



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

**Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions  
Travaux publics et Services gouvernementaux  
Canada**

1713 Bedford Row  
Halifax, N.S./Halifax, (N.É.)  
Halifax  
Nova Scotia  
B3J 1T3  
Bid Fax: (902) 496-5016

**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> Software Defined Sonobuoy Receiver	
<b>Solicitation No. - N° de l'invitation</b> W7707-176015/B	<b>Date</b> 2019-07-02
<b>Client Reference No. - N° de référence du client</b> W7707-17-6015	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$HAL-203-5898	
<b>File No. - N° de dossier</b> HAL-8-80114 (203)	<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 2019-07-29</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Atlantic Daylight Saving Time ADT
<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> MacDonald (HAL), Isabelle	<b>Buyer Id - Id de l'acheteur</b> hal203
<b>Telephone No. - N° de téléphone</b> (902) 403-9839 ( )	<b>FAX No. - N° de FAX</b> (902) 496-5016
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF NATIONAL DEFENCE 9 GROVE ST DARTMOUTH NOVA SCOTIA B3A 3C5 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**

Atlantic Region Acquisitions/Région de l'Atlantique  
Acquisitions  
1713 Bedford Row  
Halifax, N.S./Halifax, (N.É.)  
Halifax  
Nova Scot  
B3J 1T3

<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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This RFP will require the production of or access to control goods that are subject to Defence Production Act, R.S. 1985, c. D-1, bidders are advised that within Canada only persons who are registered, exempt or excluded under the Controlled Goods Program (CGP) are lawfully entitled to examine, possess or transfer controlled goods.

Visit the link below for steps on how to register in the controlled goods program.

<http://www.tpsgc-pwgsc.gc.ca/pmc-cgp/enregistrement-register/pmcinscrire-cgprester-eng.html>

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**This bid solicitation cancels and supersedes previous bid solicitation number W7707-176015/A dated 2019/03/28 with a closing of 2019/05/10 at 14:00. A debriefing or feedback session will be provided upon request to bidders/offerors/suppliers who bid on the previous solicitation.**

## **PART 1 - GENERAL INFORMATION**

### **1.1 Security Requirements**

No security requirement

### **1.2 Statement of Requirement**

The requirement is detailed under 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 World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and the Canadian Free Trade Agreement (CFTA)."

### **1.5 Phased Bid Compliance Policy**

The Phased Bid Compliance Process applies to this requirement.

### **1.6 epost Connect service**

This bid solicitation allows bidders to use the epost Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

## **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.

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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 2018-05-22 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: 90 days

### 2.1.1 **SACC Manual Clauses**

#### **SACC Manual Clause A9130T 2014-11-27 Controlled Goods Program- Bid**

### 2.2 **Submission of Bids**

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

**Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions  
Travaux publics et Services gouvernementaux  
Canada  
1713 Bedford Row  
Halifax, N.S./Halifax, (N.É.)  
Halifax  
Nova Scotia  
B3J 1T3  
Bid Fax: (902) 496-5016**

[TPSGC.RARceptionSoumissionsNE-ARBidReceivingNS.PWGSC@tpsgc-pwgsc.gc.ca](mailto:TPSGC.RARceptionSoumissionsNE-ARBidReceivingNS.PWGSC@tpsgc-pwgsc.gc.ca)

Bids/Offer will be not be accepted if emailed directly to this email address. This email is to initiate an ePost Connect conversation, as detailed in the Standard Instructions.

#### 2.2.1 **Improvement of Requirement During Solicitation Period**

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least 14 days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

### 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 Nova Scotia.

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

### 3.1 Bid Preparation Instructions

- If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. Bidders must provide their bid in a single transmission. The epost Connect service has the capacity to receive multiple documents, up to 1GB per individual attachment.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid  
Section II: Financial Bid  
Section III: Certifications

- If the Bidder chooses to submit its bid in hard copies, Canada requests that the Bidder submits its bid in separately bound sections as follows:

Section I: Technical Bid (one hard copy)  
Section II: Financial Bid (one hard copy)

Section III: Certifications (one hard copy)

If there is a discrepancy between the wording of the soft copy on electronic media and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

- If the Bidder is simultaneously providing copies of its bid using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy

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provided through epost Connect service, the wording of the electronic copy provided through epost Connect service will have priority over the wording of the other copies.

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 hard copy 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](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573) (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). 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.

### **3.1.1 Electronic Payment of Invoices – Bid**

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “C” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “C” Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

### **3.1.2 Exchange Rate Fluctuation**

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

### **3.1.3 SACC Manual Clauses**

Controlled Goods Program- Bid-A9130T-2014-11-27

## **Section III: Certifications**

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

## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

**Canada will use the Phased Bid Compliance Process described below.**

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## 4.1 Phased Bid Compliance Process

### 4.1.1.1 (2018-07-19) General

- (a) Canada is conducting the PBCP described below for this requirement.
- (b) Notwithstanding any review by Canada at Phase I or II of the PBCP, Bidders are and will remain solely responsible for the accuracy, consistency and completeness of their Bids and Canada does not undertake, by reason of this review, any obligations or responsibility for identifying any or all errors or omissions in Bids or in responses by a Bidder to any communication from Canada.

THE BIDDER ACKNOWLEDGES THAT THE REVIEWS IN PHASE I AND II OF THIS PBCP ARE PRELIMINARY AND DO NOT PRECLUDE A FINDING IN PHASE III THAT THE BID IS NON-RESPONSIVE, EVEN FOR MANDATORY

REQUIREMENTS WHICH WERE SUBJECT TO REVIEW IN PHASE I OR II AND NOTWITHSTANDING THAT THE BID HAD BEEN FOUND RESPONSIVE IN SUCH EARLIER PHASE. CANADA MAY DEEM A BID TO BE NON-RESPONSIVE TO A MANDATORY REQUIREMENT AT ANY PHASE.

THE BIDDER ALSO ACKNOWLEDGES THAT ITS RESPONSE TO A NOTICE OR A COMPLIANCE ASSESSMENT REPORT (CAR) (EACH DEFINED BELOW) IN PHASE I OR II MAY NOT BE SUCCESSFUL IN RENDERING ITS BID RESPONSIVE TO THE MANDATORY REQUIREMENTS THAT ARE THE SUBJECT OF THE NOTICE OR CAR, AND MAY RENDER ITS BID NON-RESPONSIVE TO OTHER MANDATORY REQUIREMENTS.

- (c) Canada may, in its discretion, request and accept at any time from a Bidder and consider as part of the Bid, any information to correct errors or deficiencies in the Bid that are clerical or administrative, such as, without limitation, failure to sign the Bid or any part or to checkmark a box in a form, or other failure of format or form or failure to acknowledge; failure to provide a procurement business number or contact information such as names, addresses and telephone numbers; inadvertent errors in numbers or calculations that do not change the amount the Bidder has specified as the price or of any component thereof that is subject to evaluation. This shall not limit Canada's right to request or accept any information after the bid solicitation closing in circumstances where the bid solicitation expressly provides for this right. The Bidder will have the time period specified in writing by Canada to provide the necessary documentation. Failure to meet this deadline will result in the Bid being declared non-responsive.
- (d) The PBCP does not limit Canada's rights under Standard Acquisition Clauses and Conditions (SACC) 2003 (2018-05-22) Standard Instructions – Goods or Services – Competitive Requirements nor Canada's right to request or accept any information during the solicitation period or after bid solicitation closing in circumstances where the bid solicitation expressly provides for this right, or in the circumstances described in subsection (c).
- (e) Canada will send any Notice or CAR by any method Canada chooses, in its absolute discretion. The Bidder must submit its response by the method stipulated in the Notice or CAR. Responses are deemed to be received by Canada at the date and time they are delivered to Canada by the method and at the address specified in the Notice or CAR. An email response permitted by the Notice or CAR is deemed received by Canada on the date and time it is received in Canada's email inbox at Canada's email address specified in the Notice or CAR. A Notice or CAR sent by Canada to the Bidder at any address provided by the Bidder in or pursuant to the Bid is deemed received by the Bidder on the date it is sent by Canada. Canada is not responsible for late receipt by Canada of a response, however caused.

#### 4.1.1.2 (2018-03-13) Phase I: Financial Bid

- (a) After the closing date and time of this bid solicitation, Canada will examine the Bid to determine whether it includes a Financial Bid and whether any Financial Bid includes all information required by the solicitation. Canada's review in Phase I will be limited to identifying whether any information that is required under the bid solicitation to be included in the Financial Bid is missing from the Financial Bid. This review will not assess whether the Financial Bid meets any standard or is responsive to all solicitation requirements.
- (b) Canada's review in Phase I will be performed by officials of the Department of Public Works and Government Services.
- (c) If Canada determines, in its absolute discretion that there is no Financial Bid or that the Financial Bid is missing all of the information required by the bid solicitation to be included in the Financial Bid, then the Bid will be considered non-responsive and will be given no further consideration.
- (d) For Bids other than those described in c), Canada will send a written notice to the Bidder ("Notice") identifying where the Financial Bid is missing information. A Bidder, whose Financial Bid has been found responsive to the requirements that are reviewed at Phase I, will not receive a Notice. Such Bidders shall not be entitled to submit any additional information in respect of their Financial Bid.
- (e) The Bidders who have been sent a Notice shall have the time period specified in the Notice (the "Remedy Period") to remedy the matters identified in the Notice by providing to Canada, in writing, additional information or clarification in response to the Notice. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the Notice.
- (f) In its response to the Notice, the Bidder will be entitled to remedy only that part of its Financial Bid which is identified in the Notice. For instance, where the Notice states that a required line item has been left blank, only the missing information may be added to the Financial Bid, except that, in those instances where the addition of such information will necessarily result in a change to other calculations previously submitted in its Financial Bid, (for example, the calculation to determine a total price), such necessary adjustments shall be identified by the Bidder and only these adjustments shall be made. All submitted information must comply with the requirements of this solicitation.
- (g) Any other changes to the Financial Bid submitted by the Bidder will be considered to be new information and will be disregarded. There will be no change permitted to any other Section of the Bidder's Bid. Information submitted in accordance with the requirements of this solicitation in response to the Notice will replace, in full, **only** that part of the original Financial Bid as is permitted above, and will be used for the remainder of the bid evaluation process.
- (h) Canada will determine whether the Financial Bid is responsive to the requirements reviewed at Phase I, considering such additional information or clarification as may have been provided by the Bidder in accordance with this Section. If the Financial Bid is not found responsive for the requirements reviewed at Phase I to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.

- (i) Only Bids found responsive to the requirements reviewed in Phase I to the satisfaction of Canada, will receive a Phase II review.

#### 4.1.1.3 (2018-03-13) Phase II: Technical Bid

- (a) Canada's review at Phase II will be limited to a review of the Technical Bid to identify any instances where the Bidder has failed to meet any Eligible Mandatory Criterion. This review will not assess whether the Technical Bid meets any standard or is responsive to all solicitation requirements. Eligible Mandatory Criteria are all mandatory technical criteria that are identified in this solicitation as being subject to the PBCP. Mandatory technical criteria that are not identified in the solicitation as being subject to the PBCP, will not be evaluated until Phase III.
- (b) Canada will send a written notice to the Bidder (Compliance Assessment Report or "CAR") identifying any Eligible Mandatory Criteria that the Bid has failed to meet. A Bidder whose Bid has been found responsive to the requirements that are reviewed at Phase II will receive a CAR that states that its Bid has been found responsive to the requirements reviewed at Phase II. Such Bidder shall not be entitled to submit any response to the CAR.
- (c) A Bidder shall have the period specified in the CAR (the "Remedy Period") to remedy the failure to meet any Eligible Mandatory Criterion identified in the CAR by providing to Canada in writing additional or different information or clarification in response to the CAR. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the CAR.
- (d) The Bidder's response must address only the Eligible Mandatory Criteria listed in the CAR as not having been achieved, and must include only such information as is necessary to achieve such compliance. Any additional information provided by the Bidder which is not necessary to achieve such compliance will not be considered by Canada, except that, in those instances where such a response to the Eligible Mandatory Criteria specified in the CAR will necessarily result in a consequential change to other parts of the Bid, the Bidder shall identify such additional changes, provided that its response must not include any change to the Financial Bid.
- (e) The Bidder's response to the CAR should identify in each case the Eligible Mandatory Criterion in the CAR to which it is responding, including identifying in the corresponding section of the original Bid, the wording of the proposed change to that section, and the wording and location in the Bid of any other consequential changes that necessarily result from such change. In respect of any such consequential change, the Bidder must include a rationale explaining why such consequential change is a necessary result of the change proposed to meet the Eligible Mandatory Criterion. It is not up to Canada to revise the Bidder's Bid, and failure of the Bidder to do so in accordance with this subparagraph is at the Bidder's own risk. All submitted information must comply with the requirements of this solicitation.
- (f) Any changes to the Bid submitted by the Bidder other than as permitted in this solicitation, will be considered to be new information and will be disregarded. Information submitted in accordance with the requirements of this solicitation in response to the CAR will replace, in full, **only** that part of the original Bid as is permitted in this Section.

- (g) Additional or different information submitted during Phase II permitted by this section will be considered as included in the Bid, but will be considered by Canada in the evaluation of the Bid at Phase II only for the purpose of determining whether the Bid meets the Eligible Mandatory Criteria. It will not be used at any Phase of the evaluation to increase or decrease any score that the original Bid would achieve without the benefit of such additional or different information. For instance, an Eligible Mandatory Criterion that requires a mandatory minimum number of points to achieve compliance will be assessed at Phase II to determine whether such mandatory minimum score would be achieved with such additional or different information submitted by the Bidder in response to the CAR. If so, the Bid will be considered responsive in respect of such Eligible Mandatory Criterion, and the additional or different information submitted by the Bidder shall bind the Bidder as part of its Bid, but the Bidder's original score, which was less than the mandatory minimum for such Eligible Mandatory Criterion, will not change, and it will be that original score that is used to calculate any score for the Bid
- (h) Canada will determine whether the Bid is responsive for the requirements reviewed at Phase II, considering such additional or different information or clarification as may have been provided by the Bidder in accordance with this Section. If the Bid is not found responsive for the requirements reviewed at Phase II to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.
- (i) Only Bids found responsive to the requirements reviewed in Phase II to the satisfaction of Canada, will receive a Phase III evaluation.

#### **4.1.1.4 (2018-03-13) Phase III: Final Evaluation of the Bid**

- (a) In Phase III, Canada will complete the evaluation of all Bids found responsive to the requirements reviewed at Phase II. Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) A Bid is non-responsive and will receive no further consideration if it does not meet all mandatory evaluation criteria of the solicitation.

## **4.2 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.

### **4.2.1 Technical Evaluation**

#### **4.1.1.1 Mandatory Technical Criteria**

**Please refer to Annex A, Statement of Requirement**

### **4.2.2 Financial Evaluation**

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

### 4.3 Basis of Selection

#### 4.3.1 Basis of Selection - Mandatory Technical Criteria

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

## 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

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.

### 5.2 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) (<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.

## 5.2.2 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](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/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.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex titled Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

## 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

6.1.1 There is no security requirement applicable to the Contract.

### 6.2 Statement of Requirement

The Contractor must provide the items in accordance with 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) (<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](#) 2018-06-21, General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

Solicitation No. - N° de l'invitation  
W7707-176015/B  
Client Ref. No. - N° de réf. du client  
W7707-176015

Amd. No. - N° de la modif.  
File No. - N° du dossier  
W7707-176015

Buyer ID - Id de l'acheteur  
HAL203  
CCC No./N° CCC - FMS No./N° VME

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## 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, 2024 inclusive.

### 6.4.2 Delivery Date

Please refer to Annex A for delivery dates on mandatory and optional items.

## 6.5 Authorities

### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Isabelle MacDonald  
Title: Supply Specialist  
Public Works and Government Services Canada  
Acquisitions Branch  
Directorate: Acquisitions  
Address: 1713 Bedford Row  
Halifax, NS

Telephone: 902-403-9839  
E-mail address: Isabelle.macdonald@pwgsc-tpsgc.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.

### Procurement Authority **To be inserted at contract award**

The Procurement Authority for the Contract is:

\_\_\_\_\_ (*Name of Procurement Authority*)

\_\_\_\_\_ (*Title*)

\_\_\_\_\_ (*Organization*)

\_\_\_\_\_ (*Address*)

Telephone: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

Facsimile: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

E-mail: \_\_\_\_\_.

Solicitation No. - N° de l'invitation  
W7707-176015/B  
Client Ref. No. - N° de réf. du client  
W7707-176015

Amd. No. - N° de la modif.  
File No. - N° du dossier  
W7707-176015

Buyer ID - Id de l'acheteur  
HAL203  
CCC No./N° CCC - FMS No./N° VME

The Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the Procurement Authority however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

### 6.5.2 Project Authority **To be advised at contract award**

The Project Authority for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
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 supplied with bid**

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

## 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 firm unit prices in Annex B for a cost of \$ \_\_\_\_\_ (*insert the amount at contract award*). Customs duties are included and Applicable Taxes are extra.

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 Limitation of Price

SACC Manual clause C6000C 2017-08-17 Limitation of Price

### 6.6.3 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.

### 6.6.5 Electronic Payment of Invoices – Contract **Review before contract award**

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

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

### 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 following address for certification and payment.  
\_\_\_\_\_ (to be given at contract award)
  - b. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

### 6.8 Certifications and Additional Information

#### 6.8.1 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.

### 6.8.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

### 6.9 Applicable Laws

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

### 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 general conditions [2010A](#) 2018-06-21, General Conditions - Goods (Medium Complexity);
- (c) Annex A, Statement of Requirement;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated \_\_\_\_\_ (*insert date of bid*)

### 6.11 SACC Manual Clauses

#### Defence Contract

The Contract is a defence contract within the meaning of the [Defence Production Act](#), R.S.C. 1985, c. D-1, and must be governed accordingly.

Title to the Work or to any materials, parts, work-in-process or finished work must belong to Canada free and clear of all claims, liens, attachments, charges or encumbrances. Canada is entitled, at any time, to remove, sell or dispose of the Work or any part of the Work in accordance with section 20 of the [Defence Production Act](#).

#### Controlled Goods Program – Contract

1. As the Contract requires production of or access to controlled goods that are subject to the [Defence Production Act](#) R.S. 1985, c. D-1, the Contractor and any subcontractor are advised that, within Canada, only persons who are registered, exempt or excluded under the Controlled Goods Program (CGP) are lawfully entitled to examine, possess or transfer controlled goods. Details on how to register under the CGP are available at: [Controlled Goods Program](#)

2. When the Contractor and any subcontractor proposed to examine, possess or transfer controlled goods are not registered, exempt or excluded under the CGP at time of contract award, the Contractor and any subcontractor must, within seven (7) working days from receipt of written notification of the contract award, ensure that the required application(s) for registration or exemption are submitted to the CGP. No examination, possession or transfer of controlled goods must be performed until the Contractor has provided proof, satisfactory to the Contracting Authority, that the Contractor and any subcontractor are registered, exempt or excluded under the CGP.  
Failure of the Contractor to provide proof, satisfactory to the Contracting Authority, that the Contractor and any subcontractor are registered, exempt or excluded under the CGP, within thirty (30) days from receipt of written notification of contract award, will be considered a default under the Contract except to the extent that Canada is responsible for the failure due to delay in processing the application.
3. The Contractor and any subcontractor must maintain registration, exemption or exclusion from the CGP for the duration of the Contract and in any event for so long as they will examine, possess or transfer controlled goods.

### **Controlled Goods**

The Contract involves controlled goods as defined in the Schedule to the [Defence Production Act](#). The Contractor must identify those controlled goods to the Department of National Defence.

### **Excess Goods**

The quantity of goods to be delivered by the Contractor is specified in the Contract. The Contractor remains liable for any shipment in excess of that quantity whether the excess quantity is shipped voluntarily or as a result of an error by the Contractor. Canada will not make any payment to the Contractor for goods shipped in excess of the specified quantity. Canada will not return the said goods to the Contractor unless the Contractor agrees to pay for all the costs related to the return, including but not limited to administrative, shipping and handling costs. Canada will have the right to deduct such costs from any invoice submitted by the Contractor.

## **ANNEX "A"**

### **STATEMENT OF REQUIREMENT**

**1. TITLE**

SOFTWARE DEFINED SONOBUOY RECEIVER (SDSR)

**2. BACKGROUND**

Defence Research and Development Canada (DRDC) Atlantic Research Centre (ARC) and the Department of National Defence (DND) have a requirement to use sonobuoys and, therefore, require sonobuoy radio receivers. To date, DRDC ARC has been able to field the receivers needed for its research and development activities by employing both analog AN/ARR-502B(V)4 receivers and a Software-Defined Sonobuoy Receiver (SDSR). In an effort to modernize its equipment, DRDC ARC intends to switch entirely to SDSR technology.

### 3. ACRONYMS and abbreviations

AIS	Automatic Identification System
ARC	Atlantic Research Centre
ASW	Anti-submarine warfare
BIT	Built-In Test
CFS	Command Function Select
CSG	Command Signal Generator
dB	decibel
dBm	decibel re 1 milliwatt (based on a 50-ohm impedance)
dBV	decibel re 1 volt RMS
DICASS	Directional Command-Activated Sonobuoy System
DIFAR	Directional Low Frequency Analysis and Recording
DRDC	Defence Research and Development Canada
DND	Department of National Defence
FM	Frequency Modulation
FY	Fiscal Year
GPS	Global Positioning System
HIDAR	High Dynamic Range DIFAR
Hz	hertz
ICD	Interface Control Document
MHz	megahertz
MS	MicroSoft
RF	Radio Frequency
RMS	Root mean square
S&T	Science and Technology
SCT	Sonobuoy Command Transmitter
SDSR	Software Defined Sonobuoy Receiver

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SOR	Statement of Requirement
TA	Technical Authority
UHF	Ultra High Frequency
VAC	volts, alternating current
VSWR	Voltage Standing Wave Ratio

#### 4. DEFINITIONS

**DIFAR** – for the purpose of this requirement, “DIFAR” refers to the radio telemetry link used by the Directional Frequency Analysis and Recording (DIFAR) sonobuoy. With this link, the message signal is encoded onto a carrier through analog frequency modulation (FM).

**HIDAR** – for the purpose of this requirement, “HIDAR” refers to the radio telemetry link used by the High Dynamic Range DIFAR (HIDAR) sonobuoy. With this link, the message signal is encoded onto a carrier through a specific form of digital frequency modulation.

**Analog equivalency** – the value of the receiver’s digital output when in FM mode will alternatively be expressed in terms of an analog equivalency, according to which a full-scale digital output is interpreted as a sinusoidal voltage that is 2.8 V RMS, or 7.92 V peak-to-peak.

**Fixed artifact** – a discrete-frequency artifact, or spurious tone, that does not change in frequency

**Swept artifact** – a discrete-frequency artifact, or spurious tone, that moves or sweeps in frequency

#### 5. APPLICABLE DOCUMENTS & REFERENCES

**AD1:** Figure 1. Limits on the Spectrum Level of the Receiver Noise

**AD2:** Table 1. Frequency Assignment for 99 Sonobuoy Channels

#### 6. REQUIREMENTS

##### 6.1 FIRM PURCHASE

##### 6.1.1 Software Defined Sonobuoy Receiver (SDSR)

Quantity: 4

SPECIFICATION A: GENERAL		
Specification		Value
A1	Software-defined radio architecture	The SDSR must be based on a software-defined radio architecture.

A2	Demodulation capability	The receiver must be capable of simultaneously demodulating 32 sonobuoy channels, allowing any mix of DIFAR and HIDAR telemetry types.
A3	Receiver channel tuning	Each receiver channel must be independently tunable to any of the 99 sonobuoy channels defined within the sonobuoy band of 136.000 MHz to 173.500 MHz (refer to Annex C-Table 1).
A4	Ethernet interface	The SDSR's primary communications/control must be through a gigabit Ethernet interface with a TCP/IP protocol.
A5	System clock	The SDSR must have a user-settable clock for the time-of-day, and data packets that are output from the SDSR must be time-stamped using this clock with a precision of 0.01 second or better.
A6	Analog output capability	The SDSR must provide a minimum of 4 user-selectable acoustic outputs in analog form.
A7	GPS	The SDSR must be able to decode GPS position data encoded in the sonobuoy telemetry.
A8	Automatic Identification System (AIS)	The SDSR must be able to decode AIS signals.
A9	Test signal	The SDSR must be capable of generating and outputting, in a user-selected acoustic channel, a DIFAR test signal with discrete tones between 15 and 2000 This will allow the testing of an external acoustic processor.
A10	Built-in test (BIT)	The SDSR must provide a BIT function capable of the following:  a) Verification of the proper operation of the system; b) Identification of faulty subassemblies; and c) End-to-end SDSR test capability
A11	Channel scanning	The SDSR must be capable of continuously monitoring the received RF power in all sonobuoy channels simultaneously and reporting the results in dBm as commanded.
A12	Sonobuoy command	The SDSR must be able to command sonobuoys over a UHF radio link.

<b>SPECIFICATION B: ELECTRICAL AND MECHANICAL</b>		
<b>Specification</b>		<b>Value</b>
B1	19-inch rack mount chassis	The SDSR, including its power supply, must be housed in a seam-sealed aluminum rack-mount chassis and enclosure frame. Exceptions to the above requirement will be made for the following components only:  a) Input pre-amplifier; b) UHF power amplifier; and, c) Power supplies for a) and b)

		Lockable slides or rack rail must be included with the unit.
B2	Relative humidity	The SDSR must be able to operate in humidity range RH 10-90 percent non-condensing.
B3	Altitude	The SDSR must be able to function at pressure altitudes up to 15,000 feet.
B4	Temperature	The SDSR must be able to operate in the temperature range 10-35 degrees Celsius. The lower temperature limit for storage of the SDSR must be -30 degrees Celsius.
B5	Temperature monitoring	The SDSR must continuously monitor its internal temperature, either automatically shutting down when the temperature exceeds the safe level, or providing temperature data through the Ethernet interface.
B6	AC power supply	The SDSR must operate on 115 VAC single-phase power at 50/60/400 Hz.
B7	Antenna input	Must have a single N-type antenna input connector with nominal input impedance of 50 ohms. The Voltage Standing Wave Ratio (VSWR) of this input must not exceed 2 to 1 over the frequency range of 136 MHz to 174 MHz.
B8	Input protection	No damage must occur to the receiver for input signal strengths up to +27 dBm over the frequency range of 2 MHz to 10.5 GHz.
B9	Sonobuoy command transmitter (SCT)	The SCT must have a minimum output power of 20 watts.

<b>SPECIFICATION C: MIL STANDARD COMPLIANCE</b>		
<b>Specification</b>	<b>Value</b>	
C10	Shock Tolerance	The SDSR must meet MIL-STD 901D Grade A (shock tolerance)
C11	Vibration tolerance	The SDSR must meet MIL-STD 167-1/2 (vibration tolerance)
C12	Sand and dust	The SDSR must be built to meet MIL-STD 810F M-510.4 (sand and dust)
C13	Salt and fog	The SDSR must be built to meet MIL-STD 810F M-509.4 (salt and fog conditions)
C14	Fungal growth	The SDSR must be built to meet MIL-STD 810F M-508.5 (inhibit fungus growth)

<b>SPECIFICATION D: FM RECEIVER PERFORMANCE</b>		
The receiver demodulates a frequency-modulated (FM) radio signal and outputs baseband acoustic data when in FM mode. FM mode is equivalent to DIFAR mode.		
<b>Specification</b>	<b>Requirement</b>	
D1	Digital acoustic output	The baseband acoustic output of the receiver in FM mode must be formatted as two's complement integers no less than 16 bits in length.

D2	Full-scale deviation	An FM deviation of $\pm 105$ kHz (peak) must produce a full-scale output.
D3	Tuning accuracy	The SDSR must be capable of tuning within $\pm 0.001$ percent of any of the sonobuoy channel frequencies in Annex C-Table 1.
D4	Operating input range	The SDSR must be capable of demodulating signals over the range of 0.5 microvolt to 100,000 microvolt RMS ( $-113$ dBm to $-7$ dBm) at its antenna input.
D5	Acoustic channel response	The frequency response of the acoustic channels must be flat within 1 dB from 0.5 Hz to 50 kHz.
D6	Polarity	The polarity of the acoustic outputs must be such that a positive output value is produced by an increasing carrier frequency at the input.
D7	Phase linearity	In each channel, the phase shift must be a linear function with a maximum shift of 12 degrees per kHz. The allowable error in this phase shift from the linear function must be:  Less than $\pm 2$ degrees from 2 Hz to 20 kHz, and Less than $\pm 1.5$ degrees from 12kHz to 18 kHz, and Less than $\pm 5$ degrees from 20 kHz to 45 kHz.  The linear function is defined as the best straight line drawn through the phase response characteristic.
D8	Channel-to-channel phase matching	When 2 receiver channels are tuned to the same RF input, the phase difference between their acoustic outputs must be:  Less than 3 degrees in the frequency band between 2 Hz and 5 kHz, and Less than 12 degrees in the frequency band between 5 kHz and 20 kHz.
D9	Receiver sensitivity	The signal-plus-noise to noise power ratio in the band from 2 Hz to 50 kHz in an acoustic output must be:  10 dB or greater for a $-113$ dBm carrier, and 20 dB or greater for a $-110$ dBm carrier.  The noise power must be measured with an undeviated carrier, and the signal-plus-noise power must be measured using a carrier deviation of $\pm 75$ kHz (peak) and sinusoidal modulation at a 1-kHz rate.
D10	Receiver noise floor (based on analog equivalency)	The spectrum level of the broadband receiver noise in an acoustic output must fall below the limits shown in Annex B-Figure 1. The noise spectrum level is measured with an undeviated carrier at the indicated power levels.
D11	Fixed artifacts	The output level for fixed artifacts must be:

	(based on analog equivalency)	Less than -100 dBV in the frequency band between 10 Hz and 2.4 kHz, and Less than -95 dBV in the frequency band between 2.4 kHz and 20.0 kHz, and Less than -100 dBV in the frequency band between 4.7 kHz and 15.3 kHz, and Less than -90 dBV in the frequency band between 20.0 kHz and 50.0 kHz.
D12	Swept artifacts (based on analog equivalency)	One swept artifact is allowable between 10 Hz and 50 kHz. Its output level must be less than -90 dBV.
D13	Acoustic channel total harmonic distortion	The harmonic content present in any acoustic output must be:  Less than 0.2 percent when the input signal is in the band from 2 Hz to 500 Hz, and Less than 1 percent when the input signal is in the band from 500 Hz to 5 kHz, and Less than 3 percent when the input signal is in the band from 5 kHz to 50 kHz.  The input signal is an FM signal modulated by a sinusoid of the specified frequency with an amplitude which causes a peak deviation of ±75 kHz.  The harmonics will be measured over the frequency range 2 Hz to 50 kHz. This distortion requirement must be met as the input level is varied from -87 dBm to -7 dBm.
D14	Acoustic channel intermodulation distortion	When an RF carrier is modulated by two sinusoidal inputs, one producing ±20 kHz deviation at a 100-Hz rate and the other ±30 kHz deviation at a 15-kHz rate, the intermodulation products measured at the acoustic output must be 40 dB below the output level of the 15-kHz signal.
D15	Adjacent channel rejection	An unmodulated carrier of -33 dBm located in any sonobuoy channel must not cause receiver quieting in any other channel greater than the quieting that would be produced in that channel by a -113 dBm unmodulated carrier.
D16	RF intermodulation distortion	An RF input containing 2 unmodulated carriers, each of level -35 dBm and located in any 2 sonobuoy channels, must not cause receiver quieting in any other channel greater than the quieting that would be produced in that channel by a -113 dBm unmodulated carrier.
D17	Out-of-band rejection	The in-band performance of the SDSR must not be adversely affected by an input signal having level as large as +27 dBm in the frequency band from 225 to 400 MHz.

<b>SPECIFICATION E: HIDAR RECEIVER PERFORMANCE</b>		
<b>Specification</b>		<b>Requirement</b>
E1	Bit synchronization	The SDSR must be capable of acquiring and maintaining bit synchronization to a HIDAR telemetry signal.
E2	Frame synchronization	The SDSR must be capable of acquiring and maintaining synchronization to HIDAR frames in a HIDAR bit stream. The synchronization algorithm must be robust enough to handle bit errors in the synchronization word.
E3	Synchronization flags	In the output HIDAR data packet, there must be flag bits in the packet header indicating whether the receiver has achieved bit synchronization and frame synchronization.
E4	Raw bit data	If the SDSR has achieved bit synchronization but not frame synchronization, it must place raw bit data in the output packet. The synchronization flags must indicate when raw bit data is being delivered to the user.

<b>SPECIFICATION F: SONOBUOY COMMAND TRANSMITTER</b>		
<b>Specification</b>		<b>Requirement</b>
F1	Command interface	The user must be able to configure the sonobuoy-command transmitter and initiate sonobuoy-command transmissions via the Ethernet interface.
F2	Command protocols	The SDSR must be capable of commanding sonobuoys through the SCT using both the CFS (Command Function Select) and CSG (Command Signal Generator) protocols.
F3	Timing	The elapsed time between when a sonobuoy-command control packet is received by the SDSR via its Ethernet interface and when the SCT issues the command over the UHF radio link must be known and repeatable within $\pm 0.01$ second.

### 6.1.2 Accessories

The Contractor must provide the following accessories for requirement 6.1:

The SDSR must be provided with all cables and terminations required for it to be fully functional. This excludes the input RF cable.

### 6.1.3 Documentation

The Contractor must provide the following documentation for requirement 6.1:

#### 6.1.3.1 SDSR Interface Requirements and Design Document

The Contractor must provide the Technical Authority (TA) with 1 electronic copy in Adobe PDF or MS Word format of a SDSR interface

requirements and design document. The document must provide complete details allowing custom software applications to be written for controlling all aspects of the SDSR and for receiving and interpreting data packets from the SDSR.

#### 6.1.3.2 SDSR Hardware Document

The Contractor must provide the TA with 1 electronic copy in Adobe PDF or MS Word format of a SDSR hardware document. The document must fully detail the hardware interface of the SDSR.

#### 6.1.3.3 Acceptance Test Procedure

The Contractor must provide the TA with 1 electronic copy in Adobe PDF or MS Word format of an acceptance test procedure.

#### 6.1.3.4 SDSR Operation and Maintenance Manual

The Contractor must provide the TA with 1 electronic copy in Adobe PDF or MS Word format of an SDSR operation and maintenance manual.

#### 6.1.3.5 Mil Standard Compliance

The Contractor must provide the TA with 1 electronic copy in Adobe PDF or MS Word format of test results or certificates proving compliance with the following MIL Standards:

6.1.3.5.1 Shock Tolerance: MIL-STD 901D Grade A (shock tolerance)

6.1.3.5.2 Vibration Tolerance: MIL-STD 167-1/2 (vibration tolerance)

6.1.3.5.3 Sand and Dust: MIL-STD 810F M-510.4 (sand and dust)

6.1.3.5.4 Salt and Fog Conditions: MIL-STD 810F M-509.4 (salt and fog conditions)

6.1.3.5.5 Inhibit Fungus Growth: MIL-STD 810F M-508.5 (inhibit fungus growth)

### 6.2 OPTION TO PURCHASE ADDITIONAL UNIT(S)

**Required Quantity: Up to 1 unit**

The contractor must provide DRDC the irrevocable option to purchase up to an additional 4 units as described in section 6.1 of this Statement of Requirement.

## 7. Deliverables

### 7.1 FIRM PURCHASE

#	Requirement Reference	Description of the Deliverables	Quantity and Format	Delivery Date
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<b>7.1.1</b>	6.1.1	Software Defined Sonobuoy Receiver	4	10 months after contract award or sooner
<b>7.1.2</b>	6.1.2	Accessories	Cables and Terminations as required	10 months after contract award or sooner
<b>7.1.3</b>	6.1.3.1	SDSR Interface Requirements and Design Document	4	10 months after contract award or sooner
<b>7.1.4</b>	6.1.3.2	SDSR Hardware Document	4	10 months after contract award or sooner
<b>7.1.5</b>	6.1.3.3	Acceptance Test Procedure	4	10 months after contract award or sooner
<b>7.1.6</b>	6.1.3.4	SDSR Operation and Maintenance Manual	4	10 months after contract award or sooner
<b>7.1.7</b>	6.1.3.5	Mil Standard Compliance	1 copy for all 5 standards	10 months after contract award or sooner

## 7.2 OPTION TO PURCHASE ADDITIONAL UNIT(S)

If exercised, the following table will come into effect:

#	Requirement Reference	Description of the Deliverables	Quantity and Format	Delivery Date
<b>7.2.1</b>	6.2	Software Defined Sonobuoy Receiver	1 unit	10 months after contract amendment for Up to 5 years after contract award
<b>7.2.2</b>	6.2	Accessories	Cables and Terminations as required for 1 unit	10 months after contract amendment for Up to 1 year after contract award
<b>7.2.3</b>	6.2	SDSR Interface Requirements and Design Document	1 document	10 months after contract amendment for Up to 1 year after contract award
<b>7.2.4</b>	6.2	SDSR Hardware Document	1 document	10 months after contract amendment for Up to 1 year after contract award
<b>7.2.5</b>	6.2	Acceptance Test Procedure	1 document	10 months after contract amendment for Up to 1 year after contract award

<b>7.2.6</b>	6.2	SDSR Operation and Maintenance Manual	1 document	10 months after contract amendment for Up to 1 year after contract award
<b>7.2.7</b>	6.2	Mil Standard Compliance	1 copy for all 5 standards	10 months after contract amendment for Up to 1 year after contract award

**8. Language of Work**

All work and deliverables must be in English.

**9. DELIVERY LOCATION**

Defence Research and Development Canada – Atlantic Research Centre  
9 Grove Street  
Dartmouth, Nova Scotia, B3A 3C5, Canada

**ANNEX "B"**

**BASIS OF PAYMENT**

Incoterms 2010 DDP apply to this procurement.

*Bidders are required to complete Tables 1 and 2 below which will be used for evaluation purposes. All applicable **Shipping costs must be included in the Bidder's price, and will form part of the total evaluated price, and includes Customs duties.** The price of the bid will be evaluated in Canadian dollars, and taxes must be listed separately.*

*Tables 3 to 7 below **will not** form part of the evaluation process.*

**TABLE 1: FIRM PURCHASE**

<u>Item</u>	<u>Requirement (refer to Annex A)</u>	<u>Description of the Deliverables</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Extended Total</u>
1.	6.1.1	Software Defined Sonobuoy Receiver (SDSR)	4 EA	\$	\$
2.	6.1.2	Accessories	Lot Price	\$	\$
3.	6.1.3.1	SDSR Interface Requirements and Design Document	4 EA (1 for each unit delivered)	\$	\$
4.	6.1.3.2	SDSR Hardware Document	4 EA (1 for each unit delivered)	\$	\$
5.	6.1.3.3	Acceptance Test Procedure	4 EA (1 for each unit delivered)	\$	\$
6.	6.1.3.4	SDSR Operation and Maintenance Manual	4 EA (1 for each unit delivered)	\$	\$
7.	6.1.3.5	Mil Standard Compliance Document(s) <b>(6.1.3.5.1 to 6.1.3.5.5)</b> 1 copy for each Mil Standard for an overall total of 5 copies for each unit delivered.	5 EA (1 copy for each MIL Standard)	\$	\$

**Total Cost:** \$ \_\_\_\_\_  
**Shipping Costs:** \$ \_\_\_\_\_  
**Sub-Total:** \$ \_\_\_\_\_  
**Applicable Taxes extra:** \$ \_\_\_\_\_

Solicitation No. - N° de l'invitation  
W7707-176015/B  
Client Ref. No. - N° de réf. du client  
W7707-176015

Amd. No. - N° de la modif.  
File No. - N° du dossier  
W7707-176015

Buyer ID - Id de l'acheteur  
HAL203  
CCC No./N° CCC - FMS No./N° VME

**TABLE 2: OPTION TO PURCHASE**

<b>Item</b>	<b>Requirement (refer to Annex A)</b>	<b>Description of the Deliverables</b>	<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Extended Total</b>
1.	6.2	OPTION TO PURCHASE ADDITIONAL UNIT	1 EA	\$	\$
2.	6.2	Accessories	Lot Price	\$	\$
3.	6.2	SDSR Interface Requirements and Design Document	1 EA	\$	\$
4.	6.2	SDSR Hardware Document	1 EA	\$	\$
5.	6.2	Acceptance Test Procedure	1 EA	\$	\$
6.	6.2	SDSR Operation and Maintenance Manual	1 EA	\$	\$
7.	6.2	Mil Standard Compliance Document(s) 1 copy for each Mil Standard for an overall total of 5 copies for each unit delivered.	5 EA (1 copy for each MIL Standard)	\$	\$

**Total Cost:** \$ \_\_\_\_\_  
**Shipping Costs:** \$ \_\_\_\_\_  
**Sub-Total:** \$ \_\_\_\_\_  
**Applicable Taxes extra:** \$ \_\_\_\_\_

**\*Suppliers cannot submit a lower price for the optional Software Defined Sonobuoy Receiver and additional components (Table 2) than for the required Software Defined Sonobuoy Receiver and additional components (Table 1)\***

**TOTAL EVALUATED PRICE FOR CONTRACT AWARD: TABLE 1 + TABLE 2:**

\$ \_\_\_\_\_

Solicitation No. - N° de l'invitation  
W7707-176015/B  
Client Ref. No. - N° de réf. du client  
W7707-176015

Amd. No. - N° de la modif.  
File No. - N° du dossier  
W7707-176015

Buyer ID - Id de l'acheteur  
HAL203  
CCC No./N° CCC - FMS No./N° VME

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## **ANNEX “C” to PART 3 OF THE BID SOLICITATION**

### **ELECTRONIC PAYMENT INSTRUMENTS**

*As indicated in Part 3, clause 3.1.2, the Bidder must identify which electronic payment instruments they are willing to accept for payment of invoices.*

The Bidder accepts any of the following Electronic Payment Instrument(s):

- VISA Acquisition Card;
- MasterCard Acquisition Card;
- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);
- Wire Transfer (International Only);
- Large Value Transfer System (LVTS) (Over \$25M)

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## ANNEX "D" to PART 5 OF THE BID SOLICITATION

### FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\)-Labour's](#) website.

Date: \_\_\_\_\_ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- A1. The Bidder certifies having no work force in Canada.
- A2. The Bidder certifies being a public sector employer.
- A3. The Bidder certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- A4. The Bidder certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.
- A5. The Bidder has a combined workforce in Canada of 100 or more employees; and
  - A5.1. The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.

**OR**

- A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity](#) (LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- B1. The Bidder is not a Joint Venture.

**OR**

- B2. The Bidder is a Joint Venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

## ANNEX "E"

### MANDATORY CRITERIA

#### Instructions and Specifications

Proposals which do not meet all of the Mandatory Requirements will be considered to be non-compliant and will be given no further consideration. The evaluation will only be based on the information provided with the bid. References to Internet sites or information that is not included will not be evaluated.

The Bidder must provide sufficient proof that their proposal complies with each and every one of the Mandatory Specifications. Failure to meet the requirements of all of the Mandatory Specifications will result in the bid being declared as non-compliant.

**The onus is on the Bidder to reference the page number and section of their proposal which proves compliance with each and every one of the Mandatory Requirements.**

	CRITERIA	REFERENCE IN BID (COMPLETED BY BIDDER)
M1	The Bidder must provide test results as evidence that the SDSR is capable of simultaneously demodulating 32 sonobuoy channels.	
M2	The Bidder must provide test results as evidence that the spectrum level of the broadband receiver noise in an acoustic output falls below the limits shown in Figure 1. The noise spectrum level is measured with an undeviated carrier at the indicated power levels.	
M3	The Bidder must provide test results as evidence that the SDSR is capable of meeting the following RF intermodulation distortion specification: An RF input containing 2 unmodulated carriers, each of level –35 dBm and located in any two sonobuoy channels, must not cause receiver quieting in any other channel greater than the quieting that would be produced in that channel by a –113 dBm unmodulated carrier.	