

DRAFT Plan of Cooperation 2016 Subsea Fiber Optic Cable Installation Bering, Chukchi, and Beaufort Seas, Alaska

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Prepared for

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1. Introduction

Quintillion Subsea Operations, LLC (Quintillion), is proposing to install a subsea fiber optic network along the northern and western coasts of Alaska that will provide connectivity to six rural Alaskan communities by linking them with a terrestrial fiber optic line. This Plan of Cooperation (POC) demonstrates that Quintillion is committed to communicating and cooperating with local communities and co-management organizations to prevent potential conflicts with subsistence hunters during installation of the subsea fiber optic cable. This POC was prepared specifically to address the following requirements:

- 50 CFR § 216.104 (a)(12), which requires a plan of cooperation to be submitted in support of a request for an Incidental Harassment Authorization (IHA) from the National Marine Fisheries Service (NMFS); and
- 50 CFR § 18.114, which requires a record of community consultation to be submitted in support of a request for an IHA from the U.S. Fish & Wildlife Service (USFWS).

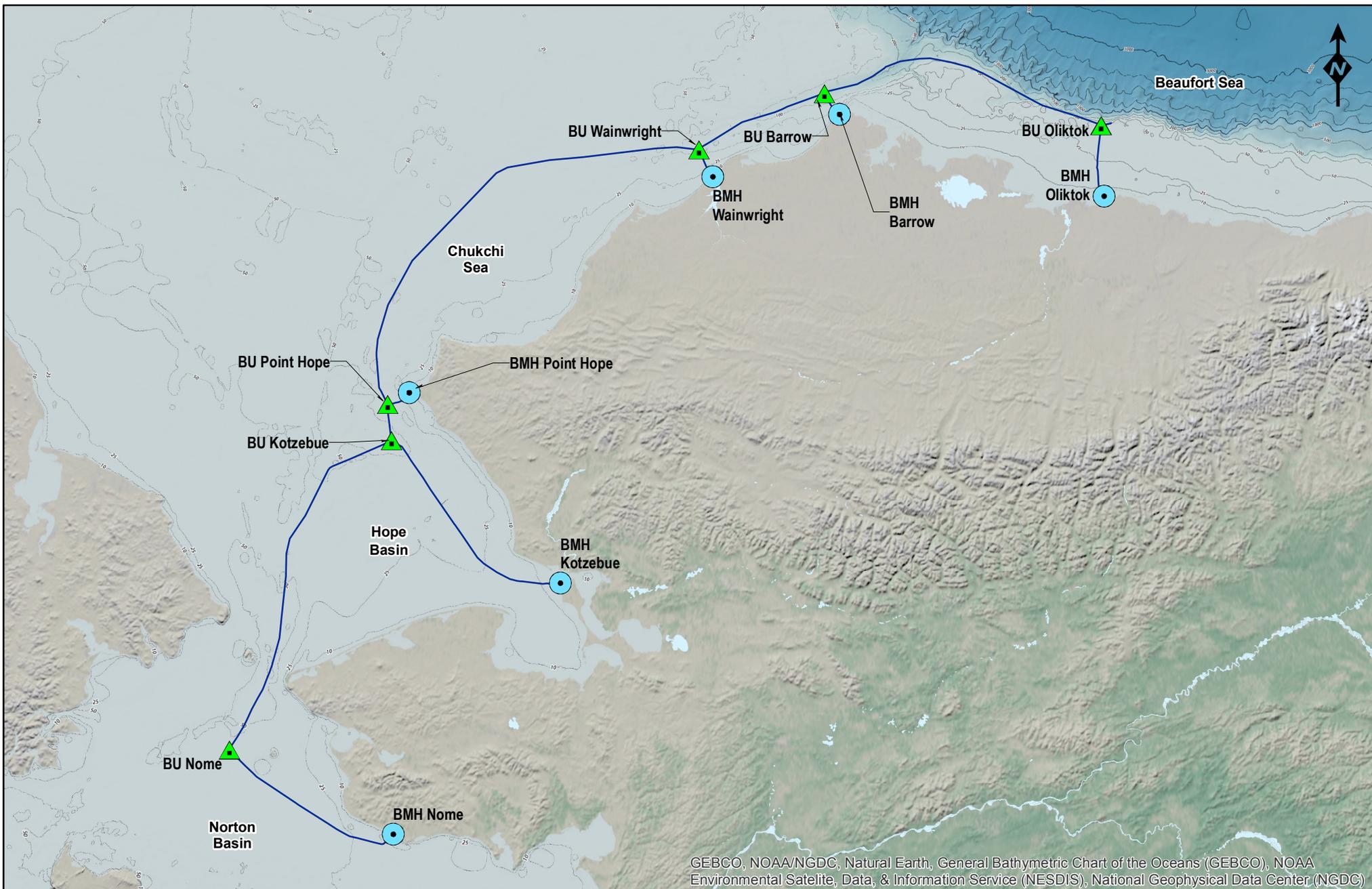
Quintillion's IHA applications describe the monitoring and mitigation procedures that will be implemented during the installation program to prevent conflicts with subsistence activities. This POC sets out procedures for Quintillion and contract staff to work in cooperation with the Chukchi, Bering and Beaufort Sea coastal communities through mutual sharing of information (project schedule, activity location/timing), with the objective of preventing conflicts between the installation program and subsistence hunting.

A record of consultation is required by the USFWS and NMFS before issuance of an IHA to an applicant. Quintillion project staff has conducted several meetings in the coastal communities for their summer 2015 activities and plans to continue this practice for 2016 operations.

2. Project Description

The Quintillion Fiber Optic Project will consist of installing 1,904 km of submerged fiber optic cable that includes a main trunk line laid on the sea floor at a range of approximately 26 to 100 kilometers offshore; and six branching lines to onshore facilities in Nome, Kotzebue, Point Hope, Wainwright, Barrow, and Oliktok Point (Figure 1). The undersea cable installation will begin in 2016 at Nome as soon as sea ice allows safe work conditions in mid-June and will continue until completion of the project in late October or early November 2016.

Laying of the cable offshore is planned to be conducted from the *Ile de Brehat* cable laying ship and nearshore cable laying by shallow draft barge and support spread. Installation of the branching lines, Branching Units (BU), and Beach Manholes (BMH) require onshore equipment and support, which is transported via a 32 ft runabout or a large 85 -125 ft landing craft to established landing sites at the villages. Each section of cable has unique characteristics such as armoring, burial, and anchoring; and it is loaded aboard the installation vessels in the order of installation.



GEBCO, NOAA/NGDC, Natural Earth, General Bathymetric Chart of the Oceans (GEBCO), NOAA Environmental Satellite, Data, & Information Service (NESDIS), National Geophysical Data Center (NGDC)

-  BMH
-  BU
-  Fiber Optic Lines



Projection: Alaska Albers

QUINTILLION SUBSEA LLC
Route Map



FIGURE:
1

3. Statement of Notification

Quintillion will be submitting drafts of this POC to the affected communities of Nome, Kotzebue, Pt. Hope, Wainwright, Barrow, and Nuiqsut, and possibly any other village with subsistence use areas within the cable-laying project area.

4. Preventing Conflicts With Subsistence

Installation of subsea cable is a slow methodical process with very prescriptive procedures that do not allow variation. Preventing conflicts with subsistence activities will rely upon effective communication to local communities regarding vessel(s) location and speed of progress. Communication with local communities is the focus of this plan in order to prevent conflicts with subsistence hunting activities during cable installation.

The cable laying vessel will have on-board Protected Species Observers (PSO) during the operating season. The PSOs will be responsible for monitoring and documenting marine mammals and to communicate with hunters, if necessary.

Quintillion has contracted with Alcatel-Lucent Submarine Networks to furnish and install the cable system. Alcatel-Lucent's vessel, *Ile de Brehat*, participates in the Automatic Identification System (AIS) vessel tracking system allowing the vessel to be tracked and located in real time. The accuracy and real time availability of AIS information via the web for the Bering, Chukchi, and Beaufort Seas will not be fully known until the vessels are in the project area. If access to the information is limited, Quintillion will provide alternate vessel information to the public on a regular basis. Quintillion can aid and support the AIS data with additional information provided to the local search and rescue, or other source nominated during the community outreach program.

Quintillion project vessels will monitor marine VHF Channel 16 at all times. Quintillion will use log books to assist in the standardization of record keeping associated with communications procedures described herein.

4.1 Operating Guidelines to Prevent Interference

The following operating guidelines apply during Quintillion's activities in the Chukchi, Bering and Beaufort Seas, except as otherwise specified, and in all cases is subject to the flexibility needed to address environmental conditions and operational safety. These protective measures are described more fully in Quintillion's separate IHA applications to NMFS and USFWS. Final measures will appear in the IHAs issued by the respective services.

The potential for interaction between cable laying operations and subsistence hunting activities is minimized by the offshore (up to 110 km) location of most of the activity. Quintillion will communicate closely with the communities of Pt. Hope, Pt. Lay, and Wainwright should activities progress far enough north in late June to mid-July when the villages are still engaged with their annual beluga whale hunt.

Quintillion will communicate closely with the communities of Wainwright, Barrow, and Nuiqsut to minimize impacts on the communities' fall bowhead whale subsistence hunts, which typically occur during late September and into October.

With the exception of Wainwright, walrus are not a major resource (compared to other marine mammals) for the villages involved with the cable-laying. However, walrus are important for other villages, such as Diomede. Quintillion will communicate with the Eskimo Walrus Commission (EWC) to ensure the affect of cable laying on the annual walrus hunts will be minimized to the extent possible.

Quintillion's cable laying program will incorporate operational procedures for minimizing potential impacts on marine mammals and on subsistence hunting.

- Vessel speed is slow, less than 1 knot for barge operations, 0.25 knots during plowing operations, and 3-4 knots during surface laying.
- Vessels follow a planned path that has been surveyed and can be provided in advance of activity.

4.2 Monitoring

Quintillion proposes to sponsor marine mammal monitoring during the cable installation in order to implement the proposed mitigation measures and to satisfy the anticipated monitoring and reporting requirements of the USFWS and NMFS IHAs. PSOs will be stationed on the *Ile de Brehat* to collect marine mammal observations throughout the operations.

Prior to mobilization, all PSOs will receive training on operations, monitoring protocols, data recording, and a marine mammal identification. An Observer's Handbook, adapted for the specifics of Quintillion's operation, will be prepared and distributed to all PSOs as preparation for the training and as a reference document in the field. This Observer's Handbook will be available to NMFS/USFWS or other stakeholders. All PSOs will meet the NMFS/USFWS requirements.

4.3 Conflict Resolution and Mitigation

Any disputes arising during or after Quintillion's program will be resolved through direct communication between designated representatives and Quintillion. Proactive mitigation and reactive conflict resolution may involve: consultation and information sharing, village visits and meetings, and operating protocols designed to restrain interference with subsistence activities.

5. Community Meetings

Communication will begin with meetings in the coastal villages and will continue with ship-to-shore communication during operation. Quintillion has previously consulted, and will continue to consult with, the affected communities to keep residents informed about project activities and mitigate potential impacts. Details from consultations conducted as part of this project are included as Exhibit 1 to this POC.

Public meetings will be conducted in the winter of 2016 in the villages of Nome, Kotzebue, Point Hope, Wainwright, Barrow, and Nuiqsut. The meetings will include a presentation of the installation process

and approximate schedule of activity. The presentation to the community will be transparent with all information provided so the villagers understand that the slow, methodical cable-laying process makes it relatively easy to avoid conflict.

Prior to starting offshore activities, Quintillion will consult with Kotzebue, Point Hope, Wainwright, Barrow, and Nuiqsut as well as the North Slope Borough, the Northwest Arctic Borough, and other stakeholders such as the EWC, the Alaska Eskimo Whaling Commission (AEWC), the Alaska Beluga Whale Committee (ABWC), and the Alaska Nanuuq Commission (ANC). Quintillion will also engage in consultations with additional groups on request. The discussions will include: presentation of this POC, project overview, identifying safeguards to prevent conflicts with subsistence hunting, and as necessary, attempt to resolve any identified potential conflicts. The POC will be updated with any changes identified during this process and will be distributed to all affected subsistence communities and NMFS and USFWS as required.

Opportunistic meetings will be conducted when possible during conferences, community meetings, and other course of business gatherings with the potentially affected communities. Other communications that will continue throughout project execution may include: public service announcements on KBRW and KOTZ radio stations; messaging on the Alaska Rural Communications Service television network; and newsletters and 1-800 comment lines.

6. Contact Information

During operations, Quintillion will maintain an onshore presence and the contact information will be provided when available. Quintillion will set up a Toll Free 24-hour contact line to leave messages on issues at any time. Elizabeth Pierce is the Quintillion Alaska Manager and can be contacted at: 800-673-4394 or Elizabeth.pierce@quintillionnetworks.com.

EXHIBIT 1

Village	Date	Organization	Contact
Barrow	April 9, 2014	NSB Acting Mayor	Reed O'Hare
	April 9, 2014	Chief Advisor to the Mayor	John Boyle
	April 9, 2014	Chief of Staff	Kathy Ahgeak
	April 10, 2014	Native Village of Barrow	Thomas Olemaun
	April 10, 2014	Arctic Slope Native Association	Marie Carroll
	April 10, 2014	AEWC	Price Leavitt
	April 10, 2014	UIC	Anthony Edwardsen
	July 23, 2015	NSB Planning Dept.	Gordon Brower
	July 23, 2015	Native Village of Barrow	Thomas Olemaun
	July 23, 2015	UIC	Anthony Edwardsen
	July 23, 2015	Community Open House	
	July 23, 2015	UIC	
	July 23, 2015	NSB Mayor Brower and Staff	
	July 23, 2015	Native Village of Barrow	
	July 23, 2015	Community Open House	
	July 23, 2015	Whaling Captain's Assoc.	Eugene Brower
	July 23, 2015	City of Barrow Mayor	Robert (Bob) Harcharek
	Kotzebue	May 28, 2014	City of Kotzebue
May 28, 2014		Kikiktagruk Inupiat Corporation	Harold Lambert
May 29, 2014		Ice Seal Committee	John Goodwin, Sr.
May 29, 2014		Alaska Beluga Whale Committee	Willie Goodwin
May 29, 2014		Northwest Arctic Borough Mayor and Directors	Mayor's Office
May 29, 2014		Native Village of Kotzebue IRA: Ukallaysaaq	Alex Whiting
July 20, 2014		City of Kotzebue	
July 20, 2014		Northwest Arctic Borough Mayor	Mayor Joule
July 20, 2014		OTZ Telephone Co-op. Inc.	Don Smith
July 20, 2014		Kikiktagruk Inupiat Corporation	William Anderson
July 20, 2014		Ice Seal Committee	John Goodwin, Sr.
July 20, 2014		Alaska Beluga Whale Committee	Willie Goodwin
July 20, 2014		Native Village of Kotzebue: Ukallaysaaq	Alex Whiting
July 20, 2014		NANA Regional Corporation	Wayne Westlake
July 20, 2014		Maniilaq Association	Tim Schuerch/ Paula Octuk
July 20, 2014		Community Open House	
July 20, 2015		NW Arctic Borough	
July 20, 2015		Kikiktagruk Inupiat Corporation	
July 20, 2015		City of Kotzebue	
July 20, 2015		Community Open House	
Nome	May 27, 2014	Nome Eskimo Community	Denise Barengo, Mike Sloan
	May 27, 2014	Kawerak, Inc.	Melanie Bahnke
	May 27, 2014	Sitnasuak Native Corporation	Chuck Fagerstrom
	May 27, 2014	Bering Straits Native Corporation	Jerald Brown
	May 27, 2014	Eskimo Walrus Commission	Vera Metcalf
	May 27, 2014	Norton Sound Health Corporation	Angie Gorn
Point Hope	April 7, 2014	Native Village of Point Hope	Peggy Frankson / Christina Tippin
	April 8, 2014	Tikigaq Corporation / Point Hope Whaling	Popsy Kinneeveauk/Clark Lane, Jr.
	April 9, 2014	City of Point Hope	Jack Schaefer
	July 21, 2014	City of Point Hope	Jack Schaefer

Village	Date	Organization	Contact
Wainwright	April 8, 2014	Whaling Captain's Assoc.	Oliver Peetook
	July 22, 2014	City of Wainwright	John Hopson, Jr.
	July 22, 2014	Community Open House	
	July 22, 2015	Community Open House	