

Cybera Intervention

**Telecom Notice of Consultation CRTC 2017-112  
Development of the Commission's broadband funding  
regime**

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CYBERA

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## INTRODUCTION

Cybera is a not-for-profit, technology neutral agency responsible for accelerating technology adoption in Alberta. One of Cybera's core roles is the operation of Alberta's Research and Education Network. This is the dedicated network for unmetered, not-for-profit traffic used by Alberta's schools, postsecondary institutions and business incubators to aid research, innovation, enterprise and ingenuity.

Cybera receives both provincial and federal government funding to spearhead pilot projects that improve efficiencies and the competitiveness of Canadian institutions and businesses, and support international level research. It is guided by a strategic leadership team, and is home to some of the world's top cloud and networking experts, who work together to build cloud infrastructure, data storage, and advanced networking solutions.

Drawing on this expertise and public service mandate, Cybera is pleased to provide the following response to the CRTC Telecom Notice of Consultation 2017-112.

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## **Cybera Comments on Appendix 2 - Telecom Notice of Consultation CRTC 2017-112**

### **Accountability and fairness**

1 The fairness monitor should be selected via a competitive RFP process. The fairness monitor should be tasked with ensuring the fund is operated with fairness and transparency, and to ensure that the process is seen by all parties involved to be operated with fairness and transparency.

2 The monitor should provide independent, unbiased advice to the Commission and the fund operator relative to the conduct of the fund collection and allocation process.

3 The monitor should act as a sounding board for parties who raise concerns about how the fund is managed. The monitor should formally document its opinions on the fairness of the process by providing the Commission with periodic reports summarizing its findings and activities.

### **Calls for applications**

4 From a funding applicant's perspective, the ideal call for applications process would be a continuous rolling, open call. From the fund administrator's perspective, the ideal is likely closer to an annual call for applications. Annual calls, however, can have a negative effect on applicants by impeding their ability to make progress while waiting for funding decisions. Open calls have the least impact on project timelines, but prevent the funding body from comparing a batch of applications. Quarterly calls for applications, processed promptly, is a good balance.

### **Distribution of funding**

5 While organizations with significant cash flow may be in a position to front capital expenditures, smaller projects may require some initial seed money to get off the ground. The Commission should be wary to not penalize small, community based projects. Cybera urges the Commission to consider the timing of fund disbursements based on the unique circumstances of each project.

### **Collecting and reporting information from applicants/recipients**

6 Section 39 should apply to information filed with the Commission and the third-party administrator. Being that the fund is not an innovation fund, there should be little concern on the part of applicants regarding trade secrets

7 The administrator should be required to report on all performance information, except that which is in contravention of section 39 of the Act. The project fund results should be shared

publicly, with detailed periodic reports, and with a real-time user friendly “dashboard” interface displaying progress in terms of households reached, geography covered, and user uptake.

8 Fund recipients should be required to participate in reporting functions, such as a broadband performance monitoring program, so far as the imposition on recipients does not constitute undue burden that prevents efficient operation of their network.

## Eligibility Criteria

### Eligible Geographic Areas

9 The Commission should focus its early efforts on applicants proposing to bridge the largest gap between existing service levels and goals of the universal service objective.

10 The proximity of an applicant’s service area to a fibre Point of Presence or interconnection should not be a factor that limits their eligibility for funding. Throughout the course of the 2015-134 process, we heard that funding for last mile infrastructure is a major hurdle in much of rural Canada, even where existing middle mile fibre is available. Such is the case in Alberta, where even with the presence of the Alberta SuperNet in 429 communities, uptake on last mile roll-out has been slow.

11 Further, proximity to fibre only matters where the population density requires proximity to fibre. If the proposed service area will cover a few tens of households in a remote community, a microwave radio link may suffice.

12 In areas without access to fibre transport infrastructure, but require it, applicants should be encouraged to leverage other available funding opportunities whose focus is backbone transport. This includes the federal Ministry of Innovation, Science, and Economic Development’s “Connect to Innovate” program. Indeed, much of the difficulty of administering the fund will be in coordinating with (federal) granting initiatives to achieve the best outcomes.

13 Cybera supports the ability of respondents to propose minor variations to the potential candidate areas and/or include suggested alternative candidate areas.

14 The current 25 square kilometer hexagonal units are not ideal for defining geographic eligibility. Geographic units don’t take into account actual population density or distribution and only makes sense when the population is uniformly distributed across the entire hexagonal unit. Most importantly, the threshold of one serviced household indicating the entire unit is served is problematic. Service coverage needs to be as granular as individual households.

15 In New Zealand, during the most recent rural broadband funding process (Rural Broadband Initiative Phase 2 and the Mobile Black Spot Fund)<sup>1</sup> providers were required to supply their

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<sup>1</sup> New Zealand Government Electronic Tenders Service. Expansion of Broadband and Mobile Coverage. 16 October 2017. Accessed 22 June 2017.

<https://www.gets.govt.nz/CFH/ExternalTenderDetails.htm?id=18074614>

geospatial coverage shapefiles.<sup>2</sup> While becoming GIS-enabled and data-driven was technical burden for all involved, the result is an elegant, granular map which has steered the ISP market in the right direction and improved coverage immensely. The Request for Proposals (RFP) process was managed by Crown Fibre Holdings.<sup>3</sup> Shapefiles were made available to respondents on the terms set out in the RFP. Cybera recommends standardizing the procedure by which adequate coverage is measured. For example, one provider may consider a residence covered if a wireless signal is available 10 metres off the ground, while another provider may measure it at 3 metres.

16 A map was also produced with a dataset of address points in two categories: addresses with 0-5Mbps, and addresses with 5-25Mbps. All addresses with the capability of 25Mbps or higher were excluded from funding eligibility. Commercially confidential information was not compromised in this process.

17 The Commission should consider a similar mapping initiative which would enable applications to be based on a more accurate count of the number and cost per address of servicing uncovered areas.

**Eligible recipients**

18 Cybera agrees with the Commission’s preliminary views on eligibility criteria. Cybera encourages the Commission to prioritize applications by non-profits, municipalities, co-ops, First Nations entities, and community networks whose activities will be undertaken efficiently and on a cost-recovery, not-for-profit basis. The Commission will likely encourage applications by public-private partnerships by including eligibility criteria such as demonstrated experience in deployment and operation of a broadband network. In Cybera’s view, these are to be encouraged, but with an eye to maintaining affordability for end users in the future.

**Eligible costs**

19 Cybera agrees with the Commission’s preliminary views on eligible costs.

**Funding from a government entity**

20 Applicants should demonstrate they have secured government funding by providing a copy of a signed funding agreement or promissory note from the government body in question. It will be useful in publicizing the fund to specifically mention non-profit and community organization

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<sup>2</sup> Crown Fibre Holdings. RFP - Expansion of Broadband and Mobile Coverage. 27 October 2016. Accessed 25 June 2017 from: [https://www.crownfibre.govt.nz/wp-content/uploads/2016/10/Base-RFP\\_RBI2\\_MBS.pdf](https://www.crownfibre.govt.nz/wp-content/uploads/2016/10/Base-RFP_RBI2_MBS.pdf)[https://www.crownfibre.govt.nz/wp-content/uploads/2016/10/Base-RFP\\_RBI2\\_MBS.pdf](https://www.crownfibre.govt.nz/wp-content/uploads/2016/10/Base-RFP_RBI2_MBS.pdf)

<sup>3</sup> New Zealand Ministry of Business, Innovation & Employment. Rural Broadband Initiative 2 (RBI2) and Mobile Black Spot Fund policy settings. Accessed 22 June 2017 from: <http://www.mbie.govt.nz/info-services/sectors-industries/technology-communications/fast-broadband/new-initiatives/rbi2-mbsf-policy-settings>

funding is eligible, as nonprofits and community organizations are not generally considered government bodies. It is confusing to list them as eligible funding bodies under “government entities.”

21 In New Zealand, Crown Fibre Holdings, on behalf of the New Zealand Government, issued a Registration of Interest<sup>4</sup> and an official invitation to local government authorities to co-fund and/or assist with improving rural connectivity and mobile black spots.<sup>5</sup> The Commission may consider a similar approach.

### **Applicant investment**

22 Applicants should be required to demonstrate they are capable of funding their own investment in a proposed project by filing financial statements, operating budgets including cash-flow.

23 If a funding recipient chooses to sell Commission-funded assets before such time that three years has elapsed since the Commission’s final disbursement, the funding recipient should be required to repay the Commission’s subsidy contribution in full. After three years, the Commission could consider an amortization/repayment schedule. For example, after three years, the recipient is required to return 75% of the subsidy; four years at 50%, five years at 25%. In the event of a sale, it can be surmised that the purchaser of the asset sees a business case for delivering broadband to the previously underserved area, and that the objectives of the fund will continue to be fulfilled. This deferral to market forces, when/if it materializes, is also in line with the policy directive.

### **Project viability**

24 In the case of incumbent network operators, Cybera encourages the Commission to investigate whether or not a network operator has already committed to serving the area within the parameters of existing capital budgets.

### **Assessment criteria**

#### **Project types**

25 As mentioned above, Cybera encourages the Commission to prioritize applications by non-profits, municipalities, co-ops, First Nations entities, and community networks whose activities will be undertaken efficiently and on a cost-recovery, not-for-profit basis.

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<sup>4</sup> New Zealand Ministry of Business, Innovation & Employment. Registration of Interest-Support, 12 March 2015. Accessed 22 June 2017 from:  
<http://www.mbie.govt.nz/info-services/sectors-industries/technology-communications/fast-broadband/new-initiatives/documents-image-library/roi-implementation-support.pdf>

<sup>5</sup> Crown Fibre Holdings. Rural Broadband and Mobile Black Spots – Invitation to Co-Fund and/or Assist. Accessed 22 June 2017 from:  
[https://www.crownfibre.govt.nz/wp-content/uploads/2011/07/2016\\_10\\_31\\_Invitation-to-Co-Fund-RBI2\\_MB\\_S.pdf](https://www.crownfibre.govt.nz/wp-content/uploads/2011/07/2016_10_31_Invitation-to-Co-Fund-RBI2_MB_S.pdf)

**Project assessment criteria**

26

In Cybera’s view, subscriber uses should not be included in the list of project assessment criteria. To include such a criterion invites proposals which speculate and exaggerate perceived “noble” user activity in a given service area.

Cybera agrees with the Commission’s preliminary views on assessment criteria. We have weighted the assessment criteria below, with 1 carrying the most weight, and 3 carrying the least.

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1	Speeds Pricing Service Coverage Private Investment Coverage Density
2	Capacity Cost per household Quality of Service Scalability Government Funding
3	Sustainability Mobile Coverage Timeliness of project rollout Wholesale Access

**Criteria to identify “priority underserved” geographic areas**

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Cybera is in agreement with the criteria identified in paragraph 46 of the notice to identify “priority underserved” areas for funding, except for the use of hexagonal units of 25 square kilometres as a geographic measure (as noted in paragraph 15 above).

## Satellite-dependent communities component

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Cybera is comfortable with the definition of satellite-dependent communities as outlined by the 2014 Satellite Inquiry Report, and with the eligible costs outlined in the Commission's preliminary views.

**\*\*\*END OF DOCUMENT\*\*\***