the ILECs the financial flexibility to raise their rates up to this cap" (ibid, para 20).

17. FMCC supports the principles of OCAP (Ownership, Control, Access and Possession) whereby communities are able to build, own and manage the telecom infrastructure they desire and require to deliver the services addressing their needs and priorities. We believe that reconciliation is supported through enabling the self-determined development goals of Indigenous communities, including through their ownership and control of telecommunications infrastructure and services. This can happen on the basis of reciprocal partnerships between TSPs and Indigenous groups, for example through TSPs leasing Indigenous-owned infrastructure to deliver connectivity services. Such partnerships can support long-term economic and community development in these regions.

18. Therefore, we stress the need for a framework guiding the funding mechanism that supports substantive reconciliation by providing opportunities for self-determination in the ownership and control of telecommunications infrastructures and services.

2. Governance issues

2.1. Governance Structure

19. In our initial intervention, FMCC noted the challenges expressed by parties regarding past administration of the National Contribution Fund (NCF) by the Canadian Telecommunications Contribution Consortium Inc. (CTCC). In particular, we noted the following points regarding the governance of the funding mechanism:

- Existing approaches have not been effective for the North.
- The existing mechanisms are open only to incumbents.
- The current CTCC board consists entirely of members who are based in southern Canada, most from the telecommunications industry.
- The board does not include any representatives from Northern regions or community-based service providers.
- The criteria and selection process for board members are not transparent.
- Information about existing criteria used to access and approve proposals for CTCC funds is difficult to find.

20. We concur with several interveners who expressed similar concerns about the CTCC composition and decision-making process, including the Columbia Basin Broadband Corporation and BC Broadband Association. For example, the BC Broadband Association writes:

"The CTCC would not be an appropriate choice as an administrator of the accounting function. This is due to the CTCC's background as an entity that deals exclusively with incumbent telephone companies. The fund administrator should have no prior association that could lead to potential bias in favour of incumbent telephone companies. The board of directors should include representation from across Canada, to ensure that the particular challenges of service delivery in Canada's geographic and economic regions are considered in the decision-making process. The board of directors should include representation from small- and medium-sized businesses. The board of directors should include representatives who have experience with the challenges associated with building and maintaining infrastructure in rural and remote areas" (paras 41-47).

21. Also, we concur with the Nunavut Economic Forum which states:

"We are concerned that southern expertise is likely to dominate any board or decision-making group. As well, there will be many more Fund applicants seeking to serve "rural" jurisdictions that are road linked, and are just out of reach of current fibre networks. Therefore, a conscious effort must be made to ensure the board has expertise on remote needs and potential technical solutions specifically for truly remote communities -- with no roads connecting the community today or planned in the near term" (paras 14-15).

22. We disagree with the statements made by the CTCC itself, as well as several TSPs that support the continuation of the existing board and process for distribution CRTC-managed funds, for the reasons noted above. For example, parties including SaskTel and TELUS state that the Commission should continue to use the existing institutional expertise of the CTCC given it is the most "efficient" and "cost-effective" choice, in part due to its experience in carrying out this role for the existing voice subsidy regime.

23. While such a choice may seem "efficient" and "cost-effective" by using an existing entity, it does not necessarily result in effective outcomes for adequate, affordable broadband deployment. This is evidenced by the ongoing lack of adequate, affordable services provided to rural, remote, Northern and Indigenous communities despite two decades of public funding.

24. We also disagree with Cogeco's proposal that the composition of the board of the administrator overseeing the fund's project management function should be completely independent of any ISPs that could receive funding under any approved projects, to avoid any actual or perceived conflict of interest. Instead, as noted in our intervention, we suggest that participants should recuse themselves from any decisions that may raise actual or perceived conflict of interest.

25. ECN also makes some interesting suggestions on this matter with which we generally concur:

"The third-party administrator(s) must maintain independence from its applicants but should have significant outreach authority to solicit applicants from rural and outlying communities and to invite interested parties to initiate projects that could be funded. The entity (entities) should be responsible to approve applications and to insure that benchmarks and standards for QOS, affordability, accessibility and service are met by

each applicant. A separate board would be appropriate to insure that the goals have been respected.

The Board of the fund should have adequate representation from rural, outlying and remote communities; from Indigenous communities; from non-profit organizations, co-ops and economic development bodies; from low-income organizations; and from public interest organizations including media forums that genuinely represent the community interest. The fund should have independent legal, technical and economic advisors but should not base its decisions solely on those considerations; rather it should have a wider perspective that conforms to 7b) and 7h) goals of the *Telecommunications Act*:

> "7(b) to render reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada"; and

> 7 (h) "to respond to the economic and social requirements of users" (pp.7-8).

26. We note that several parties propose a multi-stakeholder advisory board that includes representatives from rural, remote, Northern and Indigenous regions. Their proposal is intended to ensure that the organization is representative of these regions, understands the unique challenges and opportunities they face, and leverages the expertise of Northern and/or community-based organizations. However, we are concerned that an advisory board would have no official power, leaving decision-making to the formal administrative board. Therefore, we agree with the above interveners who state that the actual administrative board should include representatives of these regions.

27. Finally, we disagree with the suggestion made by parties including TELUS and SaskTel that ISED be tasked to oversee the competitive bidding process for the new broadband fund, and/or to manage project management/project selection and oversight.

28. We have several concerns about this proposal. There are fewer opportunities for public interest and community-based organizations to consult with ISED (vs. with the CRTC) in an open, transparent and public forum of debate and discussion.[2] Compared to the CRTC, ISED allows for fewer public consultative opportunities. There are few structured consultations, and determinations are not subject to the same method of open discourse. FMCC members have experience working with ISED to develop regional telecom infrastructure construction projects, only to see the public funds turned directly over to the telecom provider as a result of Ottawa-based lobbying efforts.

29. We note the significant number of lobbying interactions undertaken between major TSPs and ISED, as documented in the media. For example, an article in the *Hill Times* published in March 2017 noted the meetings held between large TSPs and ISED Minister Navdeep Bains:

> "Telecommunications providers have also lobbied Mr. Bains often. Bell Canada parent company BCE Inc. has registered four instances of contact with the Innovation minister,

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[2] See: Shepherd, T., Taylor, G., and Middleton, C. (2014). "A Tale of Two Regulators: Telecom Policy Participation in Canada." *Journal of Information Policy* 4:1–22. http://dx.doi.org/10.5325/jinfopoli.4.2014.0001.

Telus Corp. is there five times, Rogers Communications Inc. has two reports, and Shaw Communications Inc. has one."[3]

30. While we recognize that such meetings are part of doing business, we are concerned that such opportunities to put forward project proposals are not as open to smaller community-based and non-profit organizations, including FMCC member organizations.

31. We therefore believe that ISED should not play any official role in the management of the fund, including selection of providers to receive funding. ISED staff may, of course, be requested to provide technical or other advice to the fund administrator. As well, ISED funds can also be accessed to match funding from the CRTC Broadband Fund, which could create problems in transparency in the application of both funding envelopes.

2.2. Application process

32. Several parties commented on the specifics of the application process, pointing out challenges faced by community-based, non-profit, and/or Indigenous organizations. We agree with the need to ensure that the fund application process is flexible enough to support proposals from under-resourced organizations, including community-based and non-profit entities. Several interveners recognize this need, noting that applicants should not be penalized due to their lack of access to technical expertise. We agree with the following points:

33. <u>Timing of Applications:</u> We suggested a 'phased' approach to project applications, to enable community-driven projects. We noted that some other interveners supported a similar approach. The Government of Yukon recommended that the call for applications procedure be structured so that there is sufficient time for prospective applicants to make the necessary arrangements to meet the application criteria, and suggested that the Commission consider a staggered call for applications, so that sufficient lead time is available to those groups that might have less experience or expertise (para 25). Open Media recommended that the Commission issue multiple calls for proposals throughout the year, so that a wider range of potential applicants gained the opportunity to apply for funding.

34. <u>Plain Language:</u> We agree with Open Media that to accommodate the needs of community, non-profit, and municipal ISPs, application instructions should be clear, straightforward, and in plain language.

35. <u>Staffing:</u> Both Open Media and the Government of Yukon suggested that the third-party administrator establish staffing resources to support project applicants. For example, they suggested that the Commission follow ISED's lead by dedicating staff to clarify or explain the process where needed, and otherwise assist applicants in filling out their applications. The Government of Yukon similarly suggested the Commission establish a 'help desk' function, which could provide a resource for applicants and prospective applicants to obtain assistance prior to submitting an application, with the intended result of limiting the number of unqualified applications and facilitating the review process.

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[3] See: "Bains most lobbied cabinet minister since Trudeau won power in 2015, hands down," *Hill Times,* March 27, 2017. https://www.hilltimes.com/2017/03/27/bains-attracts-lobbyists-interface-industry-leader-innovation-agenda/100681

36. <u>Simplified Requirements for Small Awards</u>: For example, BC Broadband Association called for simplified application and reporting requirements for small funding awards (for example, those under $100,000).

37. <u>Phasing of projects:</u> We generally agree with the comments made by SWIFT on this topic:

> "The Commission should initially allocate relatively small contributions to a large number of relatively small network improvement projects (i.e. community based initiatives on the rural edges of the network where the business case to serve may not be there, even with substantial public subsidies). After a couple of years as it becomes more apparent to the administrator and the Commission what works and what doesn't work, then the Commission should review the experience and direct the administrator to make adjustments to eligibility and project assessment it considers appropriate based on data from the first call for proposals and project outcome indicators (e.g. cost per household, improvements in measured speeds/reduction in latency)" (para 18).

38. <u>Financing Assistance for Non-profits:</u> We also note that commercial providers have access to various sources of financing, whereas non-profits can face roadblocks to acquire financing from chartered banks and the Business Development Bank of Canada (BDC). Therefore, community initiatives with demonstrated financial capacity and experience will likely need assistance from the Administrator to facilitate securing needed financing, such as through a loan guarantor.

2.3. Reporting requirements

39. Several parties proposed lists of reporting requirements for fund recipients. SSi Micro provided a comprehensive list of potential items that we support:

> "SSi recommends that the Commission publish an annual review of the fund. The review should identify fund recipients and allocations (such as between remote and rural communities, wired and wireless technologies, and fund recipients themselves) to demonstrate that funding decisions are fair and no single category of recipients (such as ILECs) is receiving a disproportionate share of the funding" (para 73).

> "SSi recommends that fund recipients for both backbone and last-mile investments can publish information online. Published data should include at a minimum:

> - The names of communities to be served;
> - The expected time frame for upgrading or building backbone or last-mile services to each community;
> - For backbone projects, the rates for wholesale backbone connectivity and co-location (gateway) services or last-mile service providers at the point of presence in each community;
> - For last-mile projects, the retail pricing and services to be available" (para 88).

> "In SSi's view, the administrators should be required to report on:

> - Numbers of applications received;

- Types of application (i.e. backbone or last mile, remote or rural community, type of technology(ies) proposed);
- Geographic area proposed to be served by each application; and
- The name of and amount awarded to each successful applicant, with details on the type of project, time frame covered, and outcomes committed to" (para 96).

40. SSi also recommends that the fund's annual report identify the total funds dispersed as well as the proportion of funds collected that are spent on administration (para 97).

41. We agree with SSI's proposals and add that the report should include classifications of all applicants and successful applicants according to categories such as large ILEC, small ILEC, community ISP, Indigenous ISP, etc.

42. We emphasize that the fund must have an online presence so that it can easily and quickly communicate all requests for proposals, timelines, decision criteria, reported data and metrics, etc. to the general public, as noted by Michael McNally in his intervention. The Commission should also make this information available through its own website.

43. We recommend that the Commission include information about how the fund operates in its annual report to Parliament to ensure a degree of accountability that is consistent with the CRTC's guiding principles relating to transparency and fairness.

3. Eligibility Criteria

3.1. Eligible Geographic Areas

44. We point to All Nations Trust's statement that "the ISED map contains inaccuracies with regard to First Nation communities' access to broadband, both transport and last mile" (para 8). Several other interveners (e.g. Blue Sky, CANWISP, and Tbaytel) have noted that the 25 square km hexagons in many cases are not detailed enough to identify clusters of populations such as small communities, or availability of broadband to all locations within the hexagon. Therefore, they should not be used as the sole source to determine eligibility based on population, population density, or broadband availability.

3.2. Private and Public Investment

45. Several parties commented on levels of private and public investment in project applications. Given clear historical evidence that market forces have failed to connect unserved and under-served communities, our position is that both public and private sector investments have a place in deployment strategies.

46. We disagree with Xplornet's statement that: "The Commission should focus on encouraging as much private investment as possible" (para 11). Historical evidence clearly demonstrates that private sector investment has not been successful in addressing digital access divides in rural, remote, Northern and Indigenous communities. We have no reason to believe that things will change in the future.

47. We do agree with Xplornet's statement that "the funding mechanism should not be permitted to undercut investments that are already under way" (para 7). We point out that such investments include the millions of dollars invested to set up community-based networks operating in rural, remote, Northern and Indigenous regions, including the members of FMCC. We believe the CRTC's new broadband fund should be made available on a priority basis to these organizations, which have built and continue to operate telecommunications infrastructure and services in these regions.

3.3. Wholesale open access requirements

48. We agree with parties that support requirements for open access to transport networks, including Shaw, SSi Micro, Open Media, and NPF-PIAC. For example, SSi Micro notes that "Both eligibility and assessment criteria should be weighted so as to favour proposals to add robust and openly accessible backbone capacity" (para 46). That company put forward a strong rationale for why open access to backbone infrastructure on a wholesale basis is important for remote and Northern communities in particular:

> "It is not enough simply to add backbone capacity, especially if it undermines competitive or technological neutrality. Transport facilities must be available to all providers of access or last-mile services. And this availability must be more than simply notional. To spur innovation and choice at the edges of the Internet, the Commission must take advantage of competition and of a diversity of technologies. However, remote communities will not benefit from choice or innovation, let alone proposals that help their residents to address the affordability, accessibility and digital literacy challenges they often face along with the availability gap, unless access providers have a right to connect to available backbone facilities on fair and reasonable terms" (paras 47-9).

49. We agree with SWIFT, which states:

> "[W]e submit that for the success of the new funding regime it will be critical to impose open access obligations on fibre transport and access facilities that are going to be subsidized. Long term dark fibre Indefeasible Rights of Use (IRU) arrangements between local communities and incumbent rural transport providers should be eligible for the funding regime as levering them would represent a potentially cost effective way of improving speeds and reducing prices in rural communities and small towns where there are no competitive options available" (para 14).

50. We cite the Government of Yukon's intervention concerning why such open access to transport networks is important. The territorial government points out that in certain regions of the country, including Yukon, market forces alone cannot be reasonably expected to deliver affordable, adequate broadband services:

> "In Yukon, where all of the telecom infrastructure is under the control of Northwestel and its affiliates, there is little incentive to extend service to areas where margins may be slimmer, or to invest infrastructure before a convincing business case is made, simply because there is no threat of losing market share.

As a result, Yukon would recommend that the eligibility criteria allow for project proposals which include both underserved areas and areas where the broadband standard is met to be considered for funding.

This would not only address the situation where the "fringe" underserved areas are made more attractive for prospective service providers, but would also facilitate the growth of competition in the areas already served, which would be a particularly important benefit in Yukon" (paras 53-5).

51. Clearly, these prospective service providers would require wholesale access to Northwestel's networks.

52. We disagree with the views of several major TSPs, including Bell Canada, TELUS, and the BC Broadband Association that mandating wholesale access acts as a disincentive for project funding applications and drives up the cost of retail service. They also claim that there is little demand for wholesale access in rural, remote, Northern and Indigenous communities. For example, TELUS states that: "There is also no evidence that any demand for wholesale access exists in unserved or underserved communities to date or that there will be in the foreseeable future" (para 33).

53. Given that TELUS was an active participant in the BSO hearings (CRTC 2015-134), the company must be aware of the strong demand for wholesale access from a large number of organizations that already utilize wholesale transport access from TSPs – including some that are customers of TELUS – to provide retail services in those regions. Those providers include the FMCC member organizations, as well as a number of other entities and potential providers as stated by the Government of Yukon (quoted above).

3.4. Evidence of community engagement

54. We agree with several parties that projects should demonstrate evidence of substantive community engagement, such as a letter of support or a Band Council Resolution (in the case of First Nations communities). Open Media raised some important points on this issue of assessing the level of community support for proposed projects:

"[T]he Commission should weigh heavily the level of community support, if any, that a particular project demonstrates in its application. This includes anchor institutions, which research and other cases have shown can be integral to the success of new Internet service providers in a given community" (para 82).

"Anchor institutions compound the effects and benefits of broadband Internet access, as they can become public hubs of free access to those who cannot otherwise afford to have Internet access in their homes, in addition to a source of reliable (and during initial stages, sometimes critical) revenue. Consequently, the Commission should award greater weight to projects that demonstrate the clear involvement and support of local anchor institutions, as well as individual community members" (para 84).

55. However, we believe that degree of community engagement should not only be weighed when assessing applications, but that evidence of community engagement should be a

requirement for eligibility to apply for funds for all entities, including major private sector TSPs.

56. We agree with SWIFT that "[s]tipulating consultations with marginalized communities in project design and developing indigenous engagement plans can further enhance the accountability of recipients and capacity of the funding regimes to address deep inequities in Internet access in within our communities" (paras 61-2).

57. With regards to any formal consultation with Indigenous groups, we stress the need for a clear and binding definition of the term "consultation" in this context. For example, the Government of Canada uses the following definition, as outlined in "Guiding Principle No. 4" in *Aboriginal Consultation and Accommodation - Updated Guidelines for Federal Officials to Fulfill the Duty to Consult* (March 2011):

> "Consultation and accommodation will be carried out in a manner that seeks to balance Aboriginal interests with other societal interests, relationships and positive outcomes for all partners. A meaningful consultation process is one which is:
>
> - carried out in a timely, efficient and responsive manner;
> - transparent and predictable;
> - accessible, reasonable, flexible and fair;
> - founded in the principles of good faith, respect and reciprocal responsibility;
> - respectful of the uniqueness of First Nation, Métis and Inuit communities; and,
> - includes accommodation (e.g. changing of timelines, project parameters), where appropriate."[4]

58. We also think that the following two important points should be included in any discussion of "meaningful consultation" in this context. "Meaningful consultation" must:

- Be inclusive of the whole community, for example hosting a community meeting with a feast, to meet, learn, share, and understand local needs, priorities and desires.

- Lead to new economic and social opportunities and innovation including the potential ownership, control, and management of the infrastructure and network services.

59. For the reasons noted above, we disagree with Shaw's concerns regarding the inclusion of anchor institutions in determinations of eligibility criteria. As ECN points out:

> "It is crucial for the life of northern, remote and outlying communities that the social aspect of the community be included. The requirement for connectivity for health, education, governance, safety and security should be a substantial consideration" (p. 19).

60. Also, anchor institutions provide stable, ongoing funding in rural, remote, Northern and Indigenous regions, and help secure a business case for community networks. They are major consumers of bandwidth and data. As noted by All Nations Trust:

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[4] See: http://www.aadnc-aandc.gc.ca/eng/1100100014664/1100100014675

"Prioritize First Nations that have local health centres, schools, emergency services or victim services. These communities are able to leverage the greatest benefits from connectivity, thereby reducing both costs and operational pressure on standard government institutions such as urban schools and hospitals" (para 16).

3.5. Requirement to provide 50/10 Mbps as mandated in TRP 2016-496

61. Like NPF-PIAC, we were perplexed that the Commission's proposed model does not include eligibility requirements to meet criteria established by the Commission in TRP 2016-496, including fixed broadband speeds of at least 50 Mbps download and 10 Mbps upload.

62. To deliver long term solutions that adequately accommodate the 50/10 bandwidth requirement, infrastructure and operation strategies must address current and future needs. For example, using "current average subscriber usage" of an antiquated and poor delivery network service as a means to justify upgrading and expanding the same inadequate infrastructure using public resources is wrong.

63. Recently, a telecom provider used extrapolation of current usage in an email to an end-user that explained why a fiber upgrade was unnecessary at this time for an entire region:

> "Current average subscriber usage is 725 Kbps. [Telecom provider] has somewhere close to 200 internet customers which would only drive about 150 Mbps of traffic. Assuming with the proposed project we add another 100 subscribers then the immediate need for bandwidth would only be about 250Mbps. If usage grows 25% per year on average 1Gb of capacity would give us plenty of capacity for the immediate future.
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> Now when the CRTC desired 50/10 service comes on stream (and we really don't know when this will happen), we would then need to look at something different in terms of a solution. That's when the fibre connection would definitely be required."[5]

64. The CRTC broadband fund needs to ensure this type of design and engineering is prevented from being funded again.

65. FMCC agrees with SWIFT's comments:

> "[P]rograms which have bypassed community participation and instead allocated subsidies directly to service providers who make upgrades to legacy technologies that are expensive to scale to demand growth (or are unscalable), and perpetuate the legacy trap rural communities find themselves caught in … In addition, allocating scarce public funds to upgrading legacy copper based technologies or expensive satellite access services is not only wasteful, but can have negative implications on competition and affordability in underserved communities the Commission's new funding regime is intended to target (para 13-14).

3.6. Eligible costs

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[5] Private email correspondence dated July 7, 2017 between community member and a telecom provider to justify their publicly funded (ISED Connect to Innovate program application) upgrade of existing legacy radio equipment instead of investment in fiber network construction.

66. Several parties, noted the importance of including ongoing operational as well as one-time capital costs as eligible project expenses. We agree with Rogers that eligible costs should include both up-front costs and on-going costs, such as pole attachment fees and related support structure costs (para 22), and with the entities below that provide examples and rationales for including operating costs.

67. SSi Micro provides some good examples of additions to eligible costs in Northern and remote contexts:

> "In terms of expanding the list of eligible costs, we would recommend that these include for both terrestrial and satellite components:
>
> o Investments in training in the remote communities to develop local expertise able to support the network infrastructure assisted by the fund (backbone transport, gateways and towers, and last-mile), the delivery of services such as co-location, broadband, voice and new mobile products;
> o Leasing or purchasing land, buildings and other facilities for housing network related equipment and offering gateway / co-location services
> o General repairs and ongoing maintenance resulting from the project and related structures; and
> o To allow the broadband fund to go further with every dollar expended, costs for innovative energy efficient equipment investments - especially green energy investments, should be considered for eligibility" (para 132).

68. Nunavut Economic Forum also pointed out the high cost of energy in remote communities:

> "Businesses are charged extremely high rates per kilowatt hour (kWh) in Nunavut communities. This means that energy costs to run communication shelters in Nunavut communities range from 10 to 35 times more expensive than the south, depending on time of day, quantity used etc. All Nunavut communities currently rely on diesel fuel to produce electricity, so any investments in clean energy are critically important in Nunavut" (para 55-7).

69. Nunavut Library Association similarly points to the need for operational costs to support expenses such as maintenance, heating, materials, energy and salaries, which are two to three times higher than what might reasonably be expected in a southern community centre or library. They also note the reasoning behind these costs:

> "As a result, budgets often get cut and funds are moved around and budgets have to be adapted to changing circumstances. A broken window or furnace problem can wipe out a couple of months of Internet access. The organizations which provide public access Internet do not receive funds from the government of Nunavut to provide this service and the Community Access Program is defunct. Any program which aims to provide broadband Internet to Nunavut should recognize the benefit and need for inexpensive public access Internet in all of Nunavut's communities by creating a separate category of account for subscribers identified as public libraries and community centres" (para 7).

3.7. Summary: General Criteria

70. In general, we agree with the eligibility criteria proposed by the Eeyou Communication Network (ECN):

> "That funds for eligible projects be provided to applicants conditional upon agreement to all of the following:
>
> - that the applicant will offer affordable rates;
> - that the applicant will agree to maintain adequate Quality of Service (QoS) standards;
> - that the applicant will respect the obligation to serve all residents in the community;
> - that the applicant will commit to operate and maintain a network in good working order for not less than 20 years; and
> - that funds will not be used for overbuilding (i.e. competitive or duplicate) projects" (p. 3).

4. Assessment Criteria

4.1. Prioritization of Remote and Indigenous Communities

71. The fund as currently established ($750 million over five years) is clearly not sufficient to extend broadband services to all unserved and underserved locations in rural and remote areas. As noted in our intervention to this proceeding, we have proposed that remote and Indigenous communities be prioritized for support from the fund. We note that several other interveners endorse prioritization for northern and/or Indigenous communities.

72. We are concerned that an arbitrary designation of a fixed percentage of the fund for the remote and rural regions could result in insufficient funds to serve communities that should be prioritized. Therefore, we do not endorse arbitrary designations of fixed percentages or funding amounts for northern and Indigenous communities – unless they receive all of the available funds.

4.2. Population, Population Density, Households, etc.

73. We agree with several parties that highlight the problems inherent with metrics that assess and prioritize applications by the number of households served in a given geographic region because such an approach, while appearing efficient, in fact limits service accessibility in more remote, smaller population, geographically dispersed communities.

74. Rogers states that such an approach contains an inherent bias towards 'low-hanging fruit' – that is, towards projects that will serve the largest number of households at the lowest cost. It notes that these are unlikely to be the rural and remote areas that are in the greatest need of broadband services, and that are the most unlikely to be served by competitive market forces (para 35).

75. The Yukon Government similarly raises a concern with assessment criteria that emphasize absolute differences in factors like coverage, density and cost. Their intervention points out that:

"Due to fundamental differences in population, and density, the opportunities for scalability, increases in coverage and density, and decreases in cost per household may be significantly different for Northern communities."

They suggest this potential disparity in comparison could be addressed by categorizing or grouping similarly situated project proposals, and through a holistic consideration of assessment criteria (paras 72-74).

76. Therefore, we disagree with parties such as Cogeco that suggest the main criterion used to assess project applications should be based on the largest number of households served in a given geographic area at the lowest subsidy amount required per household.

77. We also disagree with the Government of Ontario and with Bell Canada, who state that prioritization should be by the size of the population or number of subscribers in each province and territory. The CRTC's decision stated that broadband was to be available to ALL Canadians. While we recognize that there are unserved communities in the northern regions of the most populous provinces that must gain access to broadband, their support should not exclude funding for remote communities in other regions.

78. We also strongly disagree with Xplornet's statement that: "Given the size and scale required to execute such a program, it could not be undertaken on a community by community basis but rather would need to cover a significant geographic area" (p.16).

79. We believe that Xplornet's proposal would prioritize deployment via household satellite links, which could prevent community-based organizations from setting up and operating their own local and regional network infrastructure and services. This approach limits the economic and community development benefits that can accrue from the ownership and operations of community networks.

4.3. Prioritizing community-based organizations

80. We support the views expressed by various parties – including several provincial and territorial governments, such as the Governments of Manitoba, Yukon and Ontario – that the fund should be used to prioritize support for community-based organizations. Indigenous parties including All Nations Trust and ECN also support this position.

81. In our intervention, we raised the importance of ensuring the affordability of services for both residential and institutional users. Therefore, rather than subsidizing for-profit TSPs that provide connectivity services in rural, remote, Northern and Indigenous communities, we agree with Open Media, which notes in paragraphs 48-52 that community-based service providers can address affordability by offering services at lower rates:

"Supporting and enabling the creation of municipal, community, and non-profit ISPs that would not otherwise have had sufficient funding would go a long way towards increasing competition and affordable choice in Canada's telecommunications market. Evidence demonstrates that municipal, community, and non-profit ISPs often charge lower prices for equal or better services. Community, non-profit, and municipal ISPs not only directly offer more competitive offers themselves, but their very presence also exerts competitive

pressure on incumbent ISPs to lower their prices, as well. Thus users benefit all around, even if they don't themselves subscribe to a non-profit ISP" (taken from paras 48-52).

82. In general, we agree with the prioritization proposed by ECN:

"Once all of the above conditions are met, eligible applicants should be selected in priority order according to the following:

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; groups in partnership with local anchor institutions;

Group 2: any applicant who has the approval of local councils and anchor Institutions and/or any applicant who can gather a petition of the majority of residents and of the majority of anchor institutions;

Group 3: any commercial telecommunications operator who will offer open access to its network and who will provide at-cost rates to anchor institutions" (p. 3).

4.4. Selection Methodology

83. FMCC recommends selecting projects based on their project assessment (priority, sustainability, feasibility, risk avoidance, etc), as described in the previous sections. We are firmly against any form of auction that advantages large commercial operators with strong financial abilities to secure projects over not-for-profit organizations.

84. Some interveners have proposed reverse (or minimum subsidy) auctions, whereby the bidder requesting the least amount of funding would win the subsidy.[6] While this approach appears to offer efficiency and objectivity by rewarding the lowest bids for subsidies, we believe it is not appropriate for selecting small and community providers.

85. Large ILECs and other TSPs are likely to have economies of scale from serving adjacent regions and/or volume procurements, as well as available expertise (in-house staff or consultants) to prepare detailed estimates and proposals. They may also be able to underwrite portions of the costs with surplus funds or facilities from other operations. Small and community providers do not have these advantages.

86. Although the FCC's use of reverse auctions is cited as a successful example (e.g. by Bell and NPF-PIAC), reverse auctions for services in Alaska and other Tribal regions have not achieved inclusion of any Indigenous providers. In fact, no Indigenous providers or Indigenous/incumbent partnerships have won bids, or even submitted bids, despite their eligibility for the funding. None of the Phase 1 Tribal Mobility Fund auction funds specifically allocated "to provide one-time support to deploy mobile voice and broadband services to unserved Tribal lands, which have significant telecommunications deployment

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[6] For example, Bell, NPF-PIAC, and ECN (EEYOU). ECN proposes that "negative auctions" be used only if there are multiple eligible bidders within priority groups, which would avoid competition between small community providers and ILECs. Source: CRTC 2017-112. EEYOU Communications Network. Intervention to the Canadian Radio-Television and Telecommunications Commission. June 28, 2017.

and connectivity challenges"[7] went to Indigenous providers.[8] Also, for the vast majority of Tribal service blocks in Alaska, there was only one bidder.

87. Some Indigenous and community organizations that could have competed in this and other FCC reverse auctions cited lack of understanding of the process, and difficulty in preparing bids and in participating in the auction process. They also had problems in meeting eligibility requirements.

88. We think there would be similar problems with reverse auctions as a means to select winning applicants for the broadband fund in Canada. If the Commission wants to encourage participation by small, community, and Indigenous providers, it should not rely on reverse auctions.

4.5. Community Benefits

89. We are concerned with claims made by some commercial TSPs regarding the public service or community benefits that they purport to deliver to residents of affected communities. For example, TELUS suggests that applicants should be assessed in part on their ability to provide "community benefits" – with "healthcare solutions" provided as one such community benefit. Given that TELUS is in the business of selling e-health services on a for-profit basis, we see "healthcare solutions" as one of the services provided for a fee by that company rather than as any community benefit.

90. Therefore, any commercial TSP should identify any other businesses or services that it intends to offer over infrastructure that it builds with support from the broadband fund.

91. As noted above, these corporations hold primary fiduciary responsibility to their shareholders, and not to subscribers or communities. Therefore, we suggest that the outcomes of any claims to deliver 'community benefits' are carefully monitored by the Commission.

5. Summary and conclusion

92. The FMCC respectfully submits these Reply Comments to the Commission, and hopes that they are helpful in the CRTC's deliberations on the development of the broadband funding regime.

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[7] Federal Communications Commission."Tribal Mobility Fund Phase I Auction Scheduled for October 24, 2013." DA 13-323 March 29, 2013.
[8] See http://wireless.fcc.gov/auctions/902/reports/902_bidder_summary.pdf

Appendix 1: Proposed questions to include in the Commission's requests for information to parties

For the Government of Newfoundland and Labrador:

1. Please list all remote communities (without year round road access) in Newfoundland and Labrador that would be considered unserved and underserved.

2. Please list all remote communities (without year round road access) in Newfoundland and Labrador that have only DSL service.

For the Government of Ontario:

1. Please list all remote communities (without year-round road access) in Ontario that would be considered unserved and underserved.

2. Does the Government of Ontario agree that remote communities (without year-round road access) and without broadband should be given the highest priority for funding?

For Bell Canada:

1. Please list the unserved remote communities (without year round road access) in each province and territory where Bell Canada and/or its affiliates operates.

2. Bell Canada notes: "Pricing …should not be a criterion for project assessment. Retail rates should not be regulated." (para 126). What prices would Bell Canada propose to charge if it received funding from the Broadband Fund to provide broadband in these communities?

3. Please clarify whether Bell Canada would prioritize these communities according to the total population or number of subscribers in each province or territory, and if so, why it proposes such criteria. (Bell Canada submission para. 133)

For TELUS:

1. TELUS suggests that project assessment criteria should include special consideration for projects that can demonstrate "strategic objectives in support of or in partnership with Aboriginal groups in the provisioning or upgrading of services to underserved, remote communities". Please clarify what is meant by "strategic objectives" in this context. Will such objectives enable Indigenous organizations to operate as owners and providers of their own infrastructure and services, or rather as customers of TELUS for bandwidth and services?

2. Please describe how the removal of wholesale transport access requirements will support "strategic objectives" in the provisioning or upgrading of services in partnership with Aboriginal groups.

3. Please specify what is meant by the phrase "partnership with Aboriginal groups in the provisioning or upgrading of services to underserved, remote communities" in this context.

4. Please describe the community benefits that should be assessed, and demonstrate how such benefits will provide long-term community and economic development outcomes for rural, remote, Northern and Indigenous communities.

For Blue Sky:

1. Please elaborate on whether BAIMAP could be used in remote regions of the provinces, and in the northern territories, and if so, what data would be required.

Appendix 2: Non-Profits' Consensus Broadband Fund Design Principles

The undersigned non-profit organizations have prepared this set of principles to guide the Commission's design of the broadband fund. We agree that these principles reflect an appropriate policy direction for the fund, and encourage the Commission to ensure that the outcomes of this proceeding meaningfully incorporate them.

1. The Commission should prioritize rural and remote communities. Funding should be set aside for unserved and underserved Indigenous and Official Language Minority communities to ensure their needs are met. The Commission should require applicants to demonstrate that they have obtained the support of the communities they propose to serve through meaningful consultation during the development of the proposal. The Commission should require successful applicants to continue to consult and engage throughout construction and operation.
2. The Commission should require applicants to provide wholesale access to transport infrastructure at reasonable rates.
3. The Commission should ensure community initiatives are able to compete on a level playing-field. Any requirements to demonstrate financial capacity and experience should either be achievable for community initiatives or apply flexibly where such initiatives (and only such initiatives) are concerned. Funding should be distributed to community initiatives on a basis which provides sufficient cash flow during deployment.
4. The Commission must address affordability. The Commission should require applicants to propose prices reasonably comparable to urban areas. The Commission should seek to address the needs of low-income households.
5. The Commission should promote a high standard of service.
6. If the Commission decides to proceed with an assessment criteria-based evaluation of funding applications, the Commission should establish a third-party administrator with a multi-stakeholder governance board including representatives of northern and indigenous communities. That administrator should help produce a plain language application guide, provide advice regarding the application process, and share best practices.
7. The Commission should use the best geographic data available, which will generally be household-level data, to avoid excluding partially unserved or underserved geographic units.
8. Eligible costs should not be limited to capital costs. Applicants should be able to request operational subsidies where it would not otherwise be possible to sustainably serve the community at affordable rates.
9. The use of public funds for broadband funding projects calls for a high level of scrutiny, enforcement, and accountability for awarded funding. The fund administration process and funding conditions should include monitoring and public reporting. The Commission should impose effective sanctions where applicants fail to meet the commitments made in their proposal.

Signatories:

Blue Sky Economic Development Corporation
Cybera
First Mile Connectivity Consortium
National Campus and Community Radio Association (In relation to those matters within its mandate)
National Pensions Federation and Public Interest Advocacy Centre
OpenMedia

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