



Notice SPB-002-24

Improving Indigenous Access to Spectrum: Draft
Indigenous Priority Window Spectrum Policy
Framework

Comments of Karrier.One Inc.

27 September 2024

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Mark Saunders
Innovation, Science and Economic Development Canada
Spectrum Policy Branch
6th Floor, East Tower
235 Queen St
Ottawa, ON, K1A 0H5

RE: **Comments on Notice No. SPB-002-24 — Improving Indigenous Access to Spectrum: Draft Indigenous Priority Window Spectrum Policy Framework**

Dear Mr. Saunders,

1. Karrier.One Inc. ("Karrier.One") is pleased to submit the following comments on *Notice No. SPB-002-24 — Improving Indigenous Access to Spectrum: Draft Indigenous Priority Window Spectrum Policy Framework* ("the Framework").
2. We recognize that the intent of Notice No. SPB-002-24 is to announce Innovation, Science and Economic Development Canada's (ISED) publication of an engagement process to seek input on a new draft spectrum policy framework called the Indigenous Priority Window (IPW), through the release of the document entitled SPB-002-24, Improving Indigenous Access to Spectrum: Draft Indigenous Priority Window Spectrum Policy Framework.
3. Karrier.One is a telecommunications company that focuses on building a decentralized, blockchain-based mobile network. The company's goal is to provide affordable, reliable, and decentralized connectivity through a user-owned global network. Using blockchain technology, Karrier.One enables individuals, businesses, and underserved communities to access carrier-grade wireless infrastructure at a fraction of the typical costs.

Key features of the Karrier.One network include:

1. **Decentralization:** Users, called Mobile Independent Network Operators (MINOs), can host and operate network nodes, earning utility tokens as rewards for sharing their connectivity.
 2. **Blockchain Integration:** The network leverages blockchain for transparency and efficiency, utilizing smart contracts and crypto-tokens to distribute revenue and incentivize participation.
 3. **Focus on Underserved Areas:** Karrier.One targets underserved regions, such as Indigenous and rural communities, providing connectivity without the need for traditional telecom infrastructure.
 4. **Community Ownership:** The company operates on a decentralized model where users have a say in the network's governance through a decentralized autonomous organization (DAO), with governance tokens (KONE) enabling user participation in decision-making.
4. Karrier.One holds spectrum licences in rural Ontario.
 5. Karrier.One believes that Indigenous Peoples should be given priority to the spectrum over their lands and that they should be able to develop Indigenous-led-and-owned connectivity solutions for their communities. To that end, the Framework is a positive step that can contribute to the closing of the digital divide in rural and remote Indigenous communities and contribute to Canada's journey of reconciliation with Inuit, Métis and First Nations peoples.
 6. Access to spectrum remains a major challenge for small mobile network operators, particularly in southern Canada where they must compete with the very large telecommunications companies at auction in order to acquire spectrum licences.

7. It is our position that the Framework has the potential to increase access to spectrum for Indigenous mobile network operators and wireless service providers and as such, it is a positive development for last mile connectivity and will make a significant and positive difference to rural and remote communities.
8. Karrier.One addresses some of the questions from the Framework below:

Q1. Policy Objectives:

Do you agree with the stated policy objective in section 3.1? If not, how should it be modified?

- a. How can we measure the success of the IPW spectrum policy framework?
- b. How would you like to see the IPW spectrum policy framework used in the future?
- c. Are there any other spectrum access measures we should consider to further support Indigenous connectivity?

9. Karrier.One agrees with ISSED's stated policy objective in section 3.1, which is to reduce barriers to spectrum access and support Indigenous applicants in accessing spectrum on a priority basis.
10. This objective is consistent with Section 7 of the *Telecommunications Act*, which sets out the objective to facilitate the orderly development throughout Canada of a telecommunications system that serves to safeguard, enrich and strengthen the social and economic fabric of Canada and its regions, 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 to respond to the economic and social requirements of users of telecommunications services.
11. This objective is also consistent with several of the key objectives of the *Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy* (SOR/2023-23) (the "Order"). While this Order is directed to the CRTC, it is important for ISSED's policies to be consistent with those of the CRTC to avoid confusion and conflict between the policies of Canada's regulatory bodies. The objective of the Framework is consistent with the Order's key objectives to "(a) encourage all forms of competition and investment; (b) foster affordability and lower prices, particularly when telecommunications service providers exercise market power; (c) ensure that affordable access to high-quality, reliable and resilient telecommunications services is available in all regions of Canada, including rural areas, remote areas and Indigenous communities; [... and] (e) reduce barriers to entry into the market and to competition for telecommunications service providers that are new, regional or smaller than the incumbent national service providers".
12. This objective is consistent with the principles of the United Nations Declaration on the Rights of Indigenous People (UNDRIP), which emphasizes the urgent need to respect and promote the inherent rights of Indigenous peoples of the world, especially their rights to their lands, territories and resources. Article 26 states that Indigenous peoples have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired. Article 27 calls for states to establish and implement, in conjunction with Indigenous peoples concerned, a fair, independent, impartial, open and transparent process, giving due recognition to Indigenous peoples' laws, traditions, customs and land tenure systems, to recognize and adjudicate the rights of indigenous peoples pertaining to their lands, territories and resources. Finally, Article 29 states that Indigenous peoples have the right to the productive capacity of their lands or territories and resources.
13. This objective is consistent with advances in Indigenous rights in other jurisdictions such as in the United States, Mexico and New Zealand.
14. Success of the draft Framework should be measured in terms of the following metrics:
 - (i) Number of spectrum licenses awarded;

- (ii) Quantity of spectrum awarded;
- (iii) Number of licenses put into use;
- (iv) Quantity of spectrum put into use;
- (v) Number of customers serviced;
- (vi) Geographic area serviced.

Q2. Eligibility Criteria:

What eligibility criteria should we consider for IPW applicants?

- a. Does the existing applicant-based option (Option 1), as defined in section 3.2, resonate with you? If so, which parts do you think are the most valuable to use to create the final eligibility criteria?
- b. Does the community support-based option (Option 2), as defined in section 3.2 resonate with you? If so, do you think it should be combined with Option 1 or should it stand on its own?
- c. Does the project-based option (Option 3), as described in section 3.2, resonate with you? If so, which parts do you think are the most valuable to use to create the final eligibility criteria?
- d. Are there other approaches that may be better suited to create the final eligibility criteria?

- 15. Karrier.One supports Option 1. Under this option, applicants must either be registered in Canada's Indigenous Business Directory ("IBD") (noting that Elders, band and tribal councils are exempt from registration), or be registered in a beneficiary business list, when acquiring a spectrum licence.
- 16. Karrier.One does not support Option 2. Under this option, an applicant may be considered eligible for a licence if they can demonstrate support from the Indigenous communities within the licence area. While this could work for one-off deployments, this could lead to a patchwork approach where there is support in some locations but not in others, essentially discouraging economies of scale which are critical to achieve when serving small populations.
- 17. Karrier.One does not support Option 3. Under this option, applicants may be considered eligible if they can demonstrate their initiative fits into a benefits matrix. This option would be difficult to implement and understand as it is highly subjective. There are many Indigenous groups, each with different priorities. Without a clear criteria, TSPs would be discouraged from participating.

Q3. Time-limited Window:

The proposed time-limited window is 12 months (section 3.3). Do you feel this is sufficient time to submit a licence application? If not, how much time would be sufficient?

- 18. Karrier.One supports a 12-month window for submitting licence applications.

Q4. Conditions of Licence:

How can the conditions of licence described in section 3.4 be designed for future spectrum access initiatives to support Indigenous-led connectivity solutions?

- 19. ISSED has stated that licences issued through this process will have the same conditions as those outlined in annex A of the *Access Licensing Framework - Decision on New Access Licensing Framework, Changes to Subordinate Licensing and White Space to Support Rural and Remote Deployment*.
- 20. Karrier.One believes that entities that hold spectrum licences should be given time to meet their deployment conditions, within the scope of their specific licences, before spectrum from those licences are made available through the IPW.
- 21. Karrier.One appreciates the opportunity to provide its comments in the IPW to ISSED.

Sincerely,

[submitted by email]

Andrew Buchanan
Co-Founder and Chief Technology Officer

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