

High-speed internet to bring big change in remote Alaska

December 21 2017, by Rachel D'oro



In this Oct. 31, 2017 photo provided by Arctic Slope Telephone Association Cooperative, crews with the Arctic Slope Telephone Association Cooperative install fiber distribution cable in Utqiagvik, Alaska, for the new high-speed fiber-optic system launching in Alaska's northern region, where several of the telecom company's communities are located. The new link by Anchorage-based wholesaler Quintillion is Alaska's piece of a planned international fiber-optic system that would eventually connect London and Tokyo via the Arctic. (Arctic Slope Telephone Association Cooperative via AP)

Jeff Kowunna used his drone to record this year's celebration of another

successful bowhead whaling harvest for one of the oldest Alaska Native settlements.

The video from the three-day event in remote Point Hope, at the edge of the Arctic Ocean, showed whaling captains sharing the flippers with residents, traditional drumming and dancing, and the ever-popular blanket toss, where villagers use seal skins to heave each other into the air.

But Kowunna's plan to share this unique slice of Inupiat culture online was thwarted by the area's notoriously slow satellite connection.

This month, the 34-year-old whale hunter is ready to try again. His community of 700 and several other isolated Alaska towns are getting a commodity much of the U.S. has long taken for granted: high-speed internet.

"I've been counting the days," Kowunna said of the broadband he hopes will help him connect more immediately with the world with posts from gatherings like the June whaling feast, or Qagruk, while updating folks who have moved away. "I think it's going to be a lot smoother sailing as far as streaming to the web."

The new service is part of a planned international fiber-optic system from Anchorage-based wholesaler Quintillion that eventually will connect London and Tokyo via the Arctic. It's the result of several factors, representative say, including technical advances, private investors willing to bet on the system, and a warming Arctic environment that opened up a limited construction season, allowing crews to bury hundreds of miles of subsea cable off Alaska's upper coast.



In this Nov. 29, 2017 photo, Jens Laipenieks, CEO of Arctic Slope Telephone Association Cooperative, talks in Anchorage, Alaska, about the new high-speed fiber-optic system launching in Alaska's northern region, where several of the telecom company's communities are located. The new link by Anchorage-based wholesaler Quintillion is Alaska's piece of a planned international fiber-optic system that would eventually connect London and Tokyo via the Arctic. (AP Photo/Rachel D'Oro)

"Clearly, 20 years ago, even 10 years ago, the situation with the ice in that part of the world would have made the progress much more difficult to accomplish," Quintillion spokesman Tim Woolston said.

The effect on far-northern Alaska—where many rely on a subsistence lifestyle for food—could be dramatic: No more classroom computers crashing during lessons, software taking an entire day to download, movies buffering for hours, and sophisticated medical equipment sitting

partially unused.

"A project like this is critical," said Mike Romano with NTCA-the Rural Broadband Association, which represents 850 small telecom and [broadband service providers](#) in the U.S. and Canada. Connecting rural communities remains a significant broadband challenge because of the higher cost of delivering service far from metropolitan hubs.

Alaska's 1,400-mile (2,250-kilometer) portion of the international project includes a land trunk line between Fairbanks and the Prudhoe Bay oil fields that went live in the spring. Quintillion has not released plans or a timetable for the larger project and will not say how much has been spent so far in the private venture. New York private equity firm Cooper Investment Partners is anchoring the financing.



In this undated photo provided by Quintillion, a plough is used to lay a subsea cable in the waters off the coast of Alaska. In October, 2017, ship crews finished installing the last Alaska segment of the subsea cable system between Nome and Prudhoe Bay, and the network became available Dec. 1, 2017, to telecom providers. The new, faster link by Anchorage-based wholesaler Quintillion is Alaska's piece of a planned international fiber-optic system that would eventually connect London and Tokyo via the Arctic. (Quintillion via AP)

Ship crews finished installing the last Alaska segment of subsea cable in October, and the network became available to telecom providers Dec. 1.

The improved service won't be cheap, said Jens Laipenieks, CEO of Artic Slope Telephone Association Cooperative, which serves three of the affected communities. Laipenieks expects the cost to drop when the final two phases are built and more wholesale tenants join the system.

Still, commodities always cost more in the Arctic, where a gallon of milk can carry a \$10 price tag because everything has to be flown or shipped up. Fiber-optic is no exception, but the expense has not dampened enthusiasm, according to utility officials.

"That's just the reality of being in an ultra-rural market," Laipenieks said. "But the technology will never be the limiting factor again."



In this undated photo provided by Quintillion, a worker doles out cable from a large spool on a ship as a subsea cable is laid in the waters off the coast off Alaska. In October, 2017, ship crews finished installing the last Alaska segment of the subsea cable system between Nome and Prudhoe Bay, and the network became available Dec. 1, 2017, to telecom providers. The new, faster link by Anchorage-based wholesaler Quintillion is Alaska's piece of a planned international fiber-optic system that would eventually connect London and

Tokyo via the Arctic. (Quintillion via AP)

Not everyone is sold on the new link. In Utqiagvik, America's northernmost town, Inupiat whaling captain Gordon Brower balks at exposing his culture to unnecessary criticism—from anti-whaling activists, for example.

"It's unnecessary because we're only just trying to provide food," Brower said. "We don't have Walmart in the backyard over here."

In Point Hope, Inupiat artist and traditional skin-boat maker Henry Koonook worries people will be more distracted by the online world than they already are. Koonook himself has nothing to do with computers, even to connect with prospective buyers.

"That little box—what they call a laptop and iPhones—is ruining our people," he said. "It's helping them with their education and stuff like that, but they're drifting away from the culture and traditions, and it's going fast."



In this Sept. 23, 2016, crews with the Arctic Slope Telephone Association Cooperative install fiber distribution cable in Wainwright, Alaska, for the new high-speed fiber-optic system launching in Alaska's northern region, where several of the telecom company's communities are located. The new link by Anchorage-based wholesaler Quintillion is Alaska's piece of a planned international fiber-optic system that would eventually connect London and Tokyo via the Arctic. (AP Photo/Rachel D'Oro)

Others have big plans for tapping into the faster and more reliable service.

The Arctic Slope Regional Corp., an Alaska Native corporation and minority investor in the Quintillion project, is developing an online store featuring artwork by its shareholders, a tourism platform for its eight villages and a repository of stories and videos featuring Inupiat elders.

"It's just limitless what we can do now," said Cheryl Stine, its chief administrative officer.



In this undated photo provided by Quintillion, crewmembers work on the deck of a ship laying a subsea cable in the waters off the coast of Alaska. In October, 2017, ship crews finished installing the last Alaska segment of the subsea cable system between Nome and Prudhoe Bay, and the network became available Dec. 1, 2017, to telecom providers. The new, faster link by Anchorage-based wholesaler Quintillion is Alaska's piece of a planned international fiber-optic system that would eventually connect London and Tokyo via the Arctic. (Quintillion via AP)

The North Slope Borough, where Point Hope and Utqiagvik are located, is developing a cultural website through its history, language and culture office. The site will be called Puiguitkaat, Inupiaq for "things that should never be forgotten," according to Kathy Ahgeak, who heads the office.

"We have a wealth of traditional knowledge, ancient knowledge," Ahgeak said. "We want our children to know just how far back our heritage goes."



In this Oct. 31, 2017 photo provided by Arctic Slope Telephone Association Cooperative, a crew member with the Arctic Slope Telephone Association Cooperative install fiber distribution cable in Utqiagvik, Alaska, for the new high-speed fiber-optic system launching in Alaska's northern region, where several of the telecom company's communities are located. The new link by Anchorage-based wholesaler Quintillion is Alaska's piece of a planned international fiber-optic system that would eventually connect London and Tokyo via the Arctic. (Arctic Slope Telephone Association Cooperative via AP)



In this undated photo provided by Quintillion, workers maneuver cable while laying a subsea cable off Oliktok Point near Prudhoe Bay, Alaska. In October, 2017, ship crews finished installing the last Alaska segment of the subsea cable system between Nome and Prudhoe Bay, and the network became available Dec. 1, 2017, to telecom providers. The new, faster link by Anchorage-based wholesaler Quintillion is Alaska's piece of a planned international fiber-optic system that would eventually connect London and Tokyo via the Arctic. (Quintillion via AP)

© 2017 The Associated Press. All rights reserved.

Citation: High-speed internet to bring big change in remote Alaska (2017, December 21)
retrieved 21 June 2024 from <https://phys.org/news/2017-12-high-speed-internet-big-remote-alaska.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.