

Fisheries and Oceans

Pêches et Océans Canada

RETURN BIDS TO: RETOURNER LES SOUMISSIONS À:

Bid Receiving/Réception des sousmissions

Procurement Hub | Centre d'approvisionnement Fisheries and Oceans Canada | Pêches et Océans Canada 301 Bishop Drive | 301 promenade Bishop Fredericton, NB E3C 2M6

Email - courriel: <u>DFOtenders-soumissionsMPO@dfompo.gc.ca</u>

REQUEST FOR PROPOSAL

DEMANDE DE PROPOSITION

Proposal to: Fisheries and Oceans Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods and services listed herein and on any attached sheets at the price(s) set out therefor.

Proposition aux : Pêches et Océans Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux appendices ci-jointes, les biens et les services énumérés ici sur toute feuille ciannexée, au(x) prix indiqué(s).

Comments: - Commentaries:

Solicitation

Title - Sujet

Defining the Risk of Grounding and Collision In Canada Major Ports

Date

November 27, 2020

Solicitation No. - Nº de l'invitation

F5211-210007

Client Reference No. - No. de référence du client

FP845-200062

Solicitation Closes - L'invitation prend fin

At /à: 14:00 ADT(Atlantic Standard Time)/ HNA (heure normale de

l'Atlantique)

On / le: January 6, 2021

F.O.B. – F.A.B G
Destination S

GST - TPS

Duty - Droits

See herein — Voir cinclus

See herein — Voir ci-inclus

Destination of Goods and Services – Destinations des biens et services

See herein — Voir ci-inclus

Instructions

See herein — Voir ci-inclus

Address Inquiries to -

Adresser toute demande de renseignements à

Michael Peters - Contracting Specialist

Email - courriel:

DFOtenders-soumissionsMPO@dfo-mpo.gc.ca

Delivery Required – Livraison exigée

See herein — Voir ci-inclus

Delivery Offered – Livraison proposée

Vendor Name, Address and Representative – Nom du vendeur, adresse et représentant du fournisseur/de l'entrepreneur:

Telephone No. - No. de téléphone

Facsimile No. – No. de télécopieur

Name and title of person authorized to sign on behalf of Vendor (type or print) – Nom et titre de la personne autorisée à signer au nom du fournisseur (taper ou écrire en caractères d'imprimerie)

Signature

Date

Canad'ä

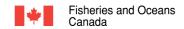


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PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement associated with this bid solicitation.

1.2 Statement of Work

The work to be performed is in accordance with the Statement of Work at Annex A.

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

1.4 Trade Agreements

The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA), Canada-Chile Free Trade Agreement, Canada-Columbia Free Trade Agreement, Canada-Honduras Free Trade Agreement, Canada-Korea Free Trade Agreement, Canada-Panama Free Trade Agreement, and Canada-Peru Trade Agreement.

1.5 Procurement Ombudsman

The Office of the Procurement Ombudsman (OPO) was established by the Government of Canada to provide an independent avenue for suppliers to raise complaints regarding the award of contracts under \$26,400 for goods and under \$105,700 for services. You have the option of raising issues or concerns regarding the solicitation, or the award resulting from it, with the OPO by contacting them by telephone at 1-866-734-5169 or by e-mail at opo-boa@opo-boa.gc.ca. You can also obtain more information on the OPO services available to you at their website at www.opo-boa.gc.ca.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the <u>Standard Acquisition Clauses and Conditions Manual</u> (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

Revision to Departmental Name: As this solicitation is issued by Fisheries and Oceans Canada (DFO), any reference to Public Works and Government Services Canada or PWGSC or its Minister contained in any term, condition or clause of this solicitation, including any individual SACC clauses incorporated by reference, will be interpreted as reference to DFO or its Minister.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The <u>2003</u> (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of <u>2003</u>, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days Insert: 90 days

2.2 Submission of Bids

Bids must be submitted only to Fisheries and Oceans Canada (DFO) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted by facsimile to DFO will not be accepted.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than seven (7) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound/saved sections as follows:

Section I: Technical Bid (one soft copy in PDF format)

Section II: Financial Bid (one soft copy in PDF format)

Section III: Certifications (one soft copy in PDF format)

The maximum size per email (including attachments) is limited to 10MB. If the limit is exceeded, your email might not be received by DFO. It is suggested that you compress the email size or send multiple emails to ensure delivery. Bidders are responsible to send their proposal and to allow enough time for DFO to receive the proposal by the closing period indicated in the RFP.

For bids transmitted by email, DFO will not be responsible for any failure attributable to the transmission or receipt of the email bid. DFO will send a confirmation email to the Bidders when the submission is received.

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment.

Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

See Annex C for details

4.1.2 Financial Evaluation

SACC Manual Clause A0220T (2014-06-26), Evaluation of Price

4.2 Basis of Selection

SACC Manual Clause A0031T (2010-08-16), Basis of Selection – Mandatory Technical Criteria

PART 5 - CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

The Contractor's Representative for the Contract is:

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the <u>Forms for the Integrity Regime</u> website (http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html), to be given further consideration in the procurement process.

procurement process.

5.1.2 Contractor's Representative

Name:

Title: Address:			
Telephone: Facsimile: E-mail:			

5.1.3 Supplementary Contractor Information

Pursuant to paragraph 221 (1)(d) of the Income Tax Act, payments made by departments and agencies under applicable services contracts (including contracts involving a mix of goods and services) must be reported on a T4-A supplementary slip.

To enable the Department of Fisheries and Oceans to comply with this requirement, the Contractor hereby agrees to provide the following information which it certifies to be correct, complete, and fully discloses the identification of this Contractor:

a)	The legal name of the entity or individual, as applicable (the name associated with
	the Social Insurance Number (SIN) or Business Number (BN), as well as the
	address and the postal code:

b) The status of the contractor (individual, unincorporated business, corporation or partnership:

c) For individuals and unincorporated businesses, the contractor's SIN and, if applicable, the BN, or if applicable, the Goods and Services Tax (GST)/Harmonized Sales Tax (HST) number:

d) For corporations, the BN, or if this is not available, the GST/HST number. If there is no BN or GST/HST number, the T2 Corporation Tax number must be shown:

,

5.1.4 Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the <u>Public Service Superannuation Act</u> (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the <u>Supplementary Retirement Benefits Act</u>, R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the <u>Canadian Forces Superannuation Act</u>, R.S., 1985, c. C-17, the <u>Defence Services Pension Continuation Act</u>, 1970, c. D-3, the <u>Royal Canadian Mounted Police Pension Continuation Act</u>, 1970, c. R-10, and the <u>Royal Canadian Mounted Police Superannuation Act</u>, R.S., 1985, c. R-11, the <u>Members of Parliament Retiring Allowances Act</u>, R.S. 1985, c. M-5, and that portion of pension payable to the <u>Canada Pension Plan Act</u>, R.S., 1985, c. C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension?

Yes () No ()

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive?

Yes() **No**()

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

Print Name	Signature

5.1.5 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

()	MasterCard	Acquisition	Card;
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() Direct Deposit (Domestic and International);

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the Ineligibility and Suspension Policy (http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html), the Bidder must provide the required documentation, as applicable, to be given further consideration in the

The following certification signed by the contractor or an authorized officer:

"I certify that I have examined the information provided abov	e and that it is correct and complete
Signature	
Print Name of Signatory	

PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

6.1 Security Requirements

There is no security requirement applicable to the Contract.

6.2 Statement of Work

The Work to be performed is in accordance with the Statement of Work at Annex "A".

6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the <u>Standard Acquisition Clauses and Conditions Manual</u> (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

6.3.1 General Conditions

<u>2010B</u> (2020-05-28), General Conditions - Professional Services (Medium Complexity) apply to and form part of the Contract.

6.3.2 Supplemental General Conditions

<u>4007</u> (2010-08-16), Canada to Own Intellectual Property Rights in Foreground Information apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from date of Contract to March 26, 2021 inclusive.

6.5 Authorities

6.5.1 Contracting Authority

Name: Title:

Organization:

The Contracting Authority for the Contract is:

Name: Michael Peters

Title: Contracting Specialist

Department: Fisheries and Oceans Canada
Directorate: Material and Procurement Services

Address: 301 Bishop Drive, Fredericton NB, E3C 2M6

Telephone: (506) 429-2359 Facsimile: (506) 452-3676

E-mail address: <u>DFOtenders-soumissionsMPO@dfo-mpo.gc.ca</u>

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 the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.5.2 Project Authority (To be named at contract award)

The Project Authority for the Contract is:

Address:			
Telephone: Facsimile: E-mail address:			
Work is being ca the technical cor discussed with the authorize change	hority is the representative of arried out under the Contract ntent of the Work under the the Project Authority, howevers to the scope of the Work has contract amendment iss	et and is responsible for all Contract. Technical matte er the Project Authority had a . Changes to the scope of	II matters concerning ers may be as no authority to f the Work can only

6.5.3 Contractor's Representative (To be named at contract award)

Name: Title: Organization: Address:	
Telephone: Facsimile: E-mail address:	

6.6 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a <u>Public Service Superannuation Act</u> (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with <u>Contracting Policy Notice: 2012-2</u> of the Treasury Board Secretariat of Canada.

6.7 Payment

6.7.1 Basis of Payment

- 6.7.1.1 The Contractor will be paid in accordance with Annex B Basis of Payment
- 6.7.1.2 All prices and amounts of money in the Contract are exclusive of the Goods and Services Tax (GST) or Harmonized Sales Tax (HST), whichever is applicable, unless otherwise indicated. GST or HST, to the extent applicable, will be incorporated into all invoices and progress claims for goods supplied or work performed and will be paid by Her Majesty. The Contractor agrees to remit to Canada Revenue Agency any GST or HST paid or due.
- 6.7.1.3 Any payment by Her Majesty under this contract is subject to there being an appropriation for the fiscal year in which the payment is to be made.

6.7.2 Limitation of Expenditure

- Canada's total liability to the Contractor under the Contract must not exceed
 \$_____(insert the amount at contract award). Customs duties are included and
 Applicable Taxes are extra.
- 2. No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - a. when it is 75% committed, or
 - b. four months before the contract expiry date, or
 - as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work, whichever comes first.
- 3. If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

6.7.3 Multiple Payments

Canada will pay the Contractor upon completion and delivery of units in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract:
- b. all such documents have been verified by Canada;
- c. the Work delivered has been accepted by Canada.

6.7.4 Electronic Payment of Invoices - Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- () MasterCard Acquisition Card;
- () Direct Deposit (Domestic and International);

6.8 Invoicing Instructions

- 6.8.1 Payments will be made provided that:
 - 6.8.1.1 The invoice(s) must be emailed to DFO Accounts Payable, at the email address indicated below:

Email: DFO.invoicing-facturation.MPO@canada.ca
CC: AP Coder (inserted at contract award)

6.9 Certifications and Additional Information

6.9.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

6.10 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____ (insert the name of the province or territory as specified by the Bidder in its bid, if applicable).

6.11 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) 4007 (2010-08-16), Canada to Own Intellectual Property Rights in Foreground Information apply to and form part of the Contract.
- (c) <u>2010B</u> (2020-05-28), General Conditions Professional Services (Medium Complexity) apply to and form part of the Contract;
- (d) Annex A, Statement of Work;
- (e) Annex B, Basis of Payment;
- (f) the Contractor's bid dated _____ (insert date at contract award)

6.12 Procurement Ombudsman

- 6.12.1 The Contractor confirms that it has read the Code of Conduct for Procurement and agrees to be bound by its terms.
- 6.12.2 The office of the Procurement Ombudsman (OPO) was established by the Government of Canada to provide an independent avenue for suppliers to raise complaints regarding the award of contracts under \$26,400.00 for Goods and under \$105,700.00 for Services. You have the option of raising issues or concerns regarding the solicitation, or the award resulting from it,. With the OPO by contacting them by telephone at 1-866-734-5169 or by e-mail at opo-boa@opo-boa.gc.ca. You can also obtain more information on OPO services available to you on their website at www.opo-boa.gc.ca.
- 6.12.3 For further information, the Contractor may refer to the following PWGSC site:

http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html

6.13 Insurance G1005C (2016-01-28)

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.

ANNEX "A" STATEMENT OF WORK

Defining the risk of grounding and collision In Canada major ports

1. Objectives of the project:

In order to prioritize its survey efforts, the Canadian Hydrographic Service (CHS) would like to better understand the risk of grounding and collision in Canadian waters. The Goal of the contract is to evaluate the probabilistic risk of grounding and collision for the commercial ports in Canada. A total of 40 ports were selected for this project.

2. Factors to consider

2.1. Risk of grounding

Elements to be evaluated to define the risk of grounding:

2.1.1. Physical factors

Based on the PIANC (THE World Association for Waterborne Transport Infrastructure) approach these factors would need to be evaluated:

- 1. Turn angle
- 2. Channel width
- 3. Straight segment
- 4. Tidal window
- 5. Limited depth
- 6. Seabed Type
- 7. Sedimentation

The physical factors will be evaluated with the CHS charts and products, CHS will provide the charts free of charge for the purpose of this project. The coordinate of the limited depth will have to be provided to CHS.

2.1.2. Vessel Specifications:

- 1. Type of ship
- 2. Length, breadth and draught
- 3. Trim, list and heel angles
- 4. Maneuverability
- 5. Under keel clearance
- Vessel Speed

This information will be extracted from the AIS data and INNAV database.

2.2 Risk of Collision

The collision risk assessment at will be evaluated with the following dataset:

- Volume of traffic (AIS data)
- 2. Vessel Traffic Survey (VTS)
- 3. Port information
 - a. Port name and location
 - b. Approach channel characteristics
 - c. Tidal planes and water levels
 - d. Survey history
 - e. Aids to navigation
- 4. Reported incidents
- 5. Ship Maneuverability

2.3. Common element to the risk of Grounding and Collision

2.3.1. Mitigations measures:

- Port State Control
- Pilotage area extension
- Tug escort
- Notice of Arrival reports
- · Safety zone around vessel
- Navigational Aids

- Inspections
- Refuse entry
- Extra bridge watch
- Demonstrated experience or simulator training

2.3.2. Environmental factors

Not all environmental factors will be a national layer, some data will local knowledge of navigators for specific areas, where other data will be on a national scale.

- 1. Ice Concentration
- 2. Wind
- Currents
- 4. Tides
- 5. Visibility Data (Fog)

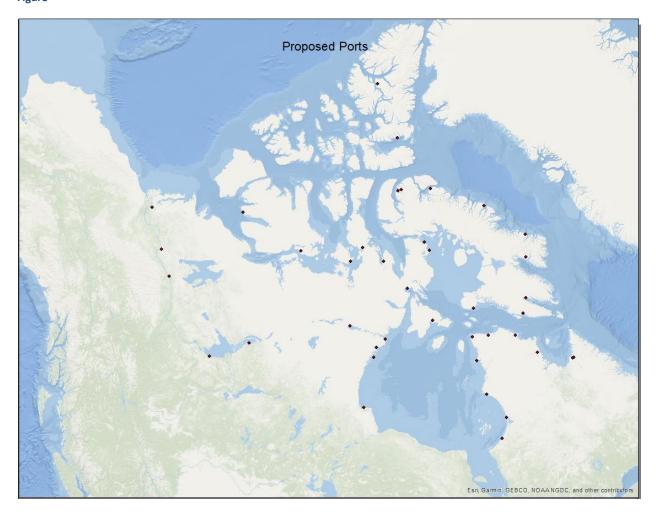
3. Project extent

40 ports in total were selected for this project, the figure and table below represent the ports that will be evaluated in the context of this project.

Table 1 -ports to be evaluated for the risk of Grounding and Collision

40 Ports					
Akulivik	Arctic Bay/Tununirusiq	Baker Lake/Qamanituaq	Broughton Island/Qikiqtarjuaq		
Cambridge Bay/Ikaluktutiak	Cape Dorset/Kinngait	Chesterfield Inlet/Igluligaarjuk	Churchill		
Clyde River	Coral Harbour/Salliq	Eureka	Fort Good Hope		
George River	Gjoa Haven/Oqsuqtooq	Great Whale River/Kuujjuarapik	Grisefiord		
Hall Beach/Sanirajak	Hay River	Igloolik/Iglulik	Inuvik		
Iqaluit	Ivujivik	Kangiqsualujjuaq	Kangirsuk		
Kugaaruk	Lake Harbour/Kimmirut	Lutsel Ke	Nanisivik		
Pangnirtung/Pannirtuuq	Pond Inlet/Mittimatalik	Port Harrison/Inukjuak	Rankin Inlet/Kangiqsliniq		
Repulse Bay/Naujaat	Salluit	Spence Bay/Taloyoak	Tulita		
Ulukhaktok	Umiujaq	Wakeham Bay/Kangiqsujuaq	Whale Cove/Tikiraqjuaq		

Figure



The deliverable:

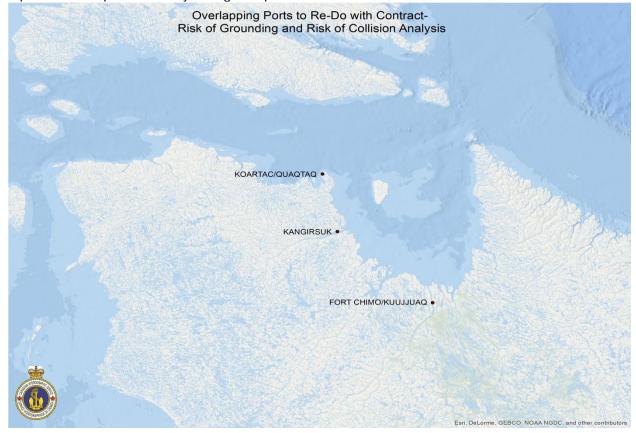
The company will have to provide an approach and heighted criteria used to define the probabilistic risk of grounding and risk of collision.

- A. Expertise services in defining risk of grounding and collision
- B. Creation of an approach with weighted criteria to define risk of grounding and collision, as well as a combined overall weight per port (with adjustable weights as per client's needs)
- C. Creation of a spreadsheet with each selected ports rank with the level of risk for grounding and collision and a classification of risk (Very high, high, medium, low and very low)
 - Spreadsheet must include summary weights for each port, and the final score for both grounding and collision separate. Must be made to easily change weighting values
- D. Creation of a shapefile (or equivalent) with approach segments with risk information (must be in geographic format- not static data).

The risk of grounding and risk of collision defined for each port presented in a spreadsheet along with the corresponding information used to define the final risk of grounding and collision as defined in section 2. The Risk of grounding and collision will have to be reported in the form of 5 classes (Very high, high, medium, low and very low). The coordinates for limited depths at each port will have to be determined and put in to a table format with the ports locations, along with what the limited depth on the port level.

4. Validation and Quality control:

As a comparative measure, three ports that have already been analyzed for risk of grounding will be sent along with the list of 40 mandatory ports acknowledged above. This will help us determine if the deliverable can be extended from the Arctic and if the returned datasets can be accepted. A progress report will be required mid-way through the process.



5. Delivery Date

The final report will need to be submitted to CHS by March 26, 2021. A progress meeting will take place when needed and requested through the project. There will be a project scope meeting at the beginning, with at least one meeting for mid-project review, and a final meeting when the data is delivered to clients.

6. CHS is providing:

CHS will be providing the Contractor with: A GIS shapefile providing the location and names of the 40 ports of interest, digital copies of the sailing directions if applicable, digital copies of the BSB and ENC navigational charts which overlap with the 40 ports of interest.

The company will be responsible of acquiring environmental and meteorological datasets, AIS traffic data, seabed material type, sedimentation risk, pilotage information (where applicable), aids to navigation, survey data, and ship draught (Ship Draught are available with the INNAV database)

7. Travel and Living

Canada will not be reimbursing accommodations and living expenses incurred associated with the performance of this contract.

ANNEX "B" BASIS OF PAYMENT

The Contractor will be paid in accordance with the following basis of payment for all professional services to carry out the required work in accordance with the Contract.

All deliverables are F.O.B. Destination, and Canadian Customs Duty included, and GST/HST extra, where applicable.

First payment will be issued Jan 2021 for ports completed to date, last payment issued end contract for remainder of ports completed.

Port Number	Port Name	All Inclusive Cost Less Tax
1	Akulivik	\$
2	Cambridge Bay/Ikaluktutiak	\$
3	Clyde River	\$
4	George River	\$
5	Hall Beach/Sanirajak	\$
6	Iqaluit	\$ \$ \$
7	Kugaaruk	\$
8	Pangnirtung/Pannirtuuq	
9	Repulse Bay/Naujaat	\$
10	Ulukhaktok	\$
11	Arctic Bay/Tununirusiq	\$
12	Cape Dorset/Kinngait	\$
13	Coral Harbour/Salliq	\$
14	Gjoa Haven/Oqsuqtooq	\$ \$ \$
15	Hay River	\$
16	Ivujivik	\$
17	Lake Harbour/Kimmirut	\$
18	Pond Inlet/Mittimatalik	\$
19	Salluit	\$
20	Umiujaq	\$
21	Baker Lake/Qamanituaq	\$ \$ \$
22	Chesterfield Inlet/Igluligaarjuk	\$
23	Eureka	
24	Great Whale River/Kuujjuarapik	\$
25	Igloolik/Iglulik	\$
26	Kangiqsualujjuaq	\$
27	Lutsel Ke	\$
28	Port Harrison/Inukjuak	\$
29	Spence Bay/Taloyoak	\$ \$ \$
30	Wakeham Bay/Kangiqsujuaq	\$

Port Number	Port Name	All Inclusive Cost Less Tax
31	Broughton Island/Qikiqtarjuaq	\$
32	Churchill	\$
33	Fort Good Hope	\$
34	Grisefiord	\$
35	Inuvik	\$
36	Kangirsuk	\$
37	Nanisivik	\$
38	Rankin Inlet/Kangiqsliniq	\$
39	Tulita	\$
40	Whale Cove/Tikiraqjuaq	\$
	Total CAD (exclusive of taxes)	\$

ANNEX "C" EVALUATION CRITERIA

MANDATORY REQUIREMENTS:

Evaluation of Proposals

Bidders' proposals must clearly demonstrate that the proposed resource(s) meet <u>all Mandatory</u> <u>Requirements</u> for it to be considered for further evaluation. Failure to demonstrate this will result in the proposal being deemed non-compliant and it will not be considered.

The Bidder must include the following tables in the proposal, indicating how the proposed resource meet both the mandatory and point-rated criteria. Reference must be made to the proposal page number or section that contains information to verify that the criterion has been met.

The Bidder's proposal must provide examples of project experience held by the proposed resource to demonstrate compliance and must include the following information for each project:

- The client organization;
- The dates/duration of the project (month and year);
- A description of the project, including the scope and elements of the framework, and the results/outcomes of the work undertaken by the proposed resource(s);
- A description of the activities performed by the proposed resource(s); and,
- The name and contact information of the client Project Authority.

No.	ITEM	Proposal Page# (Bidder to Complete)
M1	The proposed resource(s) must have a minimum of 12 months experience in risk of grounding and risk of collision assessment. Provide experience through project descriptions.	
M2	The proposed resource(s) must provide their resume which must include a least two relevant examples of risk of grounding and risk of collision assessment projects. Provide title of project(s), date, location, name of Project Authority, describe work performed.	
М3	College or University degree in hydrography or related fields. *Bidder must provide a copy of the diploma in the bid package.	
M4	The Bidder must have access to a network (minimum of one navigator) of qualified professional navigators (minimum of one navigator) who have navigated to important commercial ports in eastern Canada. Provide CV's for proposed resources who will be participating in the work to be performed.	