FIRST MILE CONNECTIVITY CONSORTIUM

October 7, 2014

ONLINE SUBMISSION

Senior Director Spectrum Development and Operations Industry Canada 300 Slater Street (JETN, 15th) Ottawa, Ontario K1A OH5 spectrum.operations@ic.gc.ca

Re: Consultation on Policy Changes in the 3500 MHz Band (3475-3650 MHz) and a New Licensing Process in Rural Areas. Reference number (DGSO-003-14): *Canada Gazette*, Part I, August 2014

Below are our comments to some issues raised by Industry Canada in Consultation DGSO-003-14. These comments are submitted on behalf of the First Mile Connectivity Consortium.

Yours sincerely,

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- 1. The First Mile Connectivity Consortium (FMCC) is an independent not-for-profit national association. We are not a provider of telecommunications services. However, our membership includes Indigenous non-profit organizations that provide mobile, cellular, wireless and wired Internet infrastructure and services to customers in rural, remote and Northern communities. It also includes non-profit organizations that are interested in providing these services if the opportunity arose.
- 2. We welcome this opportunity to comment on Policy Changes in the 3500 MHz Band (3475-3650 MHz) and a New Licensing Process in Rural Areas. This consultation is important for the development of Canada's North, and for Indigenous peoples living in remote and isolated communities across the country.
- 3. Our work at the FMCC focuses on innovative solutions to telecommunications infrastructure and services with and in rural, remote and Northern communities. We focus on a 'First Mile' approach, which advocates for and supports community ownership and control of infrastructure and services. We suggest that the success of First Mile projects is reflected in Industry Canada's observation that: "There is a continued demand for

¹ For an overview of the First Mile approach, see McMahon, R., Gurstein, M., Beaton, B., O'Donnell, S., and Whiteduck, T. (2014). "Making Information Technologies Work at the End of the Road," *Journal of Information Policy*, 4:250-269.

FWA [Fixed Wireless Access] in rural areas, much of which is being driven by local Internet service providers that are deploying high-speed broadband Internet services to rural Canadians" (paragraph 15). We point to a body of research that demonstrates the range of local Indigenous Internet service providers in place across Canada.²

- 4. Furthermore, we suggest that these First Mile projects can harness existing as well as newly available spectrum to help meet the demand for services in rural and remote regions (paragraph 16). First Mile initiatives can:
 - a) Make infrastructure and services available in regions that lack a business case for private-sector investment. The history of telecommunications in rural, remote and Northern regions provides clear evidence that communities in these regions if they ever receive commercially-provided services will be the last to be served.
 - b) **Build on existing infrastructure and services funded through prior public sector investments.** By harnessing existing networks, capacity and resources, First Mile initiatives enable service providers to build on these telecommunications systems.
 - c) Be leveraged to support economic and community development in regions that otherwise lack many sustainable employment opportunities. Keeping ownership and control of infrastructure and services inside communities helps generate jobs and keeps revenues circulating locally.
 - d) **Support the reliability of infrastructure and services.** By locating technical and administrative staff inside the communities where service is provided rather than in far-off urban centres customers gain faster, more efficient support.
 - e) Support the policy goals outlined by Industry Canada and the Government of Canada. Specifically, First Mile projects use spectrum in a way that can "maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum" (paragraph 5). Furthermore, the consultation notice points out that: "In its Economic Action Plan 2014, the Government reaffirmed its commitment to extend and enhance broadband Internet services in rural and northern communities in order to meet the continued demand for fixed services in rural areas" (paragraph 6). We stress that First Mile projects can help achieve this goal through local service providers that support competition, reflect innovation, and help make mobile infrastructure and services available to Canadians across the country, including those in rural areas, in a timely fashion.
- 5. Along with these general comments, we wish to draw Industry Canada's attention to some issues in the present consultation that specifically impact First Mile initiatives.

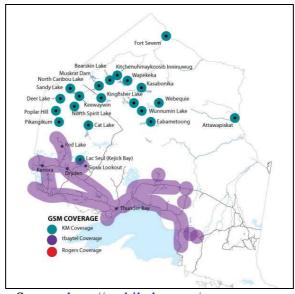
 First, in a previous response to an Industry Canada consultation (SLPB-004-14), we provided comments on service tiers and minimum bids. We expressed our concerns with the geographic and population metrics used to determine existing tiers and

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² Please see: www.firstmile.ca and http://fni.firstnation.ca for examples. An overview is available in McMahon, R., O'Donnell, S., Smith, R., Woodman Simmonds, J., Walmark, B. (2010). http://meting.knet.ca/mp19/file.php/106/Putting-the-Last-Mile-First-Dec-1-2010.pdf

corresponding licenses, and also noted that the expense of some proposed minimum bids are a challenge for independent, non-profit cellular providers serving rural, remote and Northern communities. We are concerned that these high costs restrict the ability of these organizations to expand or establish their operations.

6. Specifically, we provided an example from the areas covered in Tier 2-09. In its sparsely-populated northern section, most communities are fly-in First Nations that are serviced by one of our members, an Indigenous provider called K-Mobile. As is clear from Map 1, K-Mobile's service area focuses only on the northern regions of Tier 2-09. It does not include the more densely-populated and accessible southern regions of the Tier.



Map 1: K-Mobile Service Area

Source: http://mobile.knet.ca/coveragearea

- 7. We presented this example to highlight how the existing composition of service tiers and corresponding spectrum licenses can restrict the ongoing development of infrastructure and services in expensive-to-service regions. We suggest that alternatively constructed service tiers might reflect different regional characteristics/population sizes/opening bids in ways that can support community-based service providers like K-Mobile as "operating new entrants" serving very remote communities.
- 8. Given these concerns, we welcome Industry Canada's proposal to re-examine the classification of Tier 4 Service Areas in Consultation DGSO-003-14 as either "rural" or "urban". We suggest this provides a precedent for an approach to re-configuring service tiers that can be used to further support First Mile development initiatives in the remote and rural regions that our constituent members work in.
- 9. Second, we note Industry Canada's point that because "much of the interest in FWA [Fixed Wireless Access] is in deploying fixed broadband Internet services in smaller communities, making spectrum available for licensing in small, localized, user-defined areas on a FCFS [First Come, First Served] basis is likely to meet FWA demands in the rural tiers" (paragraph 29).

- 10. In light of this point, we contend that **if Industry Canada adopts the allocation of** spectrum licenses in rural tiers on a FCFS basis, Indigenous service providers should be extended opportunities to be consulted with regards to how this process unfolds in their territories. This consultation process should include opportunities for First Nations or other Indigenous parties to access some of the FCFS spectrum as a means to support their planned and/or existing First Mile initiatives.
- 11. Further to this, we note that the issue of consultation with regards to spectrum usage has been raised by First Nations in the past, for example by the Assembly of Manitoba Chiefs in 2007.³ We point Industry Canada to similar arguments for spectrum set-asides specific to Indigenous peoples in other regions of the world (such as in New Zealand).⁴
- 12. Third, we support Industry Canada's recommendation that existing licensees will have six months to deploy their spectrum or face the consequence of losing their license. We agree with the statement made by the Public Interest Advocacy Centre (PIAC), which notes that: "Deployment using in the 3.5 GHz spectrum has generally been low, and broadband penetration in Canada is also low, or available but unaffordable...Therefore it is important the Government is taking steps to get licensees to actually provide service, or clear the way for other willing service providers." 5
- 13. As an organization representing constituents in rural, remote and Northern communities, we can provide examples of the effects of mobile service providers 'warehousing' spectrum. If Industry Canada is interested in learning more about this issue, let us know.
- 14. We are conscious of the challenges faced by smaller, community-based service providers operating in rural and remote regions. Therefore we support exceptions to this recommendation in the event that slower deployment provides long-term economic and community development benefits for affected communities, as in the case of locally-owned and operated First Mile initiatives.
- 15. Finally, we are interested to know if and how the issues discussed in this consultation are linked to Industry Canada's announced funding for broadband provision in remote and northern regions (the "Connecting Canadians" initiative). Our members see these activities as complementary opportunities to address digital divide issues and support First Mile development in rural, remote and Northern communities. We would welcome an opportunity to discuss this point with Industry Canada staff, should it be of interest.
- 16. We thank Industry Canada for the opportunity to participate in this consultation, and are pleased to provide additional information on any of the topics addressed above.

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³ See: http://www.cbc.ca/news/manitoba-chiefs-want-cellphone-revenue-1.662690

⁴ See: http://online.wsj.com/news/articles/SB10001424127887323993804578611330239191130

⁵ See statement by John Lawford, PIAC's Executive Director and General Counsel:

⁶ See: http://www.ic.gc.ca/eic/site/028.nsf/eng/00588.html