

Demande de la CNER faisant l'objet d'un examen préalable #125720
Far North Fiber Marine Route Survey

DÉTAILS

Description non technique de la proposition de projet

Anglais:

Far North Digital LLC is developing the Far North Fiber cable project. It is the first submarine fiber optic cable to be laid through the Arctic Ocean and the Northwest Passage connecting Asia and Northern Europe. The 14,000km route extends through Canadian waters entering the Queen Elizabeth Islands from the west through McClure Strait, proceeding through Viscount Melville Sound, Barrow Strait and Lancaster Sound, then exiting into Baffin Bay and south through Davis Strait into the North Atlantic Ocean. The cable will incorporate a number of branching units which will provide for future branches to strategic landing sites in Canada's Arctic Archipelago. This application is made for, and limited to, activities involved in the marine route survey for the future communications corridor. The application covers shipboard marine survey activities that will determine a suitable route for the future installation of the Far North Fiber cable. The work associated with installation of the cable will be the subject of a future, separate permit application. The approximate route length of the cable through Canada's territorial seas is 1,360 kilometers. Of that, roughly 900 km traverses Nunavut waters. The survey corridor will be 500 meters wide along the length of the route. The Marine Survey will be performed along the cable route to ensure that the cable system is installed on the most benign seabed, avoiding any adverse impacts on sensitive living marine resources and clear of any features which could pose a threat to the design life of the cable system. The geophysical and geotechnical investigation of the route establishes a detailed profile of the seabed corridor where the cable is to be laid. The survey will include a Burial Assessment Survey (BAS) which consists of Cone Penetrometer Testing (CPT) and measurements to predict the soil type, its relative density and shear strength. The output of this activity enables production of a unique cable profile which is specifically adapted to the nature of the seabed to ensure long-term durability of the cable. Project timeline makes conservative allowance for survey activities over the entire cable route from Japan to Europe for up to two and a half years, affording opportunity for weather and ice dependent effort in the Arctic for up to three summer seasons, 2022-2024. Survey operations will be conducted on a 24-hour basis, weather and sea conditions permitting, and the survey vessel will display the shapes and lights prescribed in the International Rules for the Prevention of Collisions at Sea (COLREGS) Rule 27, to indicate that the survey vessel is restricted in its ability to maneuver. A listening watch will be maintained at all times on VHF Channel 16, and the vessel will actively transmit an AIS signal. Coordinates of the survey area will be broadcast at regular intervals on Channel 16 and appropriate working channels as prescribed Notices to Mariners.

Français: tbd

[illegible]

Inuinnaqtun: Far North Digital LLC pivalliaqitut Ungahiktumi Tununnganaq Ivalutut ittut alrujaq havaaq. Hivulliqpaanguuvluni tarjurm iluaniittut umiaqtut qiparikitut ivalutut ittut alrujaq innanganiaqhimaquq uvani Ukiuqtaqtuq Tarjunga unalu Tununngani Uataanit Ikaaruhik katilviuquq Asia unalu Tununnganaq Europemi. Una 14,000 kilamiitastigut ungahingnia uvuuna Kanatamiunut imat itiliqtaa hamna Queen Elizabeth Qikiqtangit uvanngat uataanit uvuuna McClure Ikaangit, Ikaa, pilihaaquhuni uvuuna Viscount Melville Kangiqhua, Barrow Ikaa unlu Lancaster Kangiqhua, ikaaquhuni iluanut Qikiqtaaluk unalu hivuraanit uvuuna Davis Strait iluanut Tununnganaq Atlantic Tarjua. Una alrujaq ilaginiaqtangit amihuujut qupikhimajangit ilagijaujut tunijakhaat hivunikhangit qupikhimajut parnaijijakhaat minnahuaangat najugaanut iluani Kanatam Ukiuqtaqtuq Qikiqtaalinnuit. Una tukhiutijangit hanajauhimajut haffumani, unalu iniqhimaittut, hulidjuhiit ilagijaujut imarmiutaujut iningit nalunaijijut hivunikhangit tuhagakhaujut tulagvik. Una tukhiutijangit pulahimajangit umiaqtuqtunut agjaqtut imarmiuttat nalunaijainigut hulijakhangit ihumaliuqtakhaat ajurnaattumik apqutikhangit hivunikhanut iliuraimajangit haffumani Ungahiktumi Tununnganaq Ivalutut ittut alrujaq. Una havaaq ilagijaujut iliurainirnut haffumani alrujaq ihumaginiaqtangit hivunikhangit, ahikkut laisiata ilanganit tukhiutijakhaat. Takiniqhaujungaquhijuuq haffumani alrujaq uvuuna Kanatam nunallaangit tarjuat hamnauvlutik 1,360 kilamiitastigut ungahingnia. Haffumani, 900 kilamiitastigut ungahingniqarungaquhijuuq ikaqtut Nunavut imainnit. Una nalunaijijut tulagvik takiniqhaa 500 miitas hilingnia haniraanit takiniqhaa ikaarninga. Una Imarmiuttaq Nalunaijainigut iniqhimajakhaat hinaanit alrujangit ikaarninga pidjarikhigiami alrujaqarvik iliuraqhimaquq aqittumi tarjum natia, pittailivlugit pijumanngittangit ihuuluutauhimajut qajangnaqtumik inuuhimajut imarmiuttat avataita tutqirnaqtumik hup ilitquhianit ajuqhautihimalaaqtangit hivuranarningat tiliugarnit inuuhianit haffumani alrujaqarvik. Una nunaliqiningit unalu nuna qaujiharningit qimilruqtaat haffumani inikhangit aulapkaihimajut tukiliuqhimaquq haffumani tarjuq tukung natia tulagvinga hamna alrujaq nalahimajuuq. Una nalunaijainigut ilagilaqtangit lluvirvingat Ihivriurningit Nalunaijainiq (BAS) ilagijaat Takkaq Imarmi Uuktuutigijangit Ihivriurjut (CPT) unalu uuktuutigijangit kangiqhiinnaqtangit marlunga tukiliutaa, ilagijangillu hitingnia hakugingningalu. Una aulavikhaq haffumani hulidjuhiit ikajuutigijangit aulavikhaq haffumani arlingnaqtumik alrujaq illitturninga taimaa ihuaqhinnaqtuq ilitquhianit haffumani tarjum natia aturaaqtakhaanit hakugiangnia haffumani alrujaq. Havaaq ikaarningit pitquhirijaat atuinnaqhugit nalunaijainigut hulidjuhiit tamainnut alrujaq ikaarningat uvanngat Japan uvunga Europe naahimalugu marluk avvautingillu ukiungat, atulaaqtangit hailijakhangit hila hikungalu qanurinningit akhuuqtangit Ukiuqtaqtuq naahimalugu pingahut aujaq hilaqtutitigut, 2022-2024. Nalunaijainiq aulattittijut aulapkilaqtut uvani 24 nit ikaarnigut kigligutaanit, hila tarjungillu qanurilinganingit pivluni, unalu nalunaijijuuq umiaq takukhauhunnguquq iliktirutaanit qullingillu uqaqhimaquq uvani Hilarjuatigut Maliktangit haffumani Ahijuqtailinahuarniq Tarjumi (COLREGS) Maliktangit 27, naunaiqhiilugillu nalunaijainiq umiaq iniqpiaqhimaquq pilaaqhutik hanaqigiami. Naalakhimajut tautukhutik munarijauluni qautamaat uvani VHF Qunniarnaqtuq 16, unalu umiaq turaaqhimaainnarniaqtangit hamna AIS naunaitkut. Aulapkaqhutik haffumani nalunaijainigut iningit qunniattaqtakhaat akunnganit uvani Qunniarnaqtuq 16 mi nalaumajumik havangnaqtut qunniarnaqtut tukiliuqhimaquq Nalunaitkut uvunga Imarmiutaujut.

Personnel on site: 50

Days on site: 28

Total Person days: 1400

Operations Phase: from 2022-07-16 to 2024-10-15

Operations Phase: from 2022-07-16 to 2024-10-15

Post-Closure Phase: from to

Activités

Emplacement	Type d'activité	Statut des terres	Historique du site	Site à valeur archéologique ou paléontologique	Proximité des collectivités les plus proches et de toute zone protégée
waters of Northwest Passage	Marine Based Activities	Marine	Marine waters comprising part of Northern Canada's Northwest Passage between Beaufort Sea and Baffin Bay.	Traditional subsistence hunting and fishing waters of Canada Indigenous Peoples. Human occupation and use of the Tallurutiup Imanga region can be traced back to the Dorset (500 BC–1500 AD) and Thule (about 1000 AD until approximately 1500 AD) cultures that preceded the Inuit who live in the area today.	Cable route passes through portion of Tallurutiup Imanga National Marine Conservation Area.

Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Information is not available			

Autorisations

Indiquez les zones dans lesquelles le projet est situé:

Transboundary
Kitikmeot
North Baffin

Autorisations

Organisme de régulation	Description des autorisations	État actuel	Date de l'émission/de la demande	Date d'échéance
Transports Canada	Authorizing foreign ship or non-duty paid ship to conduct commercial activity in Canadian waters, including cable-laying operations	Not Yet Applied		
Pêches et Océans Canada	Project components below the high water level	Not Yet Applied		
Environment and Climate Change Canada	Project components in Migratory Bird Sanctuaries	Not Yet Applied		
Gouvernement du Nunavut, ministère de l'Environnement	Project components on land or water that infringes on the habitat of Arctic species	Not Yet Applied		
Parcs Canada	Project components on land in an NMCA	Not Yet Applied		

Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Water		

Project accomodation types

Autre,

Utilisation de matériel

Équipement à utiliser (y compris les perceuses, les pompes, les aéronefs, les véhicules, etc.)

Type d'équipement	Quantité	Taille – Dimensions	Utilisation proposée
marine survey vessel	1	approx. 75m	geophysical and geotechnical cable route survey

Décrivez l'utilisation du carburant et des marchandises dangereuses

Décrivez l'utilisation de carburant :	Type de carburant	Nombre de conteneurs	Capacité du conteneur	Quantité totale	Unités	Utilisation proposée
Diesel	fuel	6	60	360	Cubic Meters	vessel main engine propulsion, shipboard generators

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
0		

Déchets

Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Marine Based Activities	Eaux grises	5650 litres/day	Survey vessel voluntary compliance with standards of IMO MARPOL Annex IV as with blackwater.	n/a
Marine Based Activities	Déchets non combustibles	unknown	Vessel must comply with IMO Polar Code which prohibits the discharge of garbage in Arctic waters unless food waste is ground or comminuted and the ship is not less than 12 NM from nearest land, nearest ice-shelf, or nearest fast ice, and is as far as practicable from ice concentration greater than 10%. Cargo residues may be discharged only under specifically listed conditions including: <ul style="list-style-type: none"> •cargo residues, cleaning agents or additives contained in hold wash water must not contain substances classified by IMO as harmful to the environment; •the port of departure and next port of destination are within Arctic waters and the vessel will not transit outside Arctic waters; •no adequate reception facility exists at those ports; and, if those conditions are met; •the discharge must be made as far as practicable from areas of ice concentration exceeding 1/10 and not less than 12 NM from land, nearest ice shelf, or nearest fast ice. 	Vessel required to hold oily waste and garbage (aside from ground food) in Polar Code waters until the vessel can safely offload the waste at a port reception facility or treat it to an acceptable standard.
Marine Based Activities	Eaux usées (matières de vidange)	1700 l/day	Survey vessel must comply with the IMO's MARPOL Annex IV which prohibits discharge,	n/a

			except when treated by an STP and discharged no less than 4nm from land or if untreated and discharged at > 12nm from the nearest land.	
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Répercussions environnementales :

Survey vessel main engine and generator exhaust stack emissions to atmosphere. All engines to be maintained in good working order.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

Description de l'environnement existant : Environnement physique

Canadian waters entering the Queen Elizabeth Islands from the west through McClure Strait, through Viscount Melville Sound, Barrow Strait and Lancaster Sound, then exiting into Baffin Bay

Description de l'environnement existant : Environnement biologique

The Tallurutiup Imanga region is a major east-west migratory corridor leading from Baffin Bay into the Arctic Archipelago and linking wintering and summering areas. Most species present are migratory and they all depend on this region as they move from one essential habitat to another. The area provides essential habitat for narwhal (up to 75% of the global population); beluga (20% of the Canadian population); polar bears (largest subpopulation in Canada); and several seabird species (some of the largest colonies in the Canadian Arctic).

Description de l'environnement existant : Environnement socio-économique

Miscellaneous Project Information

Identification des répercussions et mesures d'atténuation proposées

Répercussions cumulatives

Impacts

Identification des répercussions environnementales

		PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
Construction																										
Marine Based Activities		M	-	-	-	M	-	-	-	-	-	-	-	M		-	-	M	M	M		-	P	-	-	-
Exploitation																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Désaffectation																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

Site du projet



Liste des géométries de projet

1	polyline	waters of Northwest Passage
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