



1. Project Overview

1.1. Introduction and Project Location

Dynamic Ocean Consulting Ltd (Dynamic Ocean) has been retained by the Government of Nunavut – Community & Government Services (GN-CGS) as the regulatory specialist to support the permitting for the Kivalliq-Baffin Connector (KBC) Fibre Optic Cable Project (the KBC Project). The KBC Project is approximately 1,050 km in length and has four landings as below (depicted in Figure 1-1):

- Three landings on Baffin Island’s southern coast (Iqaluit, Kimmirut, Kinngait | Qikiqtani Region).
- One Landing on Southampton Island (Salliq [Coral Harbour] | Kivalliq Region).

The KBC Project will connect to a Branching Unit (BU) in Nunavik waters, northwest of Salluit (Nunavik), which was completed as a component of Phase 2 of the Kativik Regional Government (KRG) Eastern Arctic Underwater Fibre Optic Network (EAUFON) Project.

Prior to finalization of the detailed design phase of the Project, a marine survey (the KBC Marine Survey) along the marine fibre cable route will need to be completed (described in Section 3).

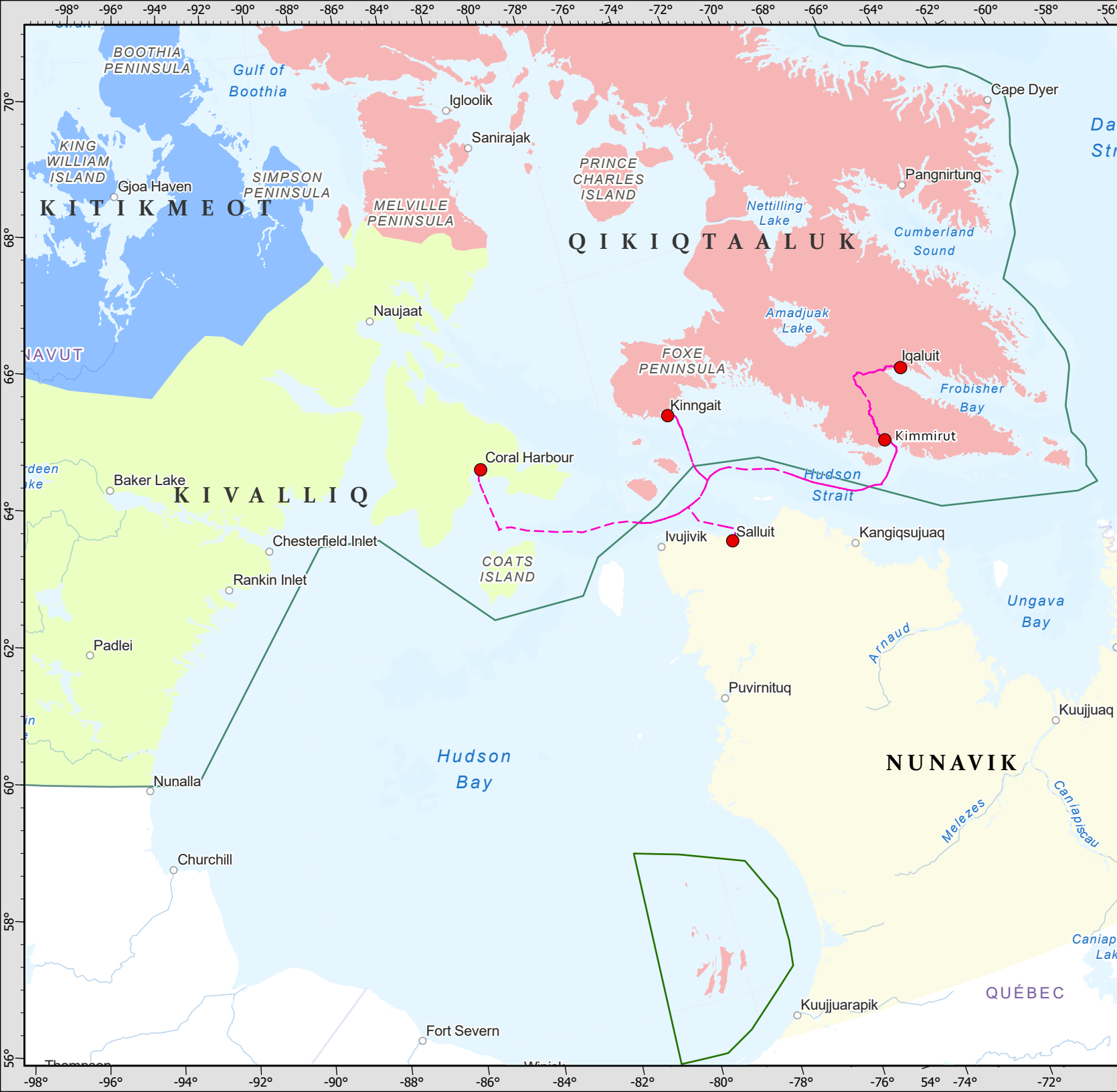
Where the KBC Marine Survey will occur in the waters of the Nunavut Settlement Area (NSA) and the Nunavik Marine Region (NMR), approvals as summarized in Table 6-2 will be required from the following Institutions of Public Government (IPGs) and Authorities Having Jurisdiction (AHJ) (collectively referred to as AHJ for the intention of this document).

1.2. Letter Intention

This is the KBC Marine Survey application letter to support the acquisition of a Conformity Determination from the NPC, and to determine whether it complies with all terms and conditions of any applicable land use plans.

1.3. Project Name

Kivalliq-Baffin Connector Marine Survey.



● Landings

— Route

Nunavut Regional Boundaries

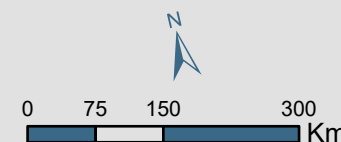
■ Kitikmeot

■ Kivalliq

■ Qikiqtaaluk

— Nunavut Settlement Area

■ Nunavik



Spatial Reference
GCS: GCS WGS 1984
Datum: WGS 1984
Projection: Mercator Auxiliary Sphere
Map Units: Meter
Drawn: C. Knight

FIGURE 1-1

GN Fiber Optic Project & Nunavut
Settlement Area Boundaries



2. Proponent and Representative Details

Contact information for the proponent and representative are provided in Table 2-1.

Table 2-1: Proponent and Contact Information

Information Request	Details
Applicant: Government of Nunavut	
Applicant's Name	Theo Potgieter Manager Facility Planning, Capital Projects
Address	PO Box 1000 Station 620 Community and Government Services Iqaluit, Nunavut X0A 0H0
Telephone / Fax	1-867-975-5432
Email	TPotgieter@GOV.NU.CA
Applicant Representative: Dynamic Ocean Consulting Ltd.	
Name	Victoria Burdett-Coutts, MSc RPBio Senior Marine Scientist and Regulatory Professional
Address	2901 Murray Street Port Moody, British Columbia V3H 1X3
Telephone / Fax	1-778-839-2372
Email	Victoria@dynamicocean.ca



3. Project Description

3.1. Scope

The KBC Marine Survey will be composed of the following activities:

- Swath bathymetry (MBES).
- Side Scan Sonar (SSS).
- Sub-bottom profiler (SBP).
- Magnetometer to locate Salluit branching unit (BU) (potential).
- Sediment sampler (vibrecore, grab sampler) approximately every 5 km up to a water depth of 25 m Chart Datum (CD).

3.2. Survey Corridor

The KBC Marine Survey will encompass the full extent of the marine cable route with up to a 500 m survey corridor (250 m on either side of the cable).

3.3. Marine Survey Intention

The intention of the KBC Marine Survey is to assess seabed conditions to support the detailed design phase of the KBC Project.

3.4. Schedule

The KBC Marine Survey will be undertaken in open-water seasons of 2025 or 2026 and will conclude within 35 to 45 days.

3.5. Personnel

The crew size will be a contractor led decision; however, it is expected to be approximately 15 people. The primary Point of Contact (PoC) will be Victoria Burdett-Coutts (see contact details in Table 2-1).



4. Consultation

Earlier versions of the KBC Project have been discussed with the hamlets and Hunters and Trappers Organizations (HTOs) of Kinngait, Kimmirut, Kinngait and Salliq (Coral Harbour). Letters of support are provided in Appendix A from the following:

- Iqaluit
 - Iristel and Ice Wireless.
- Kimmirut
 - Kimmirut Hamlet.
- Kinngait
 - Kinngait Hamlet.
- Nunavut Tunngavik Incorporated (NTI).
- KRG.

5. Project Map

See Figure 1-1.



6. Land Use and Licensing

6.1. Land Use

The Land Use summary for the KBC Marine Survey is provided in Table 6-1.

Table 6-1: Land Use Summary for the KBC Marine Survey

Region	Category	Description
Nunavut (NSA)	Administrative Boundary	Qikiqtaaluk and Kivalliq Region
	Planning Region	North Baffin
	Land Use	Field activities most closely categorized as scientific research
	Land Ownership	Crown
Nunavik (NMR)	Nunavik Marine Region – Makivvik Corporation	

6.2. Approvals

Approvals expected to be required for the KBC Marine Survey are summarized in Table 6-2.

Table 6-2: Approvals Required for the KBC Marine Survey

Region	Authority Having Jurisdiction	Approval Type	Permit Status	Permit Number
Nunavut	Nunavut Planning Commission	Conformity Determination	Submitted	Not available at time of letter
	Nunavut Impact Review Board	Screening Decision Report (SDR)	Pending submission	N/A
	Nunavut Research Institute	Research License	Pending submission	N/A
Nunavik	Nunavik Marine Regional Planning Commission	Conformity Determination	Submitted	N/A
	Nunavik Marine Regional Impact Review Board	SDR	Pending submission	N/A



Region	Authority Having Jurisdiction	Approval Type	Permit Status	Permit Number
	Makivvik Corporation	Entry and Land Access Approval	Pending conformation for requirement	N/A

7. Material Use & Waste Management

7.1. Equipment

Equipment expected to be required for the KBC Marine Survey is summarized in Table 7-1. Exact specifications of equipment will be a contractor led decision, but the types of equipment used is not expected to change potential environmental effects outlined in Section 8.

Table 7-1: Equipment Requirements for the KBC Marine Survey

Equipment Used	Quantity	Size & Dimensions	Proposed Use
MBES	1	1 m x 50 cm	Bathymetry with an approximately 500 m wide survey corridor.
SSS	1	2 m x 50 cm	Seabed type / conditions with an approximately 500 m wide survey corridor.
SBP	1	1 m x 1 m	Ground conditions below seabed with an approximately 500 m wide survey corridor.
Magnetometer	1	2 m x 50 cm	Identification of the Salluit BU.
Sediment sampler (ponar and or vibecore)	2	3 m x 50 cm	Collection of sediment samples approximately every 5 km for depths up to 25 m CD on the approach to each landing (not required to Salluit (Nunavik).

7.2. Fuel Use

Fuel consumption requirements for the KBC Marine Survey are unknown as it will be a contractor led decision, which will be based on the duration of their field program and the fuel capacity of the survey vessel. The vessel used for the KBC Marine Survey is likely to be diesel and will have appropriately safe and secured fuel storage tanks, which will be equipped with vents, overflow protection and shut-off valves for safety.

7.3. Water Consumption

Water consumption requirements for the KBC Marine Survey are expected to be up to 125 litres/day, but final requirements will be confirmed by the contractor. It is likely that the contractor will have the ability to utilize a reverse osmosis desalination system to produce freshwater, as storage of freshwater may not be logistically achievable. If yes, the contractor will be required to confirm that the water intakes for withdrawal of water from the marine environment will be of an appropriate mesh size to not



impinge fish on the screen, while being in compliance with Fisheries and Oceans Canada (DFO) Standards and Codes of Practice (SCOPs) for end-of-pipe fish screens (DFO, 2019b).

7.4. Hazardous Materials

Hazardous materials that may be required for the KBC Marine Survey are not known at this time, as it will be a contractor led decision. However, any hazardous materials required will be appropriately stored on the survey vessel. Storage and handling procedures designed to prevent harm to personnel and the environment from hazardous materials will be as per the appropriate Safety Data Sheets (SDS). SDS will be kept on site.

7.5. Waste

Waste types expected to be required for the KBC Marine Survey are not known at this time, as it will be a contractor led decision. All waste during the KBC Marine Survey will be appropriately stored on the survey vessel and disposed of at an appropriate facility either in Nunavut or Southern Canada. The contractor will be required to maintain a waste manifest to document appropriate storage. There will be no waste disposed at sea.



8. Environmental Management

Negative effects to the environment are not expected to result from the KBC Marine Survey. Mitigation measures, as described in Table 8-1, will be followed to provide effective environmental management in compliance with the legislation of pertinent AHJs and Best Management Practices (BMPs).

Table 8-1: KBC Marine Survey Environmental Effects and Mitigation

Environmental Effect	Mitigation
Disturbance to marine mammals & Fish	• A Marine Mammal Observer (MMO) will be present during the KBC Marine Survey to monitor for the presence of marine mammals. • A 1,000 m Exclusion Zone (EZ) will be monitored during survey activities as described in Section 3.1. Marine mammal behaviours will be observed and if any animals display disturbance behaviours, the marine survey will be stopped until the marine mammal has left the EZ. • Marine mammal observations will be documented and maintained on a data sheet that can be shared with AHJs, if required. • Minimum approach distances and best practices, as outlined in the Marine Mammal Regulations (MMR), must be adhered to, and protected areas, as outlined within the most recent Notice to Mariners published by the Canadian Coast Guard (CCG) at the time of construction, will be followed. • Should water withdrawal be required from the ocean, water intake will be in compliance with DFO-Fish and Fish Habitat Protection Program (FFHPP) SCOPs for end-of-pipe fish protection screens (DFO, 2024b). • If species at risk are reported or observed, the MMO will record, document, and monitor their presence (including time, date, location, activity, and proximity to survey vessel), determine potential impacts to species at risk, and any modification to activities that may be required to protect species at risk.
Temporary sediment suspension	• The footprint of the sediment samples is not expected to be impactful to the seabed, and turbidity is not expected to result in exceedances of the federal Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines (WQG) (CCME, 1999)
Accidental spill	• The contractor will have a Spill Response Plan (CSRP) in place.



Environmental Effect	Mitigation
	• All spills will be reported in accordance with the <i>Spill Contingency Planning and Reporting Regulations</i> by calling the 24-hour Spill Report Line at 867-920-8130. • Vessel fuel storage will be accompanied with spill prevention, containment, and clean-up materials that are suitable for the volume of fuels carried.

Appendix A: Letters of Support



Iristel and Ice Wireless



[Delivered by email]

Jean-François Dumoulin
675 Cochrane Drive, East Tower, 6th Floor
Markham, ON
514-800-1577
regulatory@iristel.com

3 May 2023

Mehdi Tahuri
Project Director, GN Fiber Commercialization
Government of Nunavut
Information Management / Information Technology
Community and Government Services
P.O. Box 1000 STN 660
Iqaluit, Nunavut X0A 0H0
MTAHURI@GOV.NU.CA

Dear Mr. Tahuri,

Re: The GN Phase 3 Fibre Project [Kivalliq – Baffin Connector Fibre Project]

I have received your letter dated 2 May 2023 regarding the consultation for your project to install fibre optic cable infrastructure for telecommunications in Iqaluit, Kimmirut, Kinngait, and Coral Harbour.

Iristel and its affiliate Ice Wireless strongly support this project.

Ice Wireless is a mobile wireless service provider in Iqaluit. Ice Wireless was the first service provider to offer data services over mobile wireless technology in Iqaluit through our 3G/HSPA system. Ice Wireless now offers services over 4G/LTE to residents and businesses in Iqaluit. Our number one obstacle to providing faster, more affordable, and more reliable mobile wireless services in Iqaluit is the lack of affordable high-capacity transport networks linking Iqaluit to the rest of the world. Iristel and Ice Wireless have acquired 600 MHz and 3500MHz spectrum in Nunavut for the express purpose of upgrading our mobile wireless services to 5G technology. However, unless affordable, high-capacity network transport becomes available, there is little point in investing in 5G technology for Iqaluit as the current GEO and LEO satellite-based transport networks will not support 5G speeds.

We strongly advocate for public ownership of the transport network infrastructure and recommend that the Government of Nunavut adopt a commercial model like the Government of Northwest Territories' model for the Mackenzie Valley Fibre Link. Using this model, Ice Wireless is able to acquire abundant network transport capacity in Inuvik, NT and Norman Wells, NT at approximately one twentieth of the cost of Northwestel's regulated rate for Wholesale Connect. A similar arrangement in Iqaluit and other Nunavut communities would ensure that non-incumbent service providers like Ice Wireless can continue to provide

healthy competition for mobile wireless services, and open new markets in Nunavut, which will stimulate innovation and discipline pricing to the benefit of the consumers and business that we serve.

I hope that the CRTC will move ahead with funding for your fibre optic transport project and that construction will begin as soon as possible.

Sincerely,

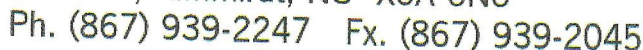
A handwritten signature in blue ink that reads 'JF Dumoulin'.

Jean-François Dumoulin
VP, Regulatory and Government Affairs

cc: IMIT@GOV.NU.CA

Hamlet of Kimmirut





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Hamlet of Kinngait





Municipality of Kinngait

P.O. BOX 30; KINNGAIT, NUNAVUT; X0A 0C0

TELEPHONE: (867) 897-8943

FAX: (867) 897-8030

May 5, 2023

Via email: MTAHURI@gov.nu.ca, IMIT@gov.nu.ca

Dean Wells, CIO
Government of Nunavut
Community and Governance Services, IM/IT
P.O.Box 1000 STN 660
Iqaluit, Nunavut
X0A 0H0

Re: Letter of Support for The Government of Nunavut Application to the CRTC Broadband Fund, 3rd Call

Dear Mr. Wells,

I was pleased to learn about the Government of Nunavut's plans for the GN Phase 3 Terrestrial/Subsea Fibre (Kivalliq-Baffin Connector) project.

My community has been underserved with respect to high-speed, reliable, and affordable telecommunication services, for as long as I remember. As I understand a resilient fiber optic network access will be the major step forward toward removing the gap in availability of digital services between our territory and the rest of Canada.

This project has the potential to create the infrastructure allowing further cultural, educational, and business relationship between the residents of my community and the rest of the world.

Therefore, I fully support your application to the CRTC Broadband fund for funding of the GN Phase 3 Terrestrial/Subsea fibre (Kivalliq-Baffin connector), intended to bring affordable high-speed broadband services to Kinngait and three other Nunavut communities.

Regards

A handwritten signature in blue ink, appearing to read "Jimmy Manning".

Jimmy Manning
Mayor of the Hamlet of Kinngait

Nunavut Tunngavik Incorporated



Bouchard, Jean-Francois

Subject: FW: Support for Broadband

From: James T. Arreak <JTArreak@tunngavik.com>

Sent: May 25, 2018 11:12 AM

To: Kimball, Lori <Lori.Kimball@GOV.NU.CA>

Cc: Hannah Uniuqsaraq <HUniuqsaraq@tunngavik.com>; Taqialuk Peter <TPeter@tunngavik.com>

Subject: Support for Broadband

Hi Lori,

As you are aware, NTI is very interested in the development of broadband in the Territory and the significant benefits it can offer Nunavummiut. Please accept this e-mail as confirmation of NTI's support for the negotiated contracts for both Northwestel (satellite) and the Undersea Fibre Optic Network Design.

We appreciate the fact that you have been engaging with NTI, the Nunavut Economic Forum, and Nunasi as you work towards advancing broadband for the Territory, and look forward to continued collaboration.

NTI supports the GN's effort to undertake the first phase of the marine survey this summer and to utilize opportunities to proceed with direct contract negotiations with the successful proponent of the tender to be issued by the Kativik Regional Government. NTI supports the Government of Nunavut's request to exercise sec. 3.1 of the Nunavummi Nangminiaqtunik Ikajuuti (NNI Policy) where it states .."Cabinet may, where warranted by the public interest, depart from the provisions of the NNI Policy in exceptional circumstances". In this particular case, NTI also supports GN's rationale that this is in the best interest of the public as this timing allows the GN to save costs on the specialized study and expedite this phase for the summer of 2018.

NTI looks forward to periodic updates on the status of this project.



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www.tunngavik.com

jtarreak@tunngavik.com

Kativik Regional Government





Mr. Kyle Seeley
Deputy Minister, Infrastructure
Community & Government Services
Government of Nunavut
W.G. Brown Building, 4th floor,
P.O. Box 1000 Stn. 700, Iqaluit, NU
X0A 0H0, Canada

Dear Mr. Seeley,

Sincerely,

Paul Parsons
Interim Director General
Kativik Regional Government