September 4, 2014

ONLINE SUBMISSION

Senior Director  
Spectrum Licensing and Auction Operations  
Industry Canada  
235 Queen Street  
Ottawa, Ontario K1A OH5  
spectrum.auctions@ic.gc.ca

Re: Consultation on the Technical, Policy and Licensing Framework for Advanced Wireless Services in the Bands 1755-1780 MHz and 2155-2180 MHz (AWS-3)  
Reference number (SLPB-004-14): Canada Gazette, Part I, August 2, 2014

Below are our comments to some issues raised by Industry Canada in Consultation SLPB-004-14. These comments are submitted on behalf of the First Mile Connectivity Consortium.

Yours sincerely,

Rob McMahon, Ph.D.  
Coordinator  
First Mile Connectivity Consortium  
rob.mcmahon@firstmile.ca

1. The First Mile Connectivity Consortium (FMCC) is an independent not-for-profit national association. We are not a provider of cellular or mobile services. However, our membership includes Indigenous non-profit organizations that provide mobile and cellular infrastructure and services to customers in rural, remote and Northern communities. It also includes non-profit organizations interested in providing these services if the opportunity arose.

2. We welcome this opportunity to comment on the technical, policy and licensing framework for Advanced Wireless Services. This consultation is important for the development of Canada’s North, and for Indigenous peoples living in remote and isolated communities.

3. We also welcome Industry Canada’s recent announcement and forthcoming consultation on spectrum licenses in the 3500 MHz band. As an organization representing constituents in rural, remote and Northern communities, we can provide examples of the effects of mobile service providers ‘warehousing’ spectrum. We plan to supply comments regarding this issue in a future submission.

4. 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. There are several benefits to such First Mile initiatives. They can:

a) **Make mobile infrastructure and services available in regions that lack a business case for private-sector investment.** The history of mobile 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 cellular infrastructure and services inside communities helps generate jobs and keep revenues circulating locally.

d) **Support the reliability of mobile 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 in the consultation paper for SLPB-004-14.** Specifically, First Mile projects use spectrum “in a way that maximizes the economic and social benefits for Canadians” (paragraph 5). They can 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 barriers to First Mile initiatives that we see reflected in the existing policy framework. In the following paragraphs, we comment on service tiers and minimum bids.

6. Section 7.2 of consultation paper SLPB-004-14 outlines the Service Tiers encompassed in the proposed policy framework and spectrum license distribution. While we support the principle of a Tier 2 model, we are concerned with the geographic and population metrics used to determine existing tiers and corresponding licenses.

7. We also note that some proposed minimum bids are a challenge for independent, non-profit cellular providers serving rural, remote and Northern communities. We are concerned that high costs will restrict the ability of these organizations to access the spectrum required to expand or establish their operations.
8. To illustrate these points, consider three regions that encompass remote and Northern communities. Table 1 (taken from p.16 and p.25 of consultation paper SLPB-004-14) illustrates the proposed opening bids and regional populations of three regions:

<table>
<thead>
<tr>
<th>Tier</th>
<th>Region</th>
<th>Population</th>
<th>Opening Bid ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-14</td>
<td>Yukon/NWT/Nunavut</td>
<td>107,000</td>
<td>150,000</td>
</tr>
<tr>
<td>2-07</td>
<td>Northern Quebec</td>
<td>191,000</td>
<td>300,000</td>
</tr>
<tr>
<td>2-09</td>
<td>Northern Ontario</td>
<td>775,000</td>
<td>1,200,000</td>
</tr>
</tbody>
</table>

9. We draw Industry Canada’s attention to 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](http://mobile.knet.ca/coveragearea)

10. We present this example to highlight how existing metrics to determine service tiers and corresponding spectrum licenses can restrict the ongoing development of infrastructure and services in expensive-to-service regions. We suggest that alternative metrics 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.

11. Further to these points, we point out that on para 95 of consultation paper SLPB-004-14, Industry Canada notes that it “recognizes the need to provide increased flexibility in the treatment of a certain subset of associated entities”, particularly in rural areas, given high costs of deployment. We draw attention to this statement to highlight how it might link to
K-Mobile and other cellular service providers that are already operating in rural, remote and Northern communities and would benefit from such flexibility.

12. Finally, we are curious if and how Industry Canada’s spectrum framework is harmonized with the agency’s recently announced funding for broadband provision in remote and northern regions (the “Connecting Canadians” initiative). We are interested in Industry Canada’s position regarding the administration of broadband initiatives vis-à-vis spectrum licensing initiatives. Our members see these two 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.

13. 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.

*** END OF DOCUMENT ***

2 Please see: http://www.ic.gc.ca/eic/site/028.nsf/eng/00588.html