



Procurement Hub – Fredericton  
301 Bishop Drive  
Fredericton, NB E3C 2M6

June 27, 2019

F5211-190233

## **ADVANCED CONTRACT AWARD NOTICE**

**TITLE: A study on marine mammals and the potential impact(s) through ship-based oil spills for Fisheries and Oceans Canada (DFO) - Gulf of St. Lawrence**

### **1.1 INTRODUCTION:**

The purpose of this Advance Contract Award Notice (ACAN) is to signal the government's intention to award a contract for these services to Reformar Inc. 310, allée des Ursulines Rimouski, QC G5L 3A1. Before awarding a contract, however, the government would like to provide other suppliers with the opportunity to demonstrate that they are capable of satisfying the requirements set out in this Notice, by submitting a statement of capabilities during the ACAN posting period.

If other potential suppliers submit a statement of capabilities during this ACAN posting period that meets the requirements set out in the ACAN, the government will proceed to a full tendering process on either GETS or through traditional means, in order to award the contract.

If no other supplier submits, on or before the closing date, a statement of capabilities meeting the requirements set out in the ACAN, a contract will be awarded to the pre-selected supplier.

### **1.2 BACKGROUND:**

Fisheries and Oceans Canada (DFO) are seeking the availability of a research vessel charter (vessel and crew) to conduct and deliver a scientific mission(s) in the Gulf of St. Lawrence south of Anticosti Island along the New Brunswick, Prince Edward Island and Nova Scotia coastlines. This science mission is focused on 1) surveying North Atlantic Right Whale (NARW), the distribution and factors affecting the distribution of their prey; and 2) the potential impact to habitat through ship-based oil spills.

The requirement is for a research vessel charter (vessel and crew) for 28 days between 06 August to September 3 2019. The vessel will mobilize in Rimouski, Quebec and will proceed to the research area (Gulf of St. Lawrence south of Anticosti Island along the New Brunswick, Prince Edward Island and Nova Scotia coastlines). The demobilization will happen at Rimouski, Quebec upon completion of the research mission.

### **1.3 Contract Dates**

The Contract dates are as follows: 28 days of sea time between the 06 August and 03 September 2019 with a change of science crew after the first 14 days.

The Contractor grants to Canada, the irrevocable option to extend the term of the Contract by up to two (2) additional one (1) year periods under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Option periods, if exercised will be April 1, 2020 through to March 31, 2021 and April 1, 2021 through to March 31, 2022. Project work will be between July and August each year

### **1.4 Objectives of the Requirement**

**The Contractor is to provide a qualified vessel and crew to complete oceanographic survey focusing on North Atlantic Right Whales (NARW) in the Gulf of St. Lawrence.**



The 3 main research tasks of this mission are as follows:

- 1.4.1 Surveying North Atlantic Right Whale (NARW) populations in the Gulf of St. Lawrence;
- 1.4.2 Distribution and factors affecting the distribution of their prey;
- 1.4.3 The potential impact to habitat through ship-based oil spills.

## 1.5 Scope

The Science Branch, Fisheries and Oceans Canada, Maritimes Region, Dartmouth, Nova Scotia, Canada, requires the complete services of an Oceanographic Research Vessel charter (vessel and crew) to deliver the summer 2019 Marine Mammal and Oil Spill Impact Mission. This mission is required to understand the population, migration patterns and effects of shipboard oils spills on the endangered North Atlantic Right Whale (NARW).

The work is focused on surveying North Atlantic Right Whales (NARW), the distribution and factors affecting the distribution of their prey – mainly copepods, and the potential impact to habitats through ship-based oil spills. The main focus of the work will extend from the St. Lawrence River estuary (~ 68°W) through the southern Gulf of St. Lawrence to the Cabot Strait. A small number of sampling stations will be within the estuary, with the main surveying and sampling occurring in the Gulf, south of Anticosti Island along the New Brunswick, Prince Edward Island and Nova Scotia coastlines. The specific locations of the stations will be driven by reported NARW sighting immediately prior to the start of the mission. Specific stations for sampling copepods or carrying out oil effects studies will be determined based on surveys of whale locations which will be ongoing during the mission.

## 2.0 Requirements

### 2.1 Scientific Survey Objectives

The main objective of this mission is to survey and document NARW in the Gulf of St. Lawrence, understand the distribution of their prey and processes driving this distribution and understand the potential effects of a ship-based oil spill on the habitat in the region. This is a collaboration among three DFO research groups.

1. **Surveying and Sampling NARW** To protect the NARW, it is important to understand the impacts of shipping, specifically noise, on the health of the whales. The Gulf of St. Lawrence is an important summer habitat for the NARW, but is also an active shipping area as vessels transit between the ports in the St. Lawrence River and the Atlantic Ocean. Throughout the mission, observed will record and photograph NARW. The health of whales will be monitored by using drone overflights to assess body condition. Drones will photograph individuals and when equipped with collection devices, drones may be flown through the vapor cloud from whale blow to measure hormonal status. Small boats will be used to approach individuals and collect samples of fecal material or use crossbows to biopsy tissues for measuring hormones, DNA or contaminants. If possible, tags will be deployed to provide information about underwater movements of the animals.
2. **Understanding processes driving copepod aggregation in NARW foraging areas** NARW have frequently been observed around convergence and divergence features. NARW forage on zooplankton, with copepods being their main prey. Understanding the physical processes that control the spatial distribution of copepods and result in aggregation will aid in understanding habitat use by NARW. This mission will map copepod distribution in the Gulf of St. Lawrence during the time the NARW are utilizing the habitat. Current velocities will be mapped along with copepod distributions to aid in modelling the underlying processes.
3. **Characterizing the fate and behavior of oil following a ship-based spill** In areas with high levels of vessel traffic, the potential for ship-based oil spills increases. While a spill from a tanker has the potential to be significant, smaller spills from any ship has the potential to affect the



environment, potentially reducing habitat suitability for specific organisms. This mission aims to characterize the fate of oil in surface waters by measuring the partitioning of surface oil into the water, chemical changes in the oil due to weathering and quantify rates of natural attenuation through microbial biodegradation. This will use ship-based incubations using water collected from specific sites within the Gulf of St. Lawrence.

### **Sampling:**

CTD/Rosette stations will be sampled at the beginning of the mission at the furthest west stations in the St. Lawrence River and moving into the Gulf of St. Lawrence. These will include depth profiles to measure background hydrocarbon concentrations and characterize the natural microbial community. Surface samples will be collected to set up the first set of incubation experiments where surface water and communities are exposed to fresh oil, mimicking a spill. A series of 4 to 5 incubations experiments will be set up over the duration of the mission. Depth profiles will be collected at stations within the Gulf as zooplankton sampling and surveying is carried out.

Mammal observers will be maintaining watch throughout the mission and identifying areas actively used by NARW. Additionally, other cetaceans and turtles may be observed and documented if encountered. When conditions allow, samples will be collected using the small boat. Tagging will be carried out when possible.

Using the presence of the NARW as a guide, the copepod spatial distributions will be mapped using tow-yo VPR/CTD observations on a spatial grid (ca. 6 km × 2 km). Current velocities will be simultaneously recorded using the ADCP. To ground truth the VPR data, net samples will be collected at specific stations. The grid sampling will be repeated 4 times over diel and tidal cycles to characterize variation in distributions due to vertical migration and currents.

### **Health and Safety:**

The Contractor is responsible for maintaining a work environment that is both safe and healthy. It is the responsibility of the Contractor to ensure that the work environment is free of known hazards and proper safe work procedures are used when conducting tasks (i.e. boat use, working on open vessel decks). All safety and health issues/incidents are to be reported to the Project Authority by the Contractor, immediately. The DFO Maritimes Field work Occupational Health and Safety policy will be consulted for any issues arising during the contract. Policies are available from the Project Authority upon request.

## **2.2 Specifications and Standards**

### **Section A: Mandatory Requirements**

Vessel Certification and Documentation – must be maintained throughout the contract

- The vessel must have a valid Transport Canada certificate Minimum Safe Manning Document – Convention with a Trading Area of Near Coastal, Class 1 Voyage, or international equivalent.
- The vessel must have a valid Transport Canada (or recognized organization) Safety Management Certificate or international equivalent.
- The vessel must have Transport Canada (or recognized organization) Safety Equipment Certificate or international equivalent.
- The Captain(s) of the vessel possesses a valid certificate of competency that meets or exceeds the operation for size (gross tonnage) of the vessel and the area of Work (*Near Coastal, Class 1* or international equivalent).
- All crew members have valid Marine Emergency Duty (MED) A1 certificates or Standard for Training, Certification and Watch keeping (STCW Basic Safety).

Vessel Particulars

- The vessel is equipped for continuous operations for a period of up to 28 days (e.g., endurance range of vessel, provisions, water making system, etc.).



- The vessel must be able to accommodate a minimum of 14 scientific personnel (individuals consisting of both genders) for the duration of the mission. This includes:
  - provide sleeping accommodations (minimum of 14 berths and max of 4 person/cabin);
  - provide a minimum of 3 on-board meals per day;
  - provide drinking water, toilets, sinks, showers and hot water.
- The vessel must have sufficient lifesaving equipment for both the crew and all scientific personnel.

#### Science Equipment

- The vessel must be equipped with an oceanographic water-sampling system that consists of:
  - an oceanographic CTD-Rosette package (minimum 12 bottle 10L/bottle), or space to accommodate one provided by DFO.
  - Launch and Recovery System (LARS) - a marine crane or A-frame to launch and recover the CTD-Rosette package;
  - a winch with a minimum of 1000 m (3200ft) of electromechanical cable;
  - a metering block or sheave, and;
  - a dedicated work space of 2m x 2m on the working deck for handling the rosette before launching and for sampling water bottles upon its recovery.
- The vessel must be equipped with a Launch and Recovery System (LARS) to deploy and recover DFO towed system. The LARS would consist of:
  - An A-frame and/or marine crane;
  - a metering block or sheave;
  - a winch with 1200m (4000ft) of electromechanical cable (6 conductors).  
NOTE: If no winch is available, space must be provided to install a DFO supplied winch with the following specifications:
    - winch base plate is 45.5in x 32in, and
    - require 208/240V 1 phase, 15 Amp.
    - Bidder should provide the General Arrangements of the Vessel and identify where the DFO winch would be installed.
- The vessel must be equipped with a telescoping or knuckle boom marine crane and provide the specifications. DFO minimum requirements are:
  - a lift height over the vessel rail of 10 m;
  - an outboard scope of the side of the vessel of 2 m; and
  - a crane whip cable that reaches the waterline.
- The vessel must have a minimum total deck space of 120m<sup>2</sup> (1300ft<sup>2</sup>) (not including the space required to fit the refrigerated container (Reefer) (see above).

#### Deck Requirements

- The vessel must be equipped with (or has a dedicated place on main deck for the setup of DFO) incubators. Space will need to be 4m<sup>2</sup> (40ft<sup>2</sup>).
  - The vessel must have a place to connect to clean sea water on the main deck to feed the incubators
  - Clean seawater for washing of nets.
- The vessel comes equipped with a (or have space to carry a DFO supplied) 6m (20ft) refrigerated container (Reefer). If the reefer is provided by DFO the vessel will have to ensure it will be able to provide:
  - 440v 30amp electrical power; and
  - a means of attaching the container to the deck.

#### Science Ancillary Equipment and Space

- The vessel must be able to carry, deploy and recover DFO's rigid hull inflatable boat for whale tagging operations.
  - The bidder must allow the launch boat to be operated by DFO science staff who are



- licensed and qualified to operate around marine mammals.
- The vessel must be able to launch the boat up to a maximum Sea State of Beaufort 3.

#### Lab Spaces

- The vessel must be equipped with either interior and/or containerized laboratory space on deck for sample processing with a total minimum area of lab space of 40m<sup>2</sup> (420ft<sup>2</sup>) and have:
  - bench space to accommodate water sample extraction/preparation;
  - a minimum of one (1) sink in the laboratory area: the sink will need to have both a freshwater supply and a clean seawater supply. The sink must have the ability to dispose of seawater;
  - one (1) certified fume hood;
  - equipped with a -80 °C and -20°C freezer with a minimum of 0.5m<sup>3</sup> (16 ft<sup>3</sup>) of storage space or have sufficient space to accommodate a DFO supplied -80°C and -20°C freezer of equivalent volume;
  - supply power to each lab;
  - access to a ship-wide Local Area Network (LAN) for connection of DFO computers. With access to NAV data (i.e. NMEA) with minimum strings being speed, position and speed;
  - include a public address system and a means of communication (e.g., phone, UHF radio, etc.) in each lab; and
- The vessel has a designated dry space for the storage and preparation of drones for whale observation. Minimum space required is 3m<sup>2</sup> (32ft<sup>2</sup>).
- The vessel must have a designated hazardous storage area for the storage of chemicals used on the mission. Science will need an area of 0.5m<sup>3</sup> (15ft<sup>3</sup>).

#### Vessel Mounted Transducers

- The vessel must be fitted with a 150kHz hull mounted ADCP system that can be logged for the duration of the mission.
- The vessel must have an EK60 (or EK80) transducer suite.
- The vessel must be equipped with a hull mounted echosounder capable of deep water sounding to a depth of at least 1,500 m with a graphical display and serial NMEA (National Marine Electronics Association) depth output.

### 2.3 Change Management Procedures

The Contracting Authority is responsible for the management of the contract and any changes to the contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of any Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

The Project Authority is the representative of the department or agency for whom the work is being carried out under any Contract and is responsible for all matters concerning the technical content of the Work under the any Contract. Technical matters may be discussed with the Project Authority; however the Project Authority has no authority to authorize changes to the scope of the work.

### 2.4 Ownership of Intellectual Property

Delivery of goods/services does not lead to the creation of intellectual property.

### 3.0 Other Terms and Conditions of the SOW

#### 3.1 Authorities

Project Authority Name to be provided upon contract award.

#### 3.2 DFO Obligations



- In support of the successful completion of the summer 2019 Marine Mammal Survey, DFO will provide the following personnel, equipment and mission planning information:
  - DFO will provide 14 scientific personnel for each survey;
  - DFO will provide a mission plan;
  - DFO will provide instruments required for the program; and
  - Prior to the commencement of the contract, the Chief Scientist shall submit a written tentative Mission Plan that shall include:
    - Date, time and point of departure
    - Estimated time at sea
    - Estimated date, time and point of arrival;
    - Anticipated cruise track;
    - Statement of all scientific operations to be carried out;
    - List of all scientific equipment and cargo to be mobilized on board the vessel.

### **3.2 Contractor's Obligations**

#### **Vessel and Crew**

- Captain and crew will communicate in English and must be available for each 12h shift to ensure successful communication with scientific personnel;
- Crew will be required to accommodate two 12-hour science personnel shifts (e.g. 0600h – 1800h and 1800h – 0600h). Crew deckhands will be available to operate winches and cranes during each science personnel shift.
- Upon contract award, Contractor will provide to DFO the vessel's safety and occupational health certification requirements for science personnel participating in the mission at sea.
- Crew will provide a familiarization tour of the ship for scientific personnel and inform them of the safety equipment and procedures, ensuring the safety of the equipment and personnel throughout the duration of the contract, and provide safe working areas on the ship.
- Prior to the mission at sea, the contractor will be expected to provide, or develop in collaboration with DFO, Safe Operating Procedures for the scientific operations identified in the Statement of Work.
- Prior to the mission at sea, the contractor will provide, or develop in collaboration with DFO, Safe Operating Procedures for the storage, handling, use and disposal of chemicals on board the Vessel.
- The vessel will be equipped with stores (e.g. storeroom, chemical locker) for the safe stowage of dangerous goods in accordance with regulations governing storage and separations of hazardous materials on board ships (International Maritime Dangerous Goods Code). Compliance with this requirement is subject to verification by Canada after contract award.
- Crew will assist with the loading and unloading of science equipment as required (e.g. shipboard crane operations, manual lifting if necessary, etc.)
- Crew will deploy/recover and/or assist with the deployment/recovery of oceanographic measurement devices and sea sampling equipment according to information provided by the Chief Scientist.
- A ship-supplied technician(s) will be on board and available 24-hours to troubleshoot, repair and maintain ship-supplied equipment and manage associated data collection. The technician(s) will liaise with DFO science staff for the duration of the contract.
- The vessel will provide satellite internet service available to science personnel for communication to shore with a minimum capacity of 20GB over a 27 day period.
- The vessel and crew are to be available for the full period of the contract.
- The vessel and crew are to be able to stay at sea without calling port for a period of 14 days.
- The vessel is to be able to berth, and its crew disembark at various ports in Eastern Canada and Quebec.

### **3.3 Location of Work, Work site and Delivery Point**

The main focus of the work will extend from the St. Lawrence River estuary (~ 68°W) through the southern Gulf of St. Lawrence to the Cabot Strait. A small number of sampling stations will be within the



estuary, with the main surveying and sampling occurring in the Gulf, south of Anticosti Island along the New Brunswick, Prince Edward Island and Nova Scotia coastlines.

### **3.4 Language of Work**

All work will be carried out in English Speaking Environments.

### **3.5 Travel and Living**

There is no provision for travel and /or living expenses under this contract.

## **4.0 Project Schedule**

### **3.1 Expected Start and Completion Dates**

Project work will take place between 02 July 2019 and 31 August 2019 and will consist of 28 working days broken into two (2) fourteen (14) day legs (with 28 working days at sea).

If option years are exercised project work will be approximately the same as initial contract year, with variation depending on whale presence.

### **3.2 Schedule and Estimated Level of Effort (Work Breakdown Structure) TIMEFRAME AND DELIVERY REQUIREMENTS**

Mobilization of the vessel at the port of Rimouski, Quebec, CANADA (Not before 02 August 2019\*)

- DFO equipment loading, installation of laboratories and safety inspection(s) (1 day)

Conduct the Gulf of St. Lawrence Marine Mammal Survey Mission (upon completion of mobilization to no later date than 08 September 2019)

- Survey along predetermined sampling areas as defined by the Chief Scientist combined with sighting notifications of the North Atlantic Right Whale. There will be a Science transfer of personnel (location to be determined).

Demobilization: return to the port of Rimouski, Quebec, CANADA (upon completion of the mission with demobilization completed no later than 15 September 2019).

- Unloading of DFO equipment and survey samples (1 day)

*\*Specific dates and times for mobilization, Departure, Arrival and Demobilization will be determined in consultation with the vessel operator upon Contract award.*

## **5.0 Required Resources or Types of Roles to be Performed**

The Contractor is required to provide the services of specific individuals with certification to perform the Work (e.g. Captain, Officers, Bosun, etc.). If specific individuals are identified in the Bid Proposal/Contract to perform the Work, the Contractor must provide the services of those individuals unless the Contractor is unable to do so for reasons beyond its control.

If the Contractor is unable to provide the services of any specific individual identified in the Bid Proposal/Contract, it must provide a replacement with similar qualifications and experience. The replacement must meet the criteria used in the selection of the Contractor and be acceptable to Canada. The contractor must, as soon as possible, give notice to the Contracting Authority of the reason for replacing the individual and provide:

- The name, qualifications and experience of the proposed replacement; and
- Proof that the proposed replacement has the required valid certificate(s) if applicable.

The contractor must not, in any event, allow performance of the Work by unauthorized replacement persons.



**6.0 Applicable Documents and Glossary**

**6.1 Relevant Terms, Acronyms and Glossaries**

Acronyms	Definition
CTD Profiler	Conductivity-Temperature-Depth Profiler
LARS	Launch and recovery system
NMEA	National Marine Electronics Association
Rosette	System for collecting seawater samples at discrete depths in the water column
WLL	Working Load Limit
SWL	Safe Working Load
NARW	North Atlantic Right Whale

**6.1 SACC Manual clause [A9141C](#) (2008-05-12) Vessel Condition**

The Contractor warrants that the vessel provided to Canada is mechanically sound, completely seaworthy, equipped with readily accessible lifesaving equipment, will be adequately manned and in full compliance with the [Canada Shipping Act](#), S.C. 2001, c. 26

**6.2 SACC Manual clause [G5003C](#) (2018-06-21) Marine Liability Insurance**

**PROJECT MANAGEMENT CONTROL AND CHANGE MANAGEMENT PROCEDURES**

Any contractor requested changes in the scope of work will be submitted, in writing, to the Project Authority. The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contract Authority. The Contractor must not perform the work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Project Authority.

**OWNERSHIP OF INTELLECTUAL PROPERTY**

Delivery of Services that do not lead to the creation of IP

**SECURITY REQUIREMENTS**

There is no requirement for security clearance because all work will occur offsite at a non-DFO facility and there is no classified or protected information arising from this work.

**MINIMUM MANDATORY REQUIREMENTS**

- See attached Mandatory Requirements

**TRADE AGREEMENTS APPLICABILITY OR OTHER OBLIGATIONS:**

Trade agreements applicable for this requirement include Canadian Free Trade Agreement (CFTA) and North American Free Trade Agreement (NAFTA)

**GOVERNMENT CONTRACTS REGULATIONS EXCEPTION AND LIMITED TENDERING REASONS:**

The following policy requirements are applicable to this ACAN process:

**Applicable Exceptions to Soliciting Bids under the Government Contracting Regulations (GCRs) (Section 6):**

Section 10.2.1 Section 6 (d) only one person or firm is capable of performing the work applies to this ACAN for the following reasons:

There are no known alternative sources of supply. Reformar Inc is the only known Operator that can accommodate this requirement in this timeframe.





**CONTRACT PERIOD:**

The contract period is estimated to be from Contract Award through to March 31, 2020 with the option to extend for 2 additional 1 year periods.

**ESTIMATED VALUE:**

The total estimated value of this contract is \$700,000.00 for the initial year, \$700,000.00 for the 1st option year, and \$700,000.00 for the 2<sup>nd</sup> option year for a total potential value of \$2,100,000.00 excluding all applicable taxes.

**INSURANCE**

The Contractor must have appropriate insurance and coverage as per Occupational Health and Safety Regulations, including current liability insurance and/or appropriate Workers Compensation coverage in place in the Maritime Provinces throughout the duration of the contract. Copies of this documentation must be provided to the DFO Project Authority in advance of commencement of the Contract.

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

**SUPPLIER'S RIGHT TO SUBMIT A STATEMENT OF CAPABILITIES:**

Suppliers who consider themselves fully qualified and available to provide the services described herein, may submit a Statement of Capabilities in writing to the Contracting Officer identified in this Notice on or before closing date. The Statement of Capabilities must clearly demonstrate how the supplier meets the advertised requirements.

**CLOSING DATE FOR SUBMITTING STATEMENT OF CAPABILITIES:**

**Friday, July 12, 2019 at 2:00 p.m. (Atlantic Time)**

Inquiries and statements of capabilities are to be directed to:

**Kimberly Walker**

Senior Contracting Officer  
Procurement Hub – Fredericton  
Telephone: (506) 238-3511  
Facsimile: (506) 452-3676  
Email: [DFOtenders-soumissionsMPO@dfo-mpo.gc.ca](mailto:DFOtenders-soumissionsMPO@dfo-mpo.gc.ca)