



Fisheries and Oceans
Canada

Pêches et Océans
Canada

**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À :**

Bid Receiving/Réception des soumissions

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 : [DFOtenders-
soumissionsMPO@dfo-mpo.gc.ca](mailto:DFOtenders-soumissionsMPO@dfo-mpo.gc.ca)

**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 à : 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 ci-annexée, au(x) prix indiqué(s).

Title / Titre Hydroacoustic Time-Series and Spatiotemporal Data Analysis		Date November 16, 2021
Solicitation No. / N° de l'invitation 30001207		
Client Reference No. / No. de référence du client(e) 30001207		
Solicitation Closes / L'invitation prend fin At / à : 2 :00 PM AST (Atlantic Standard Time) / HNA (Heure Normale de l'Atlantique) On / le : December 1, 2021		
F.O.B. / F.A.B. Destination	Taxes See herein — Voir ci-inclus	Duty / Droits 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 en ceci	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	



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Please note BIDDERS may bid on more than one TASK. Up to 2 Contracts may be awarded as a result of this RFP. Bidder's may bid on Task 1, Task 2 or both. Bidders must clearly identify FOR which task they are submitting a bid, complete documentation and submit for each Task submission.



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 detailed under Annex "A" of the resulting contract clauses.

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 or by telephone.

1.4 Trade Agreements

The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA).



PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

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.

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

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 2003 (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 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days
Insert: 120 days

2.2 Submission of Bids

Bids must be submitted 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 five (5) 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 **New Brunswick**.

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.



2.5 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
 - Office of the Procurement Ombudsman (OPO)
 - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.



PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that the Bidder submit **all** its **email** bid in separately saved sections as follows and **prior to the bid closing date, time and location**:

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)

Important Note:

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 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. Emails with links to bid documents will not be accepted.

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 in Annex "B"

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

Refer to Annex C.

4.1.1.1 Point Rated Technical Criteria

Refer to Annex C.

4.1.2 Financial Evaluation

SACC Manual Clause [A0220T](#) (2014-06-26), Evaluation of Price-Bid

4.2 Basis of Selection

4.2.1 Highest Rated Within Budget

To be declared responsive, a bid must:

- a. comply with all the requirements of the bid solicitation; and
 - b. meet all mandatory criteria; and
2. Bids not meeting (a) or (b) will be declared non-responsive.
 3. The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 70 % for the technical merit and 30 % for the price.
 4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained divided by the maximum number of points available multiplied by the ratio of 70 %.
 5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 30 %.
 6. A fixed budget is available of up to a maximum of \$90,000.00 for each task.
 7. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
 8. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.



Canada reserves the right to award one or multiple contracts for any responsive bid in order to fulfil its overall requirement. The responsive bid with the highest combined rating of technical merit and price per task will be recommended for award of a contract. Up to a maximum of two contracts may be awarded.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 70/30 ratio of technical merit and price, respectively. The total available points equal 135 and the lowest evaluated price is \$45,000 (45).

Basis of Selection - Highest Combined Rating Technical Merit (70%) and Price (30%)				
		Bidder 1	Bidder 2	Bidder 3
Overall Technical Score		115/135	89/135	92/135
Bid Evaluated Price		\$55,000.00	\$50,000.00	\$45,000.00
Calculations	Technical Merit Score	$115/135 \times 70 = 59.63$	$89/135 \times 70 = 46.15$	$92/135 \times 70 = 47.70$
	Pricing Score	$45/55 \times 30 = 24.55$	$45/50 \times 30 = 27.00$	$45/45 \times 30 = 30.00$
Combined Rating		84.18	73.15	77.70
Overall Rating		1st	3rd	2nd



PART 5 - CERTIFICATIONS

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 with their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

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 [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.1.2 Status and Availability of Resources

SACC Manual clause [A3005T](#) (2010-08-16) Status and Availability of Resources

5.1.3 Education and Experience

SACC Manual clause [A3010T](#) (2010-08-16) Education and Experience

5.1.4 List of Names for Integrity Verification Form

Bidders must complete the List of Names for Integrity Verification form found in Attachment 1 to Part 5.

5.1.5 Contractor's Representative

The Contractor's Representative for the Contract is:

Name: _____
Title: _____
Address: _____

Telephone: _____
E-mail: _____



5.1.6 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:

Signature

Print Name of Signatory

5.2 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
- d. 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 [Public Service Superannuation Act](#) (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the [Supplementary Retirement Benefits Act](#), R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the [Canadian Forces Superannuation Act](#), R.S., 1985, c. C-17, the [Defence Services Pension Continuation Act](#), 1970, c. D-3, the [Royal Canadian Mounted Police Pension Continuation Act](#), 1970, c. R-10, and the [Royal Canadian Mounted Police Superannuation Act](#), R.S., 1985, c. R-11, the [Members of Parliament Retiring Allowances Act](#), R.S. 1985, c. M-5, and that portion of pension payable to the [Canada Pension Plan Act](#), 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.

Signature

Print Name of Signatory

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

"I certify that I have examined the information provided above and that it is correct and complete"

Signature

Print Name of Signatory



5.3 Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications 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 comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the bid non-responsive.

5.3.1 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 \(http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html\)](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 procurement process.

5.3.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](#)" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](#) website (<https://www.canada.ca/en/employment-social-development/programs/employmentequity/federal-contractor-program.html#>).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.



ATTACHMENT 1 TO PART 5 LIST OF NAMES FOR INTEGRITY VERIFICATION FORM

Requirements

Section 17 of the *Ineligibility and Suspension Policy* (the Policy) requires suppliers, regardless of their status under the Policy, to submit a list of names with their bid or offer. The required list differs depending on the bidder or offeror's organizational structure:

- Suppliers including those bidding as joint ventures, whether incorporated or not, must provide a complete list of the names of all current directors.
- Privately owned corporations must provide a list of the owners' names.
- Suppliers bidding as sole proprietors, including sole proprietors bidding as joint ventures, whether incorporated or not, must provide a complete list of the names of all owners.
- Suppliers that are a partnership do not need to provide a list of names.

Suppliers may use this form to provide the required list of names with their bid or offer submission. Failure to submit this information with a bid or offer, where required, will render a bid or offer non-responsive, or the supplier otherwise disqualified for award of a contract or real property agreement. Please refer to [Information Bulletin: Required information to submit a bid or offer](#) for additional details.

List of names for [integrity verification form](#)



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 Contractor must perform the Work in accordance with the Statement of Work at Annex "A".

6.3 Standard Clauses and Conditions

As this contract 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 contract, including any individual SACC clauses incorporated by reference, will be interpreted as reference to DFO or its Minister.

All clauses and conditions identified in the Contract by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<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

6.3.1.1 2010B (2020-05-28), General Conditions - Professional Services (Medium Complexity) apply to and form part of the Contract.

6.3.2.1 Subsection 10 of 2010B (2020-05-28), General Conditions - Professional Services (Medium Complexity) – Invoice submission, is amended as follows:

Delete: 2010B 10 (2020-05-28), Invoice submission

Insert: **Invoice submission**

1. Invoices must be submitted in the Contractor's name to DFO.invoicing-facturation.MPO@DFO-MPO.gc.ca. The Contractor must submit invoices for each delivery or shipment; invoices must only apply to the Contract. Each invoice must indicate whether it covers partial or final delivery.
2. Invoices must show:
 - a. Contractor's Name and remittance physical address;
 - b. Contractor's CRA Business Number or Procurement Business Number (PBN);
 - c. Invoice Date;
 - d. Invoice Number;
 - e. Invoice Amount (broken down into item and tax amounts);
 - f. Invoice Currency (if not in Canadian dollars);
 - g. DFO Reference Number (PO Number or other valid reference number);
 - h. DFO Contact Name (to be inserted at contract award);
 - i. Description of the goods or services supplied (provide details of expenditures (such as item, quantity, unit of issue, fixed time



- labour rates and level of effort, subcontracts, as applicable) in accordance with the Basis of Payment, exclusive of Applicable Taxes;
- j. Deduction for holdback, if applicable;
 - k. The extension of the totals, if applicable; and
 - l. If applicable, the method of shipment together with date, case numbers and part or reference numbers, shipment charges and any other additional charges.
3. Applicable Taxes must be specified on all invoices as a separate item along with corresponding registration numbers from the tax authorities. All items that are zero-rated, exempt or to which Applicable Taxes do not apply, must be identified as such on all invoices.
4. By submitting an invoice, the Contractor certifies that the invoice is consistent with the Work delivered and is in accordance with 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 31, 2023.

6.5 Authorities

6.5.1 Contracting Authority

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: DFOtenders-soumissionsMPO@dfo-mpo.gc.ca

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 inserted at contract award)*

The Project Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
Address: _____
Telephone: _____



E-mail address: _____

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the 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. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.3 Contractor's Representative *(to be inserted at contract award)*

The Contractor's Representative for the Contract is:

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 [Public Service Superannuation Act](#) (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 [Contracting Policy Notice: 2012-2](#) of the Treasury Board Secretariat of Canada.

6.7 Payment

6.7.1 Basis of Payment

6.7.1.1 In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price as indicated in Annex "B" of \$ _____ *(to be inserted at contract award)*. Customs duties are included and Applicable Taxes are extra.

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 Authorized Travel and Living Expense

Canada will not pay any travel or living expenses associated with performing the Work.



6.7.3 Methods of Payment

6.7.3.1 Single Payment

Canada will pay the Contractor upon completion and delivery of the Work 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):

- i. Acquisition Card;
- ii. 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@DFO-MPO.gc.ca
CC: AP Coder: *(to be inserted at contract award)*

6.8.1.2 Refer to section 6.3.2.1

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.

6.9.2 SACC Manual Clauses

SACC Manual clause [A3015C](#) (2014-06-26), Certification - 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 **New Brunswick**.



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) the general conditions 2010B (2020-05-28), General Conditions - Professional Services (Medium Complexity);
- (c) Annex "A", Statement of Work;
- (d) Annex "B", Basis of Payment;
- (e) the Contractor's bid dated _____ *(to be inserted at contract award)*

6.12 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.

6.13 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "Dispute Resolution".



ANNEX “A” STATEMENT OF WORK

1.0 Scope

1.1 Title

Marine fish abundance and distribution: processing of a hydroacoustic time-series and spatiotemporal data analysis.

1.2 Introduction

Information about fish distribution in space and time is valuable both for understanding diverse ecological processes and for guiding applied fisheries management decisions. One important applied case is in quantifying how the relative biomass of a fish stock varies over time, known as an index of biomass or abundance.

This project is aimed at developing abundance and distribution indices for a variety of fish species in the southern Gulf of St. Lawrence (sGSL) using a hydroacoustic data time series. Hydroacoustic data has been collected between 2005 and 2020 while an annual multispecies bottom trawl survey conducted its fishing and navigating activities. The annual multi-species bottom trawl survey, conducted each September since 1971, provides information on the September abundance and distribution of many marine fish species throughout the sGSL. Total bottom trawl catch weights and numbers, representative length frequency and representative individual length-weight data has been recorded for each fish species in each survey set since 1971.

Ultimately, the results of the hydroacoustic data analysis will be used to develop species-specific spatial distribution time-series, and indices of abundance for individual stock assessments. Expected stock assessment inputs from this project are time series of spatially-aggregated biomass per year per species.

The work will be divided in two distinct tasks. Task 1 will cover the hydroacoustic data processing, and task 2 will cover the spatiotemporal analysis of the hydroacoustic and trawl data to derive distribution and abundance indices. More specifically, task 1 consists of (1) exploring the appropriate analysis methods for the available data (multi-frequency classification), (2) developing an analysis method specific to the species targeted by the survey, (3) carrying out the analysis of a temporal series of hydroacoustic data using the Echoview software and (4) writing the associated reports. Task 2 will consist of (1) using the acoustic data and trawl data to develop abundance indices using statistical methods of spatiotemporal data analysis, and (2) writing associated reports.

1.3 Objectives of the Requirement

The project has two main objectives:

First, process a time series of available hydroacoustic data from a sGSL survey.

Second, produce abundance and distribution indices for stock assessment inputs for specific species using the hydroacoustic and trawl data.

1.4 Background, Assumptions and Specific Scope of the Requirement

DFO Science performs stock assessments for commercially-exploited species. Fishery-independent abundance indices are major data sources for population models used in stock assessments. Developing a set of new abundance indices from a sGSL-wide acoustic survey has



the potential to improve the quality of a number of marine fish stock assessment for the Gulf Region.

2.0 Requirements

2.1 Tasks, Activities, Deliverables and Milestones

Task 1: Fisheries and Oceans Canada requires an analyst to perform the processing of a time series of available hydroacoustic data.

Raw files produced from an EK60 echosounder and 4 frequencies (38, 70, 120 and 200 kHz) are available for 9 years (2012 to 2020). Hac files from 2 frequencies (38 and 120 kHz) are also available for years 2005 and 2009 only. The files weight per year varies from 2 to 266 GB, the total weight of files to analyze is 966 GB. See table below for details.

year	date start	date end	files type	number of files	total files weight (GB)	number of frequencies	38	70	120	200	transceiver
2005	06-09-05	27-09-05	hac	246	2.06	2	x		x		
2009	08-09-09	01-10-09	hac	1002	8.05	2	x		x		
2012	01-09-12	26-09-12	raw	1809	87.5	4	x	x	x	x	ek60
2013	01-09-13	28-09-13	raw	1402	68.4	4	x	x	x	x	ek60
2014	02-09-14	28-09-14	raw	822	32.8	4	x	x	x	x	ek60
2015	02-09-15	30-09-15	raw	1661	85.1	4	x	x	x	x	ek60
2016	01-09-16	28-09-16	raw	1606	164.4	4	x	x	x	x	ek60
2017	05-09-17	27-09-17	raw	1302	266.6	4	x	x	x	x	ek60
2018	07-09-18	02-10-18	raw	1516	77.6	4	x	x	x	x	ek60
2019	06-09-19	01-10-19	raw	1993	102.4	4	x	x	x	x	ek60
2020	10-09-20	05-10-20	raw	1395	71.4	4	x	x	x	x	ek60

Activities are:

- (1) Selecting the appropriate target classification methods based on available data and the scientific literature (single frequency vs multi-frequency classification, using trawl catch data, etc.),
- (2) developing a processing method specific to the individual species targeted by the survey,
- (3) carrying out the processing of a temporal series of hydroacoustic data for selected species using the Echoview software and
- (4) writing the associated reports.

Task 2: Fisheries and Oceans Canada requires an analyst to develop abundance indices for a variety of fish species in the sGSL.

Activities are:



(1) Using the hydroacoustic data produced in Task 1 and trawl catch data (species identification, individual fish biological data [age, length, weight, sex, maturity]) to develop yearly fish distribution and abundance indices using modern statistical methods of spatiotemporal data analysis.

(2) writing associated reports.

2.2 Specifications and Standards

The following specifications and standards must be met and maintained throughout the contract period:

Task 1

- The successful contractor must establish a method for data transfer, communication, consultation and progress updates between DFO and the contractor;
- The Echoview Software must be used to produce the hydroacoustic data analysis;
- If automation is used, the EchoviewR package must be used and R scripts must be provided to DFO.
- After hydroacoustic data and trawl catch data exploration, the contractor must identify the echogram analysis method that will provide the most accurate species classification method.
- Standardized Echoview data flow must be applied to all years of hydroacoustic data and provided to DFO.
- Analysis results must be provided in standard exports .csv files. Hydroacoustic data quality check must be performed in R software, scripts must be provided to DFO.
- Based on the methods developed/used and the results obtained, the contractor and DFO will consult on the decision the produce either a Canadian Science Advisory Secretariat (CSAS) report or a primary publication.
- The contractor must write the document for publication in collaboration with DFO.

Task 2

- The successful contractor must use the scientific literature to identify the best spatiotemporal data analysis method to produce distribution and abundance indices from a non-stratified sampling design hydroacoustic survey.
- The contractor must apply the identified spatiotemporal method to pelagic/semipelagic/groundfish species using the hydroacoustic data and compare trends in indices with trawl catch data.
- The contractor must identify for which species the distribution and abundance indices are valid.
- The contractor must use the DFO database of trawl catch data and individual fish biological characteristics (species identification, age, length, weight, sex, maturity) with the hydroacoustic data from Task 1 to develop yearly indices of abundance and distribution for selected species of fish.
- Based on the methods developed/used and the results obtained, the contract and DFO will consult on the decision the produce either a Canadian Science Advisory Secretariat (CSAS) report or a primary publication.
- The contractor must write the document for publication in collaboration with DFO.



2.3 Change Management Procedures

All changes must be made in writing and agreed to by both parties.

2.4 Ownership of Intellectual Property

No IP will be generated from this project.

3.0 Other Terms and Conditions of the Statement of work (SOW)

3.1 DFO Support

The DFO will be responsible for the following in support of the contract:

- Provision of the hydroacoustic data.
- Provision of trawl catch data.
- Consultation on echogram analysis and data analysis methods.
- Collaboration on writing the draft documents for publication.

3.2 Contractor's Obligations

The contractor will be responsible for the following in support of the contract: See section 2.0

3.3 Deliverables

The following deliverables must be met in relation to this project:

Task 1:

- (a) Echoview files of the analyzed echograms
- (b) Csv files of exported echogram analysis
- (c) R files of quality check and data analysis scripts
- (d) A database of yearly results
- (e) Documents of draft publications

Task 2:

- (f) R files of data analysis scripts
- (g) A time-series of abundance indices for selected species
- (h) A time-series of distribution indices for selected species
- (i) A database of results
- (j) Documents of draft publications

3.4 Location of Work, Work site and Delivery Point

Work is all computer-based and can be done remotely.

3.5 Language of Work

The language of work shall be English or French.



4.0 Project Schedule

4.1 Expected Start and Completion Dates

Task 1: Contract to start upon award and latest completion date is September 1, 2022.

Task 2: Earliest expected starting date is September 2 2022 and latest completion date is March 31 2023.



ANNEX “B” BASIS OF PAYMENT

All costs for conducting the project are the responsibility of the contractor and must be reflected in the bid price. The contractor will be paid according to unit of work completed (tasks). A bidder can bid separately for Task 1 and 2 and does not need to bid for both. Only bid for the task of interest. A maximum price of \$90,000.00 is available per task.

Task 1:

Bidders must bid a price to complete Task 1 as a whole. This cost must include any computer material needed, Echoview licenses or data transfer costs. The work must be completed before the end of March 2022. The amount of work will be determined by the bidder based on their experience using Echoview tools and writing scientific reports. A table is provided describing the number frequencies, the number of files and the total file size of the hydroacoustic data to analyse. The distance travelled by the research vessel (roughly equivalent to the length of the continuous recording of hydroacoustic data) is approximately 1600 nautical miles every year.

Task 1: Hydroacoustic data processing

Deliverable	Description	Up-to Quantity	Total all inclusive price (exclusive of HST):
<ul style="list-style-type: none">Echoview files of the analyzed echogramsCsv files of exported echogram analysisR files of quality check and data analysis scriptsA database of yearly resultsDocuments of draft publications	Processing of a temporal series of hydroacoustic data using the Echoview software as per Annex A Statement of Work	1	\$ _____

Task 2:

Bidders must bid a price to complete Task 2 as a whole. The amount of work will be determined by the bidder based on their experience performing spatiotemporal data analysis and writing scientific reports.

Bidders must bid a price to complete the activities of Task 2. This cost must include any computer material needed, Echoview licenses or data transfer costs. The work is expected to begin in April 2022 (as task 1 is completed) and must be completed before the end of March 2023.



Task 2: Spatiotemporal data analysis

Deliverable	Description	Up-to Quantity	Total all inclusive price (exclusive of HST):
<ul style="list-style-type: none">• R files of data analysis scripts• A time-series of abundance indices for selected species• A time-series of distribution indices for selected species• A database of results• Documents of draft publications	Using the hydroacoustic data produced in Task 1 to develop fish distribution and abundance indices using statistical methods of spatiotemporal data analysis as per Annex A Statement of Work.	1	\$ _____

Contractors will be paid on the basis of Tasks being completed.

The contractor will be paid at the end of the fiscal year (during the month of March) after providing the deliverables and after submitting an invoice to DFO. Invoice and deliverables will be verified by project authority before payment is authorised.



ANNEX "C" EVALUATION CRITERIA

Mandatory Criteria

Proposals will be evaluated in accordance with the Mandatory Criteria as detailed herein. Bidders' Proposals must clearly demonstrate that they meet all Mandatory Criteria for the proposal to be considered for further evaluation. Proposals not meeting the Mandatory Criteria will be excluded from further consideration.

Mandatory and Rated

To demonstrate experience, the Bidder must cite specific examples from their work history. For the purposes of this proposal, "experience" shall infer that the Bidder has gained this experience while performing a task or duty in which the experience criterion was the primary focus of the work conducted. Project experience is to be used to demonstrate compliancy and must include the following information:

- 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 resources;
- A description of the activities performed by the proposed resources; and,
- The name and contact information of the client Project Authority.

The Bidder must include the following table in their proposal and providing the proposal page number or section that contains information to verify that the criteria has been met.

Task 1. Hydroacoustic data processing

Mandatory Criteria:

No.	Mandatory Criteria	BIDDER RESPONSE (response should make reference to the relevant proof in bidder proposal and/or appended documentation).
M1	The Bidder must demonstrate completing one (1) data analysis project (hydroacoustic data related or not) where the R software programming was used.	
M2	The Bidder must demonstrate two (2) scientific publications in international peer-reviewed journals within the past 5 years.	
M3	The Bidder must demonstrate (3) hydroacoustic data analysis project where the Echoview software was used to read, clean and process the echograms.	



Rated Criteria:

Criteria	Rated Criteria	Score	BIDDER RESPONSE (response should make reference to the relevant proof in bidder proposal and/or appended documentation).
R1	The Bidder demonstrates, through project descriptions, previous experience working on hydroacoustic data analysis, which included reading the data, cleaning the data, analyzing the echograms, exporting the echogram analysis product and using the product to quantify either the single targets or schools (volume targets) of interest to the research question: <ul style="list-style-type: none">• 1 project = 10 points• 2 to 4 projects = 20 points;• 5 or more projects = 40 points	/40	
R2	The Bidder demonstrates through project descriptions experience in the coordination of tasks, data management, and quality control for projects of similar size and scope outlined in Annex A (months of work, high volume of data to process, high volume of products, time series). <ul style="list-style-type: none">• 1 project = 5 points;• 2 project = 10 points;• 3 or more projects = 15 points	/15	
R3	The Bidder is able to perform both Task 1 and Task 2. <ul style="list-style-type: none">• No = 0 points• Yes = 10 points	/10	
Total Score		/65	

Task 2. Spatiotemporal data analysis

Mandatory Criteria:

No.	Mandatory Criteria	BIDDER RESPONSE (response should make reference to the relevant proof in bidder proposal and/or appended documentation).
M1	The Bidder must list and describe two (2) statistical data analysis projects where the R software programming was used.	
M2	The Bidder must demonstrate two (2) scientific publications in international peer-reviewed journals within the past 5 years.	



Rated Criteria:

Criteria	Rated Criteria	Score	BIDDER RESPONSE (response should make reference to the relevant proof in bidder proposal and/or appended documentation).
R1	The Bidder demonstrates, through project descriptions, previous experience in using modern statistical tools to analyse spatiotemporal time series of data, which included exploring and cleaning the data, performing the statistical analysis and relevant diagnostic tests, producing data products (figures and tables) of interest to the research question: <ul style="list-style-type: none">• 1 project = 10 points• 2 to 4 projects = 20 points;• 5 or more projects = 40 points	/40	
R2	The Bidder demonstrates through project descriptions experience in the coordination of tasks, data management, and quality control for projects of similar size and scope (months of work, high volume of data to process, high volume of products, time series). <ul style="list-style-type: none">• 1 project = 5 points;• 2 project = 10 points;• 3 or more projects = 15 points	/15	
R3	The Bidder is able to perform both Task1 and Task 2. <ul style="list-style-type: none">• No = 0 points• Yes = 10 points	/10	
Total Score		/65	