

Iridium® Push-To-Talk Enables Remote Utility Workers to Stay Connected

Partners: Network Innovations, Icom

“Hydro-Québec comes to us when they have a problem and need a solution. We leverage our engineers, our team, and Iridium to provide what they need, and they trust it. It’s a great example of multiple partners coming together to choose the right products and services and fulfill their needs.”

— Wesley Robb, Account Manager,
Network Innovations



200+

PTT devices in use

260+

kilometers of construction

3

year project

AT A GLANCE:



THE CHALLENGE

Companies building utilities infrastructure in remote locations require secure, mobile, and reliable communications for workers and mobile safety personnel, but custom terrestrial networks are costly, prone to weather interference, and can disturb local environments.



THE SOLUTION

Working directly with the customer to test, deploy, and train workers, Iridium service provider Network Innovations and their partner Tel-Loc leveraged existing Iridium Push-To-Talk (PTT) solutions to keep field workers, medical and safety personnel, and operations centers connected throughout the development of a new utility line.



THE IMPACT

Using interoperable Iridium PTT equipment, along with mobile and portable accessories, Hydro-Québec workers could rely on an open line of communication to both command centers and medical trailers, providing efficiency, safety, and security while working in remote, snow-prone areas.

Iridium Product: Iridium Extreme® PTT
Iridium Connected® Product: Icom IC-SAT100
Embedded Iridium Module: Iridium Core 9523
Service Utilized: Iridium® Push-To-Talk



THE CHALLENGE

Large infrastructure projects in remote environments typically require extensive IT and network infrastructure development with communications being the key to project success. Connecting the isolated, off-grid locations where Hydro-Québec's utility line construction took place would traditionally require building custom terrestrial infrastructure solely for communications purposes, a costly and long-term project.

Additionally, workers and dispersed medical providers required clear voice lines, low latency connections, and high audio output, as they needed the ability to respond quickly to requests through an open communication channel. Further, Iridium PTT was uniquely positioned to facilitate group communications for inter-team coordination across construction sites. With up to 15 talkgroups available to the workers at any given time, remote teams could rely on instant connections at the push of a button, rather than individual dialing and one-to-one calls. Meanwhile, the mobile hospitals not only needed to communicate among the groups through PTT, but they also required the ability to make voice calls for longer communications to doctors if the on-site trailer needed assistance.

THE SOLUTION

Deploying a fleet of Iridium Connected® Icom IC-SAT100 devices among remote workers, along with several Iridium Extreme® PTT handsets for medical personnel, Iridium service provider Network Innovations and their partner Tel-Loc helped Hydro-Québec build a communications configuration with the necessary security, mobility, and reliability required across hundreds of kilometers of land alongside the utility line's construction.

Workers were equipped with the IC-SAT100, benefitting from its familiar land-mobile radio (LMR) design and interoperability with other Iridium PTT devices, while all medical trailers and mobile ambulances were equipped with the Iridium Extreme® PTT dual-mode handset and docking stations,

allowing for PTT communications among workers and other medical personnel, as well as satellite voice calling services for situations that required further medical assistance.

The Network Innovations and Tel-Loc teams went into the field with the Hydro-Québec team to provide on-site training. They also worked with Iridium to develop custom training materials including a Canadian-French how-to video, to ensure users felt comfortable operating the new PTT devices.

THE IMPACT

Leveraging Iridium's network, Network Innovations and Tel-Loc were able to develop a solution for Hydro-Québec that increased efficiency, safety, and security for lone workers and medical staff in the field. From daily interactions between on-site workers using Iridium PTT to critical medical calls over the Iridium network, users stayed connected and safe throughout their work.

Network Innovations and Tel-Loc delivered both Iridium and Iridium Connected devices, along with a variety of important accessories to increase the mobility and portability of a critical communications solution for one of Canada's largest public utilities providers. By using Iridium, rather than building a custom land-based network, Hydro-Québec was able to reduce their communications infrastructure costs, begin construction quickly, and minimize local environmental disruption.

THE FUTURE

Seeing the success and benefits of Iridium Connected solutions for their operations, Hydro-Québec is working closely with Network Innovations and Tel-Loc to identify additional ways to leverage the Iridium network such as taking advantage of Iridium Certus® broadband services. Additionally, as Iridium prepares to formally launch its Iridium Certus midband service, Hydro-Québec has helped provide Iridium manufacturing partners with input on their requirements for these new solutions.

