

**ISED SLPB-004-21**

**Consultation on New Access Licensing Framework,  
Changes to Subordinate Licensing and White Space  
to Support Rural and Remote Deployment**

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**Comments of the  
First Mile Connectivity Consortium**

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**I. Introduction**

1. The First Mile Connectivity Consortium (FMCC) is an incorporated independent not-for-profit national association. Our members are First Nations Internet service providers known as “community/regional intermediary organizations.” Our associate members are university and private sector researchers and others interested in Indigenous and community communications and telecommunication services for the public good. Our work focuses on innovative solutions to digital infrastructure and services with and in rural and remote regions and communities across Canada. More details about our members and activities are available at <http://firstmile.ca>
2. Many FMCC members began as remote and rural First Nations community organizations that came together when Industry Canada initiated the First Nation SchoolNet program; others belong to Indigenous non-profit service providers who are determined to bring quality services to remote areas. For many years, these organizations have worked with Industry Canada and now Innovation, Science and Economic Development Canada (ISED), Indigenous Services Canada, the Canadian Radio-Television and Telecommunications Commission (CRTC), and other agencies to develop effective solutions for broadband infrastructure and services in these regions and communities.
3. Over the years, the FMCC has developed considerable expertise on the communications needs of people in remote communities, and how their communities can become owners and providers, as well as consumers, of communications services. FMCC members have delineated policies and approaches that work. Success stories and research on community-based networks can be found in this free downloadable e-book: <http://firstmile.ca/new-book-stories-from-the-first-mile-digital-technologies-in-remote-and-rural-indigenous-communities/>
4. We are active participants in policy and regulatory proceedings, including in past spectrum consultations held by Industry Canada and ISED. Our policy activity focuses on innovative solutions to telecommunications infrastructure and services with and in rural, remote and Northern communities. To meet these goals, we focus on a ‘First Mile’ approach, which advocates for and supports community ownership and control of infrastructure and services.

## **II. Spectrum Issues for Rural, Remote, and Indigenous Regions**

5. We welcome this consultation on unused spectrum by ISED “to support innovation and the availability of rural services....” (para 1). We note ISED’s reference to the *Spectrum Policy Framework for Canada* (SPFC), “which states that the objective of the spectrum program is to maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum resource (para 8). We also note that ISED refers to the Digital Charter which lists universal access as its first principle, and that ISED recognizes affordability as a key component of access (para 9).

6. However, we point out that there is no reference to Indigenous peoples or First Nations in this entire document. **This oversight must be addressed.** As we explain in our responses below, Indigenous rights and lands as well as legal precedents must be considered in allocation of spectrum to serve Canada’s rural and remote regions.
7. With respect to both fixed and mobile wireless projects, spectrum access and licensing rules must provide more opportunities for small and non-profit community and Indigenous providers and the communities they serve. There are many already-existing examples of Indigenous entities utilizing spectrum to deliver services. For example, the Mamawapowin Technology Society uses unlicensed spectrum to provide free public wi-fi in Maskwacis, AB.<sup>1</sup> With respect to mobile spectrum, for more than 10 years, K-Net Mobile has provided 3G cellular services in 15 rural/remote First Nations in Northern Ontario through a subordinate licensing agreement with Rogers.<sup>2</sup> These two examples demonstrate the kinds of innovations that are enabled by increased Indigenous access to and control over spectrum resources.
8. First Mile projects support the policy goals outlined in the *Telecommunications Act* and the *Spectrum Policy Framework for Canada*. Specifically, First Mile projects use spectrum in a way that maximizes the economic and social benefits for Canadians. They can support competition, reflect innovation, and help make wireless infrastructure and services available to Canadians across the country, including those in rural areas, in a timely fashion.
9. Barriers to deployment experienced by FMCC member organizations and others operating in rural/remote regions include limited spectrum access. As noted in a 2018 audit by the Office of the Auditor General on *Connectivity in Rural and Remote Areas*: “... small Internet service providers did not have sufficient access to high-quality spectrum to support broadband deployment in rural and remote areas” (para 1.19). Various parties in CRTC 2019-406 also pointed out that access to spectrum is a clearly defined barrier to deployment in these regions.
10. There is an existing public record of proposals from Indigenous entities to secure access to spectrum for their connectivity needs. The Assembly of First Nations has issued numerous resolutions regarding connectivity and spectrum access. Most recently, in Resolution 19/2020 the Assembly of First Nations (AFN) explicitly calls on Indigenous Services Canada and ISED to support and work with First Nations to enable spectrum access. Other examples include policy recommendations issued as an outcome of the annual Indigenous Connectivity Summit. In 2019, these included the proposal that:

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<sup>1</sup> See: <https://mamawapowin.org/>

<sup>2</sup> See: <https://mobile.knet.ca/node/464>

“Federal regulators should ensure that Indigenous governments and Indigenous-owned entities have first rights to the spectrum over their lands. Unused spectrum over Indigenous lands should be reallocated for Indigenous use.”<sup>3</sup>

11. We note that in some jurisdictions, including the U.S. and New Zealand, Indigenous groups have asserted that spectrum is a natural resource subject to treaty. As a resource, spectrum can be utilized to deploy connectivity services (e.g. used by Indigenous service providers) or leased to service providers as a means to generate revenues. In the U.S., spectrum is considered a bankable asset that can be used as loan collateral. Recently, the Federal Communication Commission (FCC) in the U.S. developed a Tribal Priority Spectrum for 2.5 GHz spectrum licenses.<sup>4</sup> After several Tribes successfully demonstrated proof of concept for fixed wireless networks, the FCC established a formal Tribal priority spectrum policy. Eligible Tribal entities had a window of time to apply for licenses over their territories – they had up to two years to deploy services to a certain amount of end users (e.g. 50%) or lose their license. More than 400 Tribes applied for these licenses.<sup>5</sup>
12. Acknowledging the successful efforts between Indigenous groups and Spectrum license authorities in other parts of the world, we believe it is important to highlight this existing work undertaken by Indigenous parties in the context of this specific consultation. Providing a working example of current practices can be a starting point for a fulsome review and discussion of spectrum access (and the Spectrum Policy Framework for Canada). Similar to the development and reform of other aspects of telecommunications and broadcasting policy, this issue will require additional opportunities for Indigenous parties to co-create an inclusive and equitable policy for spectrum allocation and management.
13. Below, we briefly summarize our prior submissions regarding issues related to mobile and fixed wireless infrastructure and service. We present this material to demonstrate evidence and proposals we have already submitted on the record in prior consultations. These include two consultations held by Industry Canada 2014 and a recent consultation held by the Canadian Radio-Television and Telecommunications Commission (CRTC) in 2019-2021.
14. We then provide comments on the present consultation (ISED SLPB-004-21) and initial responses to the questions raised in the consultation document. We reserve the right to expand upon or modify our responses during the Reply Comments phase of these proceedings.

### **III. Summary of Prior FMCC Consultations on Spectrum Issues**

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<sup>3</sup> See: <https://www.internetsociety.org/wp-content/uploads/2020/01/2019-ICS-Policy-Recommendation.pdf>

<sup>4</sup> See: <https://www.fcc.gov/25-ghz-rural-tribal-window>

<sup>5</sup> See: <https://www.fcc.gov/25-ghz-rural-tribal-maps>

15. The FMCC has been engaged in policy consultations regarding spectrum since 2014. We have pointed out challenges faced by Indigenous service providers in securing access to spectrum through submissions to both ISED (including Industry Canada) and the CRTC.

**FMCC Submission to Industry Canada Consultation SLPB-004-14 (September 2014)**

16. On September 4, 2014 the FMCC filed an intervention in Industry Canada’s *Consultation on the Technical, Policy and Licensing Framework for Advanced Wireless Services in the Bands 1755-1780 MHz and 2155-2180 MHz (AWS-3)*.<sup>6</sup> In our submission, we provided comments on service tiers and minimum bids, and expressed our concerns with the geographic and population metrics used to determine existing tiers and corresponding licenses. We 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 raised concerns that these high costs restrict the ability of these organizations to expand or establish operations.
17. Finally, we raised questions regarding if and how Industry Canada’s spectrum framework was harmonized with the agency’s recently announced funding for broadband provision in remote and northern regions (the “Connecting Canadians” initiative).<sup>7</sup> We were interested in Industry Canada’s position regarding the administration of broadband initiatives vis-à-vis spectrum licensing initiatives. Our members continue to view these two activities as complementary opportunities to address digital divide issues and support First Mile development in rural, remote and Northern communities.

**FMCC Submission to Industry Canada Consultation DGSO-003-14 (October 2014)**

18. On October 7, 2014 we filed an intervention in Industry Canada’s *Consultation on Policy Changes in the 3500 MHz Band (3475-3650 MHz) and a New Licensing Process in Rural Areas*.<sup>8</sup> In our submission, we suggested that the success of First Mile projects is reflected in Industry Canada’s observation that: “There is a continued demand for 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).
19. We welcomed 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 suggested that this proposal provided 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.

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<sup>6</sup> Reference number (SLPB-004-14): Canada Gazette, Part I, August 2, 2014.

<sup>7</sup> See: <http://www.ic.gc.ca/eic/site/028.nsf/eng/00588.html>

<sup>8</sup> Reference number (DGSO-003-14): Canada Gazette, Part I, August 2014.

20. We also noted that the issue of consultation with Indigenous communities regarding spectrum usage has been raised by First Nations in the past, for example by the Assembly of Manitoba Chiefs in 2007.<sup>9</sup> We pointed Industry Canada to similar arguments for spectrum set-asides specific to Indigenous peoples in other regions of the world (such as in New Zealand).<sup>10</sup>
21. As an organization representing constituents in rural, remote and Northern communities, we offered to provide Industry Canada with examples of the effects of mobile service providers ‘warehousing’ spectrum.

### **FMCC Submission to Telecom Notice of Consultation CRTC 2019-406 – Spectrum Issues**

22. On April 23, 2020, we filed an intervention in the CRTC’s consultation regarding potential barriers to the deployment of broadband-capable networks in underserved areas in Canada.<sup>11</sup> We also filed Reply Comments, Final Comments, and Final Reply Comments in those proceedings. While we are aware that spectrum and satellite licensing and regulation fall primarily under the jurisdiction of ISED, we included comments on those issues at that time because of the important role that both resources play in connecting rural and remote communities. We provided our recommendations to contribute to a comprehensive and integrated policy framework to support the deployment and sustainability of telecommunications infrastructure and services to all Canadians, including those living in remote, Northern and Indigenous regions.
23. We argued that with respect to both fixed and mobile wireless projects, spectrum access and licensing rules must provide more opportunities for small and non-profit community and Indigenous providers and the communities they serve.
24. We also stated that effective spectrum management and regulation should support small and non-profit community operators and not only incumbents and other large providers.<sup>12</sup> Some Indigenous organizations such as K-Net Mobile in Northwestern Ontario already utilize spectrum through subordinate licenses, where available, to provide mobile services to their

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<sup>9</sup> See: <http://www.cbc.ca/news/manitoba-chiefs-want-cellphone-revenue-1.662690>

<sup>10</sup> See: <http://online.wsj.com/news/articles/SB10001424127887323993804578611330239191130>

<sup>11</sup> CRTC Notice of Consultation CRTC 2019-406.

<sup>12</sup> Organizations including the International Telecommunication Union (ITU) Development Bureau have recommended that administrations consider mechanisms to facilitate the development of broadband services in rural and remote areas by small and non-profit community operations. Recommendation ITU-D 19. WTDC 2017 report. [https://www.itu.int/en/ITU-D/Conferences/WTDC/WTDC17/Documents/WTDC17\\_final\\_report\\_en.pdf](https://www.itu.int/en/ITU-D/Conferences/WTDC/WTDC17/Documents/WTDC17_final_report_en.pdf)

populations.<sup>13</sup> However, existing spectrum licensing policies limit Indigenous organizations in providing wireless services.

25. We noted the Fall 2018 report of the Auditor General of Canada, which highlighted significant shortcomings in Canada’s existing spectrum management regime:

“[S]mall Internet providers did not have sufficient access to high-quality spectrum to support broadband deployment in rural and remote areas. The Department [ISED] auctioned spectrum licenses for geographic areas that were too large for smaller service providers to submit bids for. Also, the secondary market for unused spectrum did not function well, partly because licensees had little business incentive to make unused spectrum available for subordinate licensing” (p.4).<sup>14</sup>

26. We proposed that one solution would be a re-examination of mobile service tiers. We pointed to our previous filing in Industry Canada spectrum consultation (SLPB-004-14), where the FMCC commented on service tiers and minimum bids. We re-iterated our concerns with the geographic and population metrics used to determine existing tiers and corresponding licenses, and also noted that the expense of some proposed minimum bids is a challenge for independent, non-profit cellular providers serving rural, remote and Northern communities.

27. We recommended that the Broadband Fund and ISED recognize the need to ensure a more inclusive approach to the distribution of spectrum licenses that reflects the diversity of providers.

28. We also proposed that the Commission and ISED consider establishing spectrum set-asides or license transfer for Indigenous territories. This approach has been adopted by the FCC in the U.S. for 2.5 GHz spectrum. As noted above, the FCC is providing Native Tribes with an opportunity to secure 2.5 GHz spectrum covering their Tribal lands as a low-cost means to support broadband deployment in those communities.<sup>15</sup>

29. We noted that the FCC policy allows for applicants to determine the specifics of the license areas: “Applicants in the Rural Tribal Window may designate their own desired license areas, so long as the entire area is rural Tribal land, and the applicant has a local presence in the area...”<sup>16</sup>

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<sup>13</sup> See: <http://mobile.knet.ca/>

<sup>14</sup> See: [http://www.oag-bvg.gc.ca/internet/English/parl\\_oag\\_201811\\_01\\_e\\_43199.html](http://www.oag-bvg.gc.ca/internet/English/parl_oag_201811_01_e_43199.html)

<sup>15</sup> Source: <https://www.fcc.gov/25-ghz-rural-tribal-window>

<sup>16</sup> See: <https://www.fcc.gov/25-ghz-rural-tribal-window>

30. We recommended that ISED set aside portions of appropriate spectrum for fixed wireless for use by Indigenous communities through a program similar to that employed by the FCC.
31. Concerning the need for more accurate spectrum coverage maps for Indigenous regions, we noted the errors and omissions, such as those for the spectrum block in the western part of the Lake Huron First Nations treaty territory in and around Sault Ste. Marie (see para 58 below).

#### **IV. FMCC Comments on Questions Raised in ISED SLPB-004-21**

32. In this section we respond to the questions listed in ISED's document.

##### **Access Licensing Framework**

*Q1 ISED is seeking comments on its proposal to implement a new Access Licensing framework to make licenses available in rural and remote areas where there is unused spectrum.*

33. We support the general concept of the Access Licensing framework to make spectrum licenses available in rural and remote areas. Wireless services, both fixed and mobile, are important for Indigenous residents of remote regions. For example, a survey of Indigenous communities in Northern Ontario in 2016 found that 85 percent of respondents wanted cellular deployed in their region because of health and safety concerns.
34. However, we note that there is no reference to Indigenous peoples or First Nations in this entire document. **Any new licensing framework must take into consideration the requirements and jurisdictions of Indigenous peoples, including their interests in building and deploying infrastructure and services.** Our past submissions to ISED and the CRTC have recommended that the Broadband Fund and ISED recognize the need to ensure a more inclusive approach to the distribution of spectrum licenses that reflects the diversity of providers (see paras 4-12 above).
35. In Section III we summarized existing policy interventions by Indigenous parties and others that highlighted barriers to spectrum access. There are additional examples of similar efforts in our research and policy interventions.
36. Spectrum should be considered a natural resource subject to Treaty and/or Indigenous Rights and Jurisdiction. Therefore, any Access Licensing framework should take into consideration Treaty and Indigenous Rights and economic reconciliation.
37. For example, Indigenous peoples should receive tangible benefit for natural resource development taking place in their territories, such as through Revenue-Sharing Agreements,



Impact Benefit Agreements (IBAs) or a similar mechanism. As noted in a 2015 report from the Parliamentary Information and Research Service:

“IBAs are privately negotiated, legally enforceable agreements that establish formal relationships between Aboriginal communities and industry proponents....

Broadly, IBAs serve two primary purposes. First, they seek to address the potentially adverse effects of development activities on Aboriginal communities, with a view to providing some compensation for these activities. Second, IBAs help to ensure that Aboriginal communities acquire benefits from resource development activities occurring on their traditional territories” (p.1).<sup>17</sup>

***Q2 ISED is seeking comments on its proposal to issue access spectrum licences and access radio licences on a first-come, first-served basis.***

38. Indigenous entities should have first right of refusal for spectrum licenses in their territories. For example, ISED could adopt an Indigenous Priority Access Window to allow Indigenous governments, organizations and/or service providers to obtain a license for spectrum in their territories.
39. In our submission to CRTC 2019-406, we recommended that the Commission and ISED establish spectrum set-asides or license transfer for Indigenous territories. This approach is being adopted by the FCC in the U.S. for 2.5 GHz spectrum. The FCC is providing Native Tribes with an opportunity to secure 2.5 GHz spectrum covering their Tribal lands as a low-cost means to support broadband deployment in those communities (See above, para 11).
40. That said, we note that colleagues working for Tribal entities in the U.S. have noted the limitations of the “rural” requirements, which blocks the ability for Indigenous communities and entities operating closer to “urban” areas from accessing Tribal Priority spectrum. Therefore, we recommend that ISED work with Indigenous entities to determine the most appropriate geographic eligibility.
41. Further, any request for spectrum that would serve or cover Indigenous lands should require consultation with those Indigenous representatives. FMCC has provided extensive materials regarding consultation with Indigenous entities on issues related to telecommunications infrastructures and services in past submissions in CRTC proceedings related to the CRTC Broadband Fund and barriers to deployment in remote regions, highlights of which are summarized in Section III above.

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<sup>17</sup> See: <https://lop.parl.ca/staticfiles/PublicWebsite/Home/ResearchPublications/InBriefs/PDF/2015-29-e.pdf>

42. Examples of models of Indigenous spectrum policies are available from Mexico, New Zealand and the United States. We refer to ISOC/Mozilla's submission to these consultations for a summary of these examples.

***Q3 ISED is seeking comments on its proposal to use the rural and remote Tier 5 service areas as the basis to determine the rural and remote areas in which it will apply access licensing.***

43. We commend ISED for developing the smaller Tier 5 licensing areas. As noted in prior ISED interventions, FMCC members have faced barriers to accessing spectrum licenses in the past due to the size and composition of service Tiers.

44. In the case of Access Licensing, we concur with ISOC and Mozilla's recommendation to support the use of Tier 5 service areas with the provision that ISED should reserve the right to consider and implement smaller Tier areas should Tier 5 regions prove problematic.

45. In their submission to these consultations, Joseph and McNally point out that while some Tier 5 service areas align relatively closely to existing Indigenous Land Claim Agreement areas, there are many areas where Indigenous territories are amalgamated into larger Tier 5 blocks. They suggest that ISED develop a mechanism to deal with the unforeseen consequences of the current Tier 5 divisions. We agree with this suggestion.

***Q4 ISED is seeking comments on its proposed principles to be used when considering spectrum licensed or radio licensed bands where the proposed Access Licensing framework will apply.***

46. We generally agree with the proposed principles, but we note that they focus only on technical criteria. See the response to Q5 below.

***Q5 ISED is seeking comments on other principles it should take into account when considering bands where the proposed Access Licensing framework will apply.***

47. We note that the current principles focus on technical criteria. We agree with Joseph and McNally's recommendation to foreground social use cases in the Access Spectrum licensing process, such as for community networks, Indigenous networks, and public good use cases.

48. The most remote and unserved/underserved communities should be prioritized in Access Spectrum allocations. For example, the telco servicing a Tier 5 area in northern Ontario put a freeze on installing any more landlines into these communities. As a result of that decision, some people were completely cut off, and even lack access to 911 service if the internet goes offline. Hunters and others engaged in on the land activities also require mobile service to

keep in contact with their families and for reasons of public safety. Therefore, these unserved regions and communities should get priority.

49. Entities that acquire spectrum to deploy broadband infrastructure and services should be required to consult with affected communities.

50. We also agree in general with ECN's proposal to add the following additional principles:

- a. An Indigenous priority window should be established (as outlined above).
- b. The spectrum made available for access licensing should enable the rural and remote communities to implement the same technologies available in metro areas, i.e. mmWave spectrum for 5G in the future.
- c. Development of projects using spectrum should be oriented toward long-term, sustainable/resilient systems that benefit communities and people who live in rural and remote areas....
- d. Collaborative work between smaller-scale entities such as community and municipal networks; Indigenous and regional service providers; etc. should be encouraged and supported.

***Q6 ISED is seeking comments on adopting a flexible use licensing model for fixed and mobile services when issuing access spectrum licences.***

51. We concur with this proposal to use a flexible use licensing model.

***Q7 ISED is seeking comments on its proposal to use Tier 5 service areas for the proposed access spectrum licences and any associated potential technical challenges should this process be applied to all commercial mobile or flexible use frequency bands.***

52. In general we agree with this proposal.

53. However, where spectrum covers Indigenous land and/or communities, consultation with their representatives should be required, and permission granted to use the spectrum before it is licensed.

***Q8 ISED is seeking comments on any future adjustments to the licence areas for access spectrum licences, including consideration of more localized areas (e.g. smaller than Tier 5).***

54. Tier 5 service areas are very large, typically including several isolated remote communities. See: [https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h\\_sf01627.html#tierMap](https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf01627.html#tierMap)
55. We agree with ECN's comment that the size of some Tier 5 service areas may pose challenges for smaller providers, including Indigenous providers.
56. We agree with ISOC/Mozilla's suggestions that the Tier 5 service areas should be reviewed at the expiry of the first round of licenses (i.e. after three years) and possible additional granularity in service area size be considered then.

***Q9 ISED is seeking comments on its proposed process for identifying rural and remote Tier 5 service areas in which there is unused spectrum that would be made available for access spectrum licensing.***

57. In some cases, the issue is not spectrum but service. There is a need for better maps that show both spectrum coverage and locations where services are provided.
58. In past consultations, Indigenous interveners have pointed out the need for more accurate spectrum coverage maps for Indigenous regions. For example, in CRTC 2019-406, Robinson Huron Treaty Litigation Fund noted: "At present, the most basic information is missing as illustrated by the spectrum block in the western part of the Lake Huron First Nations treaty territory in and around Sault Ste. Marie" (para 31).
59. We support ISOC/Mozilla's request for more information on how multiple applications for spectrum in a single Tier 5 service area will be handled. For example, Does spectrum assigned through this process grant exclusivity in the Tier 5 service area for the frequencies assigned?

***Q10 ISED is seeking comments on its proposal to impose a condition of licence to prohibit existing primary and subordinate licensees' deployment in areas for which an access spectrum licence has been issued.***

60. We support this proposal. A deadline should be stated by which the access spectrum licensee must be deployed.

***Q11 ISED is seeking comments on its proposal that stations already deployed by primary or subordinate spectrum licensees within their service areas would be protected from subsequent deployment under access spectrum licences.***

61. We agree that the existing deployments of primary and subordinate spectrum licensees should be protected. Evidence should be required that the stations have been deployed and service activated, and that the service meets specified Quality of Service (QOS) targets.

***Q12 ISED is seeking comments on the above options for eligibility.***

62. Both options have some advantages. Option 2, specifying that an applicant must not hold a spectrum license whether deployed or undeployed in the Tier 5 service area, would maximise the opportunity for new operators to gain access to spectrum.
63. However, Option 1 would at least specify that no applicant must hold a licence for undeployed spectrum, thus prohibiting an incumbent from acquiring more spectrum if it had not fully deployed any spectrum in the Tier for which it had a licence.
64. Since Tier 5 regions are very extensive, subregions could be required to implement either of these options.

***Q13 ISED is seeking comments for Option 1 and Option 2, specifically should the deployed and/or undeployed spectrum be based on any frequency band (e.g. 2500 MHz) currently held by the applicant or only the band (e.g. PCS band) for which the application is made?***

65. We propose that the deployed and/or undeployed spectrum should be based on any frequency band. For example, under Option 1, an applicant could not receive a licence if it had not deployed spectrum in any band in the Tier 5 region for which it had received a licence.

***Q14 ISED is seeking comments on its proposal to issue access spectrum licences with a three-year licence term and the proposed wording of the condition of licence above.***

66. In general, we support both the license term and the wording of the condition.
67. However, the condition states that the licence would be renewed unless a breach of licence condition has occurred, but does include build out as a condition. The licence condition should require build out within the three years. The license should not be renewed unless sufficient justification were given to explain the lack of completion.
68. We emphasize this requirement because there is a history of providers acquiring spectrum in Indigenous regions and communities but not deploying services or requesting unreasonable concessions to build out the networks. For example, one FMCC member organization based in Northern Ontario stated that a telco asked for co-location on a tower, free colocation in shelters, free back haul, and a cash contribution of \$160,000 before it would consider bringing cellular service to the region. The Indigenous provider refused.

***Q15 ISED is seeking comments on its proposal that access spectrum licences not contain transfer, subdivision or subordination privileges.***

69. We disagree with the proposal that access spectrum licenses should not contain transfer, subdivision, or subordination privileges. Subordination is an important mechanism for extending services in rural, remote and Indigenous regions. See our responses to Q43 and Q45 below.

70. The rationale stated by ISED that access spectrum licences would not be awarded by auction is not relevant to the decision to include transfer, subdivision or subordination privileges.

***Q16 ISED is seeking comments on its proposal to align the deployment conditions for access spectrum licences with the relevant conditions of licence currently applied to the licences in the specific band, taking into account any differing characteristics such as Tier sizes, and the timing as to when those deployment requirements should apply. ISED is also seeking comments on the appropriateness of existing deployment requirements for private networks.***

71. We agree with the conditions in ISED para 59: Licensees would be required to meet the end-of-term deployment requirements in order to be eligible to renew the licence.

72. We have no comment on private networks at this time.

***Q17 ISED is seeking comments on its proposal to apply the conditions of licence set out in annex B to access spectrum licences issued through the proposed Access Licensing framework.***

73. We believe that Indigenous communities/providers should be exempt from spectrum fees. Also, we see no need to require 2 percent of Adjusted Gross Revenues to be spent on R&D. This requirement should be waived for Indigenous licensees.

74. We have no comments on the other conditions in Annex B at this time.

***Q18 ISED is seeking comments on its proposal to make 800 MHz cellular available for access spectrum licenses in rural and remote Tier 5 service areas in which the existing primary or subordinate has no deployment.***

75. We support this proposal.

***Q19 ISED is seeking comments on its proposal to modify the CTFA, where relevant, to change the existing fixed service allocation to primary status in the 824-849 MHz/869-894 MHz range, noting that the fixed service is already allocated on a primary basis in the 890-894 MHz portion.***

76. We agree that both Fixed and Mobile services should be authorized for this band.

***Q20 ISED is seeking comments on its proposal to make PCS blocks A to F available for access spectrum licenses in rural and remote Tier 5 service areas in which the existing primary or subordinate licensee has no deployment.***

77. We agree that both Fixed and Mobile services should be authorized for this band.

***Q21 ISED is seeking comments on any other spectrum licence bands that meet the principles proposed in section 5 that could be considered for access spectrum licensing.***

78. We have no comment at this time.

***Q22 ISED is seeking comments on the proposal to generally adopt the same technical requirements, including coordination requirements, as published in RSS-132 and SRSP-503 in the cellular band, and RSS-133 and SRSP-510 in the PCS band for future access spectrum licences.***

79. In general, we concur, but we note that coordination and field strength criteria may not be relevant in remote regions where there is no other use of the band, and where, for example, increased field strength may allow the signal to reach Indigenous people engaging in activities such as hunting, fishing and trapping away from their communities.

***Q23 ISED is seeking comments on the above proposal to amend the Condition of Licence concerning "International and Domestic Coordination" for all existing spectrum licensees in blocks A and B of the cellular band and blocks A through F, inclusively, of the PCS band.***

80. In general, we concur with this proposal.

***Q24 ISED is seeking comments on its proposal that existing cellular and PCS stations under spectrum licences will be protected from access spectrum licence operations and would not be required to coordinate with new access spectrum licence operations in adjacent service areas.***

81. In general, we concur with this proposal.

***Q25 ISED is seeking comments on its proposal that any future stations deployed by existing cellular and PCS spectrum licensees would be subject to the coordination rules in SRSP-503 and SRSP-510 applied at the new Tier 5 service area boundary where an access spectrum licence has been issued.***

82. In general, we concur with this proposal.

***Q26 ISED is seeking comments on its proposal that existing radio licensees operating standard systems in the PCS band would be protected from access spectrum operations and***

***access spectrum licensees may not trigger displacement of existing radio licences in the PCS band.***

83. In general, we concur with this proposal.

***Q27 ISED is seeking comments on the process for making access spectrum licences available and the options described above.***

84. There are some problems with both options.

85. For Option 1, making all access spectrum available at the same time, we do not know why ISED would specify precisely 126 days to process the licences, since it has no idea how many applications it will receive.

86. For Option 2, release of access spectrum in tranches, Indigenous organizations / communities / providers should get priority. Also, completely unserved areas should also be prioritized.

***Q28 Under both options, ISED is seeking comments on its proposal to begin access spectrum licensing three months after the publication of the decision.***

87. In general, we concur with this proposal.

***Q29 Under both options, ISED is seeking comments on its proposals to limit the number of access spectrum licence applications to:***

***Option 1: 20 per applicant per 12 month period***

***Option 2: 5 per applicant at the opening of the access licensing process for each tranche.***

Both options seem completely arbitrary. However, no matter what approach is used, it should be reviewed after the first year to determine:

- How many licences were issued
- How long the process took per licence
- What problems arose etc.

Then the process should be revised if necessary, based on this analysis.

***Q30 Under Option 2, ISED is seeking proposals on how it should prioritize Tier 5 licence areas and spectrum blocks if it adopts a sequential release of spectrum for access spectrum licensing. Proposals should address the key considerations of equitable geographic distribution, coverage, impacts on existing licensees, potential business cases, and timeliness.***

88. We think these criteria are not appropriate.



89. Indigenous regions should be given first priority. Indigenous and unserved regions should be given priority. See the response to Q27 above.

## **Radio Access Licenses**

*Q31 ISED is seeking comments on its proposal to issue site-specific access radio licences within rural and remote Tier 5 service areas under the Access Licensing framework.*

90. We concur with this proposal

*Q32 ISED is seeking comments on its proposal to follow its LMR licensing process to receive and review applications for access radio licences.*

91. We have no comment at this time.

*Q33 ISED is seeking comments on its proposal not to limit the number of access radio licence applications an applicant may submit via the Spectrum Management System for these bands.*

92. We have no comment at this time.

*Q34 ISED is seeking comments on potential eligibility restrictions for access radio licences.*

93. We would like clarification of ISED's definition of "private networks" (para 103) and whether it applies to community broadband networks.

*Q35 ISED is seeking comments on its proposal to apply the above conditions of licence to access radio licences.*

94. We question the one year licence term as opposed to three years, and note that there is no mention of expectation of renewal or criteria to be used for renewal.

*Q36 ISED is seeking comments on its proposal to allow broadband use in the 900 MHz LMR band as shown in figure 6.*

95. We support this proposal.

96. However, we urge ISED to align with the US changes to 900 MHz LMR band plan, so that broadband is available in all parts of Canada (ISED para 117).

*Q37 ISED is seeking comments on its proposal to issue access radio licenses in the 897.5-900.5 MHz and 936.5-939.5 MHz portions of the 900 MHz LMR band in rural and remote*

***Tier 5 service areas and only in locations within those service areas where there will be no interference to existing LMR operations.***

97. In general, we support this proposal.

***Q38 ISED is seeking comments on availability of equipment for the proposed broadband service, including the feasibility of modifying 3GPP band 8 equipment.***

98. We have no comment at this time.

***Q39 ISED is seeking comments on the potential use cases of 3/3 MHz for broadband services, including the potential for 5G deployment.***

99. We prefer 5/5 MHz, noting that ISED states that it “recognizes that a 3/3 MHz broadband segment is likely not enough to achieve CRTC's universal broadband service objective of 50/10 Mbps for public consumers” (para 114).

***Q40 ISED is seeking comments on the feasibility of also making 896-901 MHz and 941-946 MHz available for broadband at the same time as 987.5-900.5 MHz and 936.5-939.5 MHz***

100. We support this proposal.

***Q41 ISED is seeking comments on its proposal to use the same methodology for determining geographic separation for broadband service as already included in SRSP-506 for land mobile systems.***

101. We have no comment at this time.

***Q42 ISED is seeking comments on whether the 1.5 MHz and 500 kHz of separation are sufficient to protect the adjacent band Air-Ground Radiotelephone Service, fixed service and Narrowband Personal Communications Service.***

102. We have no comment at this time.

***Q43 ISED is seeking comments on the potential or actual benefits of subordinate licensing to increase rural broadband access and accommodating new innovative network usage.***

103. Subordinate licensing is an important policy mechanism for rural, remote, Northern and Indigenous regions. FMCC member organizations ECN and K-Net already have subordinate licensing arrangements in place. K-Net Mobile provides mobile phone services in 15 rural/remote First Nations in Northern Ontario through a subordinate licensing agreement

with Rogers.<sup>18</sup> This arrangement has resulted in a number of innovative uses of mobile technologies in First Nations contexts, such as the DiabeTEXTs initiative from KO Health and K-Net to use cellular technology to provide diabetes education and information to interested community members through SMS texting and other electronic media.<sup>19</sup> ECN works with SSi Canada, which holds a subordinate licence and has partnered with Eeyou Mobility Inc (EMI) to implement infrastructure and provide cell service in the Eeyou Istchee region.

***Q44 ISED is seeking comments on ways in which to streamline the general application requirements for subordinate licences as set out in sections 5.6.3 and annex D of CPC-2-1-23. ISED also seeks proposals to streamline the application process for all subordinate licence applicants, including those in commercial mobile bands who must also provide material addressing the criteria and considerations in section 5.6.4 of CPC-2-1-23. In these proposals, ISED also seeks comments as to how parties can demonstrate (e.g., an attestation, or other commitment) that their request for a subordinate licence does not constitute a transfer, deemed transfer, or prospective transfer as discussed in section 8.2.1 above.***

104. We support efforts by ISED to clarify and streamline the application process for subordinate licences.

105. Indigenous groups have raised this challenge in prior consultations. For example, in CRTC 2019-406, the Inuvialuit Regional Corporation (IRC) stated that the existing spectrum management regime imposes onerous, impractical conditions for sub licensing unused spectrum. During those proceedings, we agreed with IRC's recommendation that the CRTC (working in collaboration with ISED) should require spectrum licensees to sublicense unused spectrum at reasonable terms.

106. The 2018 report of the Auditor General of Canada has also noted the challenges with the existing market for subordinate licenses. These included limited information on unused spectrum and the lack of a clear, user-friendly process for applicants.<sup>20</sup>

***Q45 ISED is seeking comments on facilitating subordinate licensing and encouraging secondary market transactions including:***

- ***Should additional changes be made to existing licences that will encourage the use of subordinate licences as a means to help deploy more services?***
- ***Given ISED's regulatory role, are there any issues or actions ISED should consider?***

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<sup>18</sup> See: <https://mobile.knet.ca/node/464>

<sup>19</sup> See: <https://cjc-online.ca/index.php/journal/article/view/2488/2276>

<sup>20</sup> Auditor General report, sec. 1.78-1.81.

107. ISED should encourage and facilitate subordinate licensing. Subordinate spectrum licensing agreements support principles of economic reconciliation and partnership between Indigenous and non-Indigenous entities. Spectrum license holders should consider how they might support the ongoing economic and community development of Indigenous Nations through spectrum-sharing agreements, including by supporting and encouraging subordinate licenses. Examples of successful partnerships exist, as in the cases of K-Net Mobile and Eeyou Mobility Inc's work with SSi Canada.
108. We also propose that there should be incentives for existing licence holders to share spectrum with Indigenous providers.
109. Concerning the examples in para 149, we propose that ISED should:
- establish timelines and deadlines for a licensee to respond to a request to enter into a subordinate agreement;
  - require that the Primary Licensee provide valid reasons for refusing to enter into a subordinate arrangement (e.g. an imminently planned deployment);
  - establish potential consequences ranging from fines to forfeiture of licences for failing to respond to a request.

***Q46 ISED seeks comments on what additional information, if any, should be included in the draft form shown in annex D.***

110. We have no comment at this time.

## **TVWS & RRBS**

***Q47 ISED is seeking comments on its proposal to remove the current restriction on database hosting in order to facilitate cloud-based database hosting solutions.***

111. We support this proposal.

***Q48 ISED is seeking comments on its proposal to allow the use of TV channels 3 and 4 by all types of WSD.***

112. In general, we support this proposal. However, we would expect any provider serving an Indigenous community to determine whether use of these frequencies would interfere with TV reception, connections with VCRs, etc.

***Q49 ISED is seeking comments on its proposal to no longer renew existing RRBS licences after March 31, 2027.***

113. We support this proposal.

## **V. Conclusion**

114. We thank ISED for the opportunity to contribute to this important consultation.

115. We reserve the right to submit Reply Comments including additions and modifications to the responses above during the next phase of the proceedings and any other phases that may be authorized.

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