

**RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS À:**  
**Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions  
Travaux publics et Services gouvernementaux  
Canada**  
**Pacific Region**  
**401 - 1230 Government Street**  
**Victoria, B.C.**  
**V8W 3X4**  
**Bid Fax: (250) 363-3344**

**REQUEST FOR PROPOSAL  
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government  
Services 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, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services  
Gouvernementaux 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 annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

<b>Title - Sujet</b> CO 2 SENSOR	
<b>Solicitation No. - N° de l'invitation</b> F1625-140147/A	<b>Date</b> 2015-01-20
<b>Client Reference No. - N° de référence du client</b> F1625-140147	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$VIC-253-6647	
<b>File No. - N° de dossier</b> VIC-4-37231 (253)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2015-03-02</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Pacific Standard Time PST
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Kellen, Reuben	<b>Buyer Id - Id de l'acheteur</b> vic253
<b>Telephone No. - N° de téléphone</b> (250) 363-3844 ( )	<b>FAX No. - N° de FAX</b> (250) 363-0395
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF FISHERIES AND OCEANS 9860 W.SAANICH RD P.O.BOX 6000 SIDNEY British Columbia V8L4B2 Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Public Works and Government Services Canada - Pacific  
Region  
401 - 1230 Government Street  
Victoria, B. C.  
V8W 3X4

<b>Delivery Required - Livraison exigée</b> See Herein	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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## SEAWATER PCO2 MEASUREMENT DEVICE

### PART 1 - GENERAL INFORMATION

#### 1.1 Introduction

The bid solicitation is divided into six parts plus attachments annexes as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Requirement, the Basis of Payment, and any other annexes.

#### 1.2 Summary

1. The Statement of requirement is as follows:
  - a.) to supply and deliver one (1) Autonomous submersible, seawater pCO<sub>2</sub> measurement device in accordance with the associated Technical Specifications detailed in the Requirement attached as Annex A.
2. Term of Contract  
Delivery on or before March 31, 2015.

#### 1.3 Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex A.

#### 1.4 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.

#### 1.5 Trade Agreements

The requirement is subject to the provisions of the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

## **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 [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](#) (2014-09-25) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

### **2.2 Submission of Bids**

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

### **2.3 Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) 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 British Columbia.

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 sections as follows:

Section I: Technical Bid (2 hard copies)  
Section II: Financial Bid (1 hard copy)  
Section III: Certifications (1 hard copy)

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

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

#### **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. The total amount of Applicable Taxes must be shown separately.

##### **3.1.1 Exchange Rate Fluctuation**

[C3011T](#) (2013-11-06), Exchange Rate Fluctuation

#### **Section III: Certifications**

Bidders must submit the certifications 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 – Mandatory Technical Criteria

#### **4.1.2 Financial Evaluation**

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

### **4.2 Basis of Selection**

- 4.2.1** SACC Manual Clause [A0031T](#) (2010-08-16) Basis of Selection – Mandatory Technical Criteria

## **PART 5 - CERTIFICATIONS**

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

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default in carrying out any of its obligations under the Contract, 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 may render the bid non-responsive or constitute a default under the Contract.

### **5.1 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.

#### **5.1.1 Integrity Provisions - Associated Information**

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Bid of Standard

Instructions 2003. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

#### **5.1.2 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 ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from Employment and Social Development Canada (ESDC) - Labour's website.

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.

### **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 this Contract.

#### **6.2 Requirement**

The Contractor must provide the items detailed under the "Requirement" 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 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**

2010A (2014-11-27), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

##### **6.3.2 Supplemental General Conditions**

*Supplemental General Conditions* 4003 (2010-08-16), Licensed Software apply to and form part of the Contract.

#### **6.4 Term of Contract**

##### **6.4.1 Delivery Date**

All the deliverables must be received on or before March 31, 2015.

##### **6.4.2 Shipping Instructions - Delivered Duty Paid**

Goods must be consigned and delivered to the destination specified in the contract:



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Incoterms 2000 "DDP Delivered Duty Paid" *Sidney, BC, Canada.*

## **6.5 Authorities**

### **6.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Name: Reuben Kellen  
Title: Contracting Officer (Co-op)  
Public Works and Government Services Canada  
Acquisitions Branch  
Directorate: Victoria Commercial Acquisitions  
Address: 1230 Government Street

Telephone: 250-363-3844  
Facsimile: 250-363-3960  
E-mail address: [Reuben.Kellen@pwgsc-tpsgc.gc.ca](mailto:Reuben.Kellen@pwgsc-tpsgc.gc.ca)

In the event you are unable to contact the above noted Authority, please contact:  
PAC.VICCA@tpsgc-pwgsc.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 Technical Authority**

The Technical Authority for the Contract is provided upon Contract Award

The Technical Authority named above 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 Technical Authority, however the Technical 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**

Name and telephone numbers of the person responsible for production:

Name: \_\_\_\_\_ Telephone No: \_\_\_\_\_

Facsimile No.: \_\_\_\_\_ E-mail: \_\_\_\_\_

Name and telephone numbers of the person responsible for delivery:

Name: \_\_\_\_\_ Telephone No: \_\_\_\_\_

Facsimile No.: \_\_\_\_\_ E-mail: \_\_\_\_\_

---

## **6.6 Payment**

### **6.6.1 Basis of Payment**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price as specified in Annex B, Basis of Payment for a cost of \$ \_\_\_\_\_. Customs duties are included and Applicable Taxes are extra.

For the firm price portion of the Work only, Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

### **6.6.2 Single Payment**

SACC Manual clause H1000C 2008-05-12 Single Payment

## **6.7 Invoicing Instructions**

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
  - a. The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
  - b. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

## **6.8 Certifications**

### **6.8.1 Compliance**

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing associated information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the associated information, or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

## **6.9 Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force \_\_\_\_\_.

## **6.10 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 supplemental general conditions 4003 (2010-08-16), Licensed Software;
- (c) the general conditions 2010A (2014-11-27), General Conditions - Goods (Medium Complexity);
- (d) Annex A, Requirement;
- (e) Annex B, Basis of Payment;
- (f) the Contractor's bid dated \_\_\_\_\_

## **6.11 SACC Manual Clauses**

A9068C (2010-01-11), Government Site Regulations;  
G1005C (2008-05-12), Insurance.

## **ANNEX A REQUIREMENT**

Autonomous submersible, seawater pCO<sub>2</sub> measurement device

### **1.0 SCOPE**

#### **1.1 Identification**

Autonomous submersible, seawater pCO<sub>2</sub> measurement device

#### **1.2 Requirement**

The Department of Fisheries and Oceans – Ocean Science Division (OSD) requires one (1) autonomous, submersible, seawater pCO<sub>2</sub> measurement device.

The scope of supply must include all required hardware, software, and documentation.

#### **1.3 Background**

Fisheries and Ocean routinely measures the partial pressure of CO<sub>2</sub> (pCO<sub>2</sub>) in parts of the ocean. The project for which this device is designed, includes measuring changes in air/sea gas exchange during times of active sea-ice growth and sea-ice melt. More specifically changes in the pCO<sub>2</sub> in seawater that is directly impacted by brine rejection and freshening. The same measurements will be obtained as the opposite occurs (ice melts and surface water freshens). The success of these measurements depends strongly on the quick measurement of the partial pressure of carbon dioxide in seawater where the salinity changes rapidly; and the long term stability of the instrument that is deployed to make these measurements.

### **2.0 TECHNICAL REQUIREMENTS**

#### **2.1 General**

The following documents, of the exact issue shown, form part of this Requirement to the extent specified herein. In the event of conflict between the documents referenced herein and the contents of this Requirement, the Requirement shall take precedence.

#### **2.2 Specifications**

A The supplier must provide a complete autonomous submersible, seawater pCO<sub>2</sub> measurement system including all required hardware and software. The system must be capable of long term deployment, in cold seawater at full ocean depth. The system must have a fast equilibration time, response time as well as high accuracy and precision.

Detailed design and performance requirements are as follows:

1. Must have a fast response time of 1.5minutes (90 seconds) or faster (less than 90 seconds)
2. Must be capable to a sampling rate of 1 per second or 1 hz
3. Must be able to resolve all concentration/partial pressures of CO<sub>2</sub> between 200-1000uatm
4. must be accurate to within 1 uatm with a precision of 1%
5. must be capable of making measurements (with the same accuracy and precision mentioned above) at sub-zero temperatures (i.e. -2.0 oC).
6. must be fully capable of submersion to full ocean depth (6000m depth or deeper)
7. Must have anti-fouling protection for long term stable deployments
  - stability is defined a low drift (less than 10 uatm during a 1 year long deployment)
8. Must be capable of battery powered and cabled operations and must have internal data logging capability.

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9. deliverable before March 31st , 2015

B The supplier must provide complete documentation for the submersible pCO<sub>2</sub> measurement system describing both hardware and software, as follows:

1. Hardware manual describing all physical components.
2. Parts list including sourcing list for hardware.
3. Operator/Training manual.
4. Software manual/guide book for foreground software.

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## ANNEX B

### BASIS OF PAYMENT

#### Bidder's Instructions

The Bidder should provide their bid pricing in the following format, and include it in their financial bid. Bids will be evaluated by taking the aggregate of the unit prices offered below.

The pricing of the warranty options will not be evaluated.

Item	Description	Price (CAD\$)
1.	One (1) autonomous submersible, seawater pCO2 measurement device, with all associated components and manuals, in accordance with Annex A, Requirement, and the bidder's proposal dated _____.	\$ _____
2.	Delivery Incoterms 2000 Delivered Duty Paid (DDP) to the Institute of Ocean Sciences in Sidney, BC.	\$ _____
Evaluated Price (CAD\$)		\$ _____
<b>Options:</b>		
Extended Warranty (if available)		
2-years		\$ _____
3-years		\$ _____
4-years		\$ _____
5-years		\$ _____
6-years		\$ _____

*GST is extra.*

**DELIVERY OFFERED (ARO):** \_\_\_\_\_

## ANNEX C

### MANDATORY TECHNICAL CRITERIA

The following are the minimum Government of Canada requirements for the **autonomous submersible seawater pCO<sub>2</sub> measuring device**

The Bidder must provide proof and/or verification of the Mandatory Technical Criteria herein through supporting documentation such as technical brochures, certificate of qualifications and letters of authenticity from industry associations, as applicable.

Item	Minimum Mandatory Requirements	Pass / Fail	Bid Ref Page #	Comments
1.	Response time: <ul style="list-style-type: none"> <li>Acceptable equilibration / response time is 1.5min (90 seconds) or less (faster)</li> </ul>			
2.	Data Logging operations <ul style="list-style-type: none"> <li>Capability for physical (wired) electronic interface for both power and data logging.</li> <li>Capability for autonomous logging – internal data storage for non-cabled deployment</li> <li>Must be capable of battery powered operation, but external power source (battery) need not be included in bid.</li> </ul>			
3.	Precision and Accuracy <ul style="list-style-type: none"> <li>Must resolve 1uatm with a precision of 1%.</li> </ul>			
4.	Sample rate: <ul style="list-style-type: none"> <li>1Hz (1 measurement per second) or faster</li> </ul>			
5.	pCO <sub>2</sub> measurement range: <ul style="list-style-type: none"> <li>200 – 1000uatm</li> </ul>			
6.	Fully operational Temperature range <ul style="list-style-type: none"> <li>Minus 2 to 20 Celsius</li> <li>No loss of precision or accuracy in above range</li> </ul>			
7.	Fully Operational at full ocean depth <ul style="list-style-type: none"> <li>6000m or deeper</li> </ul>			
8.	Anti-fouling protection – long term stability: <ul style="list-style-type: none"> <li>Must be capable of low drift during a 1 year long deployment</li> <li>Low drift defined as less than 10uatm over a 1 year long deployment</li> </ul>			
9.	Other requirements <ul style="list-style-type: none"> <li>Factory recalibration after 1<sup>st</sup> year</li> </ul>			