

A Cree-Led Mobile Broadband Solution for the Eeyou Istchee James Bay Region of Québec

Written Submission by Eeyou Mobility Inc. to the
Standing Committee on Finance in Advance of the 2021 Budget

August 7, 2020



- **Recommendation:** That the Government commit, as a very high priority, to funding the extension of a Cree-led mobile wireless network in the Eeyou Istchee James Bay region of Québec, deployment of which is essential for safety, security and social and economic development.

The Challenge of Mobile Wireless Coverage in the Eeyou Istchee James Bay Region

Many of Canada's First Nations communities, especially those in more remote areas, experience a digital divide that limits access to reliable, affordable and robust broadband connectivity.¹ This leads to profound disadvantages. As noted by the Canadian Radio-television and Telecommunications Commission (CRTC), *"fixed and mobile wireless broadband Internet access services are catalysts for innovation and underpin a vibrant, creative, interactive world that connects Canadians across vast distances and with the rest of the world."*²

The COVID-19 crisis, and the new reality of self-isolating, working and educating from home, make the need for reliable connectivity more urgent than ever. In large but underserved regions such as the Eeyou Istchee James Bay region of Québec, a robust recovery from this pandemic will require that people, businesses and governments have access to reliable and affordable mobile wireless broadband service throughout the region. Indeed, mobile wireless broadband service is now, more than ever, essential *"to find jobs, manage their investments, conduct business, further their education, keep informed on matters of public concern, consult with health care professionals, and interact with all levels of government"*.³

The Eeyou Istchee James Bay region of Québec covers more than 330,000 km², including more than 1,900 km of highways and roads connecting nine Cree and five non-Cree, or *Jamésien*, communities. Rich in wildlife and other natural resources, the region is home to approximately 18,000 Indigenous residents and about 15,000 *Jamésien* inhabitants.

Limited mobile wireless service is available from Bell Mobility in parts of the region, but in certain Cree communities service is either unavailable or leaves a great deal to be desired. The extensive road network is heavily travelled, providing a lifeline and essential links for those who live, work and travel in the region. In 2019, more than 60,000 vehicles passed the control point at the south end of the James Bay Highway at Matagami. The total number of vehicles travelling on this major road and elsewhere in the region is significantly higher. Today, however, mobile wireless coverage along the roadways is non-existent outside the immediate vicinity of select communities. This results in:

¹ According to the CRTC's 2019 *Communications Monitoring Report*, at the end of 2018 only 31.3% of households in First Nations reserves had access to broadband service at speeds that meet or exceed the CRTC's universal service objective (USO) target of 50 Mbps download and 10 Mbps upload with no data caps. This compares unfavourably with the proportion of Canadian households overall that had access to USO-level service, at 85.7%. CRTC, *Communications Monitoring Report 2019*, Chapter 9, "Retail Fixed Internet Sector and Broadband Availability", at <https://crtc.gc.ca/eng/publications/reports/policymonitoring/2019/cmr9.htm#a3.3>

² Telecom Regulatory Policy CRTC 2016-496, *"Modern telecommunications services – The path forward for Canada's digital economy"*, December 21, 2016.

³ Ibid.

- Human safety being jeopardised, as travellers and the police, firefighters, ambulance and other first responders have limited connectivity in emergency situations;⁴
- Travel risks and inconvenience being greatly increased along the hundreds of kilometres of roadways with no telecommunications service; and
- Non-existent coverage along key trap lines and popular hunting and fishing spots adjacent to the road system.

The absence of wireless network coverage threatens the safety and security for the tens of thousands of residents, workers and visitors to the region who travel the roads and the Cree who pursue the traditional harvesting rights and practices in Eeyou Istchee.

A lack of access to mobile wireless broadband service also limits social development and suppresses the potential for economic development in the territory, including in forestry, mining and exploration activity.

Yet the potential for economic development in the region is enormous. Evidence of this is in the recent announcement of « La Grande Alliance », a \$4.7-billion agreement for collaboration and consolidation of socio-economic ties between the Grand Council of the Crees and the Government of Québec to connect, develop and protect the territory.⁵

In sum, non-existent or inadequate mobile wireless coverage in the Eeyou Istchee James Bay region contributes to the challenges faced by residents, business and government:

- Families, students and workers struggle to stay connected;
- Essential institutions such as education, health, justice, environmental monitoring and public security struggle to deliver critical public services;
- Key industries cannot advance at the normal pace of business;
- Human safety and first responders are compromised in case of emergency;
- Travel along Eeyou Istchee James Bay's extensive road network is riskier and less convenient than it would be with coverage; and
- In general, economic and social development is impeded by high cost, capacity shortfalls, and lack of competitive choice.

⁴ This is a very real concern that can have terrible consequences. In late 2019, Mr. George He, a nurse travelling for work to the community of Nemaska, died after he had car troubles and was unable to call for assistance. A lack of cellular coverage was identified as a contributing factor in his death. See: <https://ici.radio-canada.ca/nouvelle/1411104/georges-he-disparu-mort-reseau-cellulaire>

⁵ For further information on La Grande Alliance announced on February 17, 2020, see:

- <https://www.lagrandealliance.quebec/en/>
- <https://ici.radio-canada.ca/espaces-autochtones/1525929/nation-cris-gouvernement-quebec-entente-paix-braves>
- <https://montrealgazette.com/news/local-news/quebec-james-bay-cree-announce-4-7-billion-development-deal>

A Sustainable, Cree-led Solution is Available

Recognizing how essential high quality, high capacity and affordable broadband connectivity – both fixed and mobile – is to people throughout the Eeyou Istchee James Bay region, positive steps are being taken to develop solutions that respond to local needs and resources.

Since 2011, Eeyou Communications Network (ECN) has designed, deployed and operated more than 3,000 km of fibre optic cable in the region, offering broadband connectivity to the health, education, and public security sectors, and fibre-to-the-home service to residents and small businesses. ECN is majority owned by the Cree, and fully owned by the residents of Eeyou Istchee and the James Bay region. It operates on a not-for-profit basis with a strong local presence and an explicit mandate to *“develop and offer advanced telecommunication services to native and non-native residents and communities of the James Bay and northern Quebec region.”*

With respect to mobile services, in 2019, ECN joined with Eeyou Companeé and SSi Micro Ltd., now doing business as SSi Canada (SSi), to create Eeyou Mobility Inc. (EMI) to deploy and deliver mobile wireless broadband services across the Eeyou Istchee James Bay region.

Eeyou Companeé, also known as the James Bay Eeyou Corporation, is EMI’s majority shareholder. Established in 1986 to implement the La Grande (1986) Agreement between the Cree Nation and Hydro-Quebec, and with a head office in Chisasibi, Eeyou Companeé manages funds under various agreements with Hydro-Québec. Inherent in its mandate is the protection and enhancement of the aboriginal and treaty rights of the Cree throughout all aspects of the company’s activities and investments, including EMI, as well as providing training and employment opportunities for the Cree.

ECN and SSi each hold minority positions in EMI, and each is fully committed to making available their existing networks, systems and operating expertise to ensure the success of EMI. ECN fibre transport is being used to deliver backbone connectivity for the EMI network, and EMI is leveraging SSi’s existing, state-of-the-art mobile wireless operations and systems, already proven in the challenging territory of Nunavut. SSi, headquartered in Yellowknife, is a leader in delivering advanced satellite, broadband and mobile solutions to remote and outlying areas.

The EMI project is being delivered in phases:

- The first phase, already underway, is fully funded by EMI’s founding shareholders and will see deployment of the Eeyou Mobility wireless network across all nine Cree communities and five *Jamésien* municipalities in the region;
- Subsequent deployment phases – which will require significant public investment to complete – will see the extension of EMI mobile wireless coverage across highways, access roads and adjacent trap lines and popular hunting and fishing spots in the region.

For the subsequent deployment phases, EMI is seeking and will seek support from public funding programs, such as the Québec Government's « Régions branchées » program, the CRTC Broadband Fund, and the Federal Government's announced Universal Broadband Fund. However, existing and announced programs have their constraints.

The CRTC Fund, for example, is constrained by limited resources (\$750 million over five years for all of Canada). There is no firm indication when the CRTC will make decisions or release funds in response to Applications filed on October 3, 2019 and June 1, 2020. Moreover, the limited resources available and uncertainty of CRTC funding decisions jeopardize necessary third-party agreements and preclude timely construction, especially in regions such as Eeyou Istchee whose northern location already complicates logistics and times during which construction can take place.

Support from other connectivity investment programs, such as those of the Government of Québec can be contingent upon matching funds from the Federal Government or the CRTC Broadband Fund.

In terms of the amount of investment needed to complete the Eeyou Mobility project, due to the highly competitive and commercially sensitive nature of public funding processes, EMI would be pleased to share details of our well-developed business plan with the Standing Committee on Finance *in camera* and at the Committee's convenience, instead of providing these details in a publicly available document.

Benefits of a Sustainable, Cree-Led Solution

As a project designed in close cooperation with the Cree of Eeyou Istchee, EMI will deliver significant benefits for all those living in and visiting the region.

The additional safety and security for travellers on highways and roadways throughout the region is priceless; but it will also contribute significantly to the viability of industry in the region as well as the delivery of data-hungry public services, including remote healthcare and other social services.

Powered by World-leading Clean Energy Solutions

EMI has developed clean and innovative off-grid power solutions to supply the majority of road sites that cannot be connected to Hydro-Quebec's grid. These sites will be powered by a solar array coupled with supercapacitor graphene batteries. If solar power is reduced or unavailable, a backup propane/LNG DC generator will provide any additional power required.

Cree Ownership and Commitment Delivers Local Employment

Cree engagement in EMI through both Eeyou Compañee and ECN ensures that Eeyou Mobility will respect Cree objectives for the use of birthright lands and resources while ensuring that the Cree derive economic, social and cultural benefits from the project.

Cree engagement ensures the development of sustainable employment throughout the region will remain a high priority. Training will lead to skilled, local jobs in logistics, shipping and receiving, tower maintenance and support, satellite systems maintenance and support, installation and technical support for fibre facilities, and field technicians for remote travel.

In this regard, Eeyou Companeé has a mandate to provide training and employment opportunities for the Cree, of benefit to EMI, and the training expertise and staffing practices of ECN and SSi will ensure local personnel are available to EMI and well-qualified to support the network and operations.

Superior Broadband Delivers Future Growth

Cree involvement in EMI will ensure that Eeyou Istchee and *Jamésien* businesses, households and governments have access to affordable, high quality mobile broadband so that those in the region can pursue their social, cultural, and economic objectives unencumbered by poor or no connectivity.

Households will have easier access to educational resources. Cree Nations as well as municipalities and provincial and federal levels of government will be able to improve the efficiency and delivery of a wide range of public programs, from education to health care and access to justice. The priority that EMI attaches to Cree training and job creation in the region will also contribute to the long-term sustainability of the network and services.
