



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

INVITATION TO TENDER

APPEL D'OFFRES

**Tender 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.

**Soumission 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 et sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

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

Title - Sujet Satellite Compass	
Solicitation No. - N° de l'invitation F1701-160105/A	Date 2017-08-30
Client Reference No. - N° de référence du client F1701-160105	GETS Ref. No. - N° de réf. de SEAG PW-\$XLV-166-7317
File No. - N° de dossier XLV-7-40040 (166)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-10-10	
Time Zone Fuseau horaire Pacific Daylight Saving Time PDT	
F.O.B. - F.A.B.	
Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Castle, David G.	Buyer Id - Id de l'acheteur xlvl66
Telephone No. - N° de téléphone (250) 217-6555 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Fisheries and Oceans Canada See herein	

Instructions: See Herein

Instructions: Voir aux présentes

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

TABLE OF CONTENTS

TITLE: Canadian Coast Guard – Satellite Compass

PART 1 - GENERAL INFORMATION

- 1-1 Security Requirement
- 1-2 Requirement
- 1-3 Trade Agreements

PART 2 - BIDDER INSTRUCTIONS

- 2-1 Standard Instructions, Clauses and Conditions
- 2-2 Submission of Bids
- 2-3 Enquiries - Solicitation Period
- 2-4 Applicable Laws

PART 3 - BID PREPARATION INSTRUCTIONS

- 3-1 Bid Preparation Instructions
- 3-2 Tables of Bid Deliverables

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

- 4-1 Evaluation Procedures
- 4-2 Basis of Selection

PART 5 - CERTIFICATIONS

- 5-1 Certifications Required with the Bid
- 5-2 Certifications Precedent to Contract Award
- 5-3 Price certification

PART 6 – RESULTING CONTRACT CLAUSES

- 6-1 Security Requirement
- 6-2 Statement of Work
- 6-3 Standard Clauses and Conditions
- 6-4 Term of Contract
- 6-5 Authorities
- 6-6 Payment
- 6-7 Invoicing Instructions
- 6-8 Certifications
- 6-9 Applicable Laws
- 6-10 Priority of Documents

LIST OF ANNEXES:

- | | |
|---------|----------------------|
| Annex A | Requirement |
| Annex B | Basis of Payment |
| Annex C | Integrity Provisions |

PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement associated with this bid solicitation.

1.2 Requirement

Canadian Coast Guard has a requirement for the provision of twenty (20) Satellite Compasses as per the attached quote (Annex A) and the Basis of Payment (Annex B).

1.2.1 Optional Units

The Contractor grants to Canada the irrevocable option to acquire 10 (ten) additional Satellite Compasses as described at Annex A of the Contract under the same conditions and at the prices and/or rates stated in Annex B of the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option within 12 months after contract award by sending a written notice to the Contractor.

1.3 Trade Agreements

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

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>) 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 (2016-04-04) Standard Instructions - Goods or Services – Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2.2 Submission of Bids

If possible, 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 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 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 (1 hard copies or 1 soft copy by USB stick or Disc).
- Section II: Financial Bid (1 hard copies or 1 soft copy by USB stick or Disc).
- Section III: Certifications (1 hard copies or 1 soft copy by USB stick or Disc).

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft 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 - Annex C, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work. Note: Completion of Annex C is mandatory.

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.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

3.2 Tables of Bid Deliverables

3.2.1 Mandatory Bid Deliverables

Regardless of requirements specified elsewhere in this bid solicitation and its associated Statement of Work, the following are the only mandatory documents that must be submitted with the response at the time of bid closing. The Bidder must be compliant on each item to be considered responsive.

No	Part	Article	Description	Condition	Document provided
Section I- Technical Bid					
1		Front page	Invitation to Tender document part 1 page 1, completed and signed	Mandatory with the bid	<input type="checkbox"/>
1		Annex C	Mandatory Response	Mandatory with the bid	
Section II- Financial Bid					
1	Annex B	ALL	Annex B Basis of Payment	Mandatory with the bid	<input type="checkbox"/>
Section III- Certification					
1		5.1.1	Integrity Provisions – Declaration of Convicted Offences (if required)	Mandatory with the bid	<input type="checkbox"/>

3.2.2 Supporting Deliverable Requirements

If the following information which supports the bid is not submitted with the Bid; it will be requested by the Contracting Authority, and it must be provided within 24 hours of the written request:

No	Part	Article	Description	Condition	Document provided
Section III- Certification					
1	Part 5	5.2.3	Price Certification	24 hrs of written request	<input type="checkbox"/>
2	Part 5	5.2.4	Price Support, in the form of published price lists, or invoicing for a similar service	24 hrs of written request	<input type="checkbox"/>
3	Part 6	6.5.4	Contractor representative	24 hrs of written request	<input type="checkbox"/>
4	Part 6	6.10	Applicable Laws	24 hrs of written request	<input type="checkbox"/>
5		5.2.1 and Annex C	Integrity Provisions – Required Documentation	24 hrs of written request	<input type="checkbox"/>

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 (Annex C) and financial evaluation criteria (Annex B).
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.2 Financial Evaluation

The bids will be evaluated in accordance with Annex B, Basis of Payment.

4.2 Basis of Selection

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. 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 *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politiquepolicy-eng.html>), the Bidder must provide with its bid the required documentation, as applicable, 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 *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politiquepolicy-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 (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.

5.3 Price Certification

The Bidder certifies that the price proposed

- (a) is not in excess of the lowest price charged anyone else, including the Bidder's most favoured customer, for the like quality and quantity of the goods, services or both;
- (b) does not include an element of profit on the sale in excess of that normally obtained by the Bidder on the sale of goods, services or both of like quality and quantity, and
- (c) does not include any provision for discounts to selling agents.

Signature	Name	Title	Date
-----------	------	-------	------

5.3.1 Price Support

The Bidder must provide one or more of the following price support, if applicable:

- a. a current published price list indicating the percentage discount available to Canada; or
- b. copies of paid invoices for the like quality and quantity of the goods, services or both sold to other customers; or
- c. a price breakdown showing the cost of direct labour, direct materials, purchased items, engineering and plant overheads, general and administrative overhead, transportation, etc., and profit.

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 Canadian Coast Guard has a requirement for the provision of Satellite Compasses as per the Technical Statement of Requirement (Annex A).

6.2.1 The Contractor grants to Canada the irrevocable option to acquire 10 (ten) additional Satellite Compasses as described at Annex A of the Contract under the same conditions and at the prices and/or rates stated in Annex B of the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option within 12 months after contract award by sending a written notice to the Contractor.

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](#) 2016-04-04, General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Delivery

All the deliverables must be received on or before Oct 30, 2017.

6.4.2 Delivery location

The Contractor shall give the Departmental Representative at least two weeks' notice before the delivery of the parts to the site.

6-4.3 Preparation For Delivery

Preparation for delivery and packaging are to be to the highest manufacturer's standard for the mode of transportation utilized, to ensure safe arrival at final destination.

6-4.4 Shipping Instructions - Delivery at Destination

1. Goods must be consigned to the destination(s) specified in the Contract and delivered Delivery Duty Paid (DDP), Incoterms 2000 for shipments from a commercial contractor.
2. The Contractor is responsible for all delivery charges from the Contractor's facility to destination, including administration costs, insurance and risk of transport.

6-4.5 Failure to keep the Contracting Authority informed

As the delivery date is an essential part of this contract, except for excusable delays notified in accordance with Article 16 (Time of Essence) of 2010, failure to communicate any changes to the delivery schedule specified in this contract will prejudice Canada and will, at Canada's discretion, entail either:

- a) Contract Termination in accordance with General Conditions 2010 Article 06 (Time of the Essence) and Article 23 subsection 4, (Default by the Contractor), and the Contractor will be liable to Canada for all losses and damages suffered by Canada because of the default or occurrence upon which the notice was based, including any increase in the cost incurred by Canada in procuring the Work from another source; or
- b) Consideration for Contract Amendment. Delivery date(s) will not be extended without consideration being provided by the Contractor in the form of adjustment to the price, warranty, and/or services provided.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Dave Castle
Supply Specialist
Public Works and Government Services Canada
Marine Acquisitions
401-1230 Government Street
Victoria, BC V8W 3X4

Telephone: 250-217-6555
E-mail address: david.castle@pwgsc-tps qc.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 will be identified at contract award:

The Technical 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 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

6.6.1.1 Basis of Payment - Firm Unit Prices

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm Price of _____. Goods and Services Tax or Harmonized Tax is extra, if applicable.

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 schedule.

6.6.1.2 Single Payment

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

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

6.6.1.3 SACC Manual Clauses

C0100C	2010-01-11	Discretionary Audit - Commercial Goods and/or Services
C0711C	2008-05-12	Time Verification
B5007C	2010-01-11	Procedures for Design Change or Additional Work

6.7 Invoicing Instructions

The Contractor must submit invoices in accordance with the section of the General Conditions titled Invoice Submission.

Invoice is to be made out to:

DFO

Original invoice is to be sent for verification to:

Public Works and Government Services Canada

Marine Acquisitions

Email the invoice to Pac.marine@pwgsc.gc.ca

Please note the contract number in the subject line of the email.

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 additional 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 additional 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.

6.8.3 SACC Manual Clauses

A0285C	2007-05-25	Worker Compensation
--------	------------	---------------------

6.9 Applicable Laws

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

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 (2016-04-04);
- (c) Annex A, Statement of Work;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated _____.

Foreword

1. Scope

This Technical Statement of Operational Requirements details the technical requirements for a Commercial-off-the-Shelf (COTS) Satellite Compass.

In this document, Mandatory requirements are preceded by (M) and (D) for Desired.

2. Background

The Canadian Coast Guard (CCG), a Special Operating Agency of the Department of Fisheries and Oceans, owns and operates the federal government's civilian vessel fleet. The Oceans Act gives the Minister of Fisheries and Oceans responsibility for providing:

- a. Aids to Navigation
- b. Marine communications and traffic management services
- c. Icebreaking and ice-management services
- d. Channel maintenance
- e. Marine search and rescue
- f. Marine pollution response
- g. Support of other government departments, boards and agencies by providing ships, aircraft and other services

The new International Maritime Organization (IMO) Polar Code requires that vessels operating in the high Arctic have an IMO compliant satellite compass. Additionally there are smaller CCG vessels that have traditionally used expensive gyro compass technologies that can benefit from less expensive satellite compass technology as the Transmitting Heading Device (THD). To support life cycle management of this technology, CCG requires a single satellite compass model that is IMO compliant as a THD, supports Global Positioning System (GPS), Globalnaya Navigazionnaya Sputnikovaya Sistema (GLONASS), terrestrial (Differential GPS (DGPS)) and satellite based augmentation (Satellite Based Augment System (SBAS) and is compatible with National Marine Electronics Association (NMEA) 0183 and 2000.

Section 1 REQUIREMENTS

1.1 REGULATORY REQUIREMENTS

- M1 The satellite compass shall be certified to conform to IMO Resolution MSC.116(73) Performance Standards for Marine Transmitting Heading Devices (THDs).
- M2 The satellite compass shall be certified to conform to IMO Resolution MSC.112(73) Adoption of the Revised Performance Standards for Shipborne Global Positioning System (GPS) Receiver Equipment.
- M3 The satellite compass shall be certified to conform to IMO Resolution MSC.113(73) Adoption of the Revised Performance Standards for Shipborne GLONASS Receiver Equipment.
- M4 The satellite compass shall be certified to conform to IMO Resolution MSC.114(73) Adoption of the Revised Performance Standards for Shipborne DGPS and DGLONASS Radio Beacon Receiver Equipment.
- M5 The satellite compass shall be certified to conform to IMO Resolution MSC.115(73) Adoption of the Revised Performance Standards for Shipborne Combined GPS-GLONASS Receiver Equipment.
- M6 The satellite compass shall be certified to conform to IMO Resolution A.694(17) General Requirements for Ship-borne Radio Equipment Forming Part to the Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids.

1.2 STANDARDS REQUIREMENTS

- M7 The satellite compass shall be certified to conform to International Technical Commission (IEC) standard IEC 60533.
- M8 The satellite compass shall be certified to conform to IEC 60945.
- M9 The satellite compass shall be certified to conform to IEC 61162-1, 2, and 3.
- M10 The satellite compass shall be compatible with the NMEA 0183 and 2000 protocol.
- M11 The satellite compass shall be certified to conform to American National Standards Institute (ANSI) standard RS-422 ANSI/TIA/EIA-422-B Electrical Characteristics of Balanced Voltage Differential Interface Circuits.
- M12 The satellite compass shall be compatible with the Radio Technical Commission for Maritime Services Special Committee RTCM SC104 protocol.

1.3 OPERATIONAL REQUIREMENTS

- M13 The dimensions of the satellite compass shall not exceed 750 x 250 x 150 mm (L x W x H).
- M14 The satellite compass shall operate using a nominal voltage of 12 or 24 Volts DC \pm 10%.
- M15 The satellite compass shall operate over an ambient temperature range of -30 to +70 degrees Celsius.

-
- M16 The satellite compass shall have an internal antenna capable of receiving and processing DGPS beacon signals
 - M17 The satellite compass shall have an internal antenna capable of receiving Global Navigation Satellite System (GNSS) corrections from Satellite Based Augmentation Systems (SBAS).
 - M18 The satellite compass shall be able to process SBAS from North America's Wide Area Augmentation System (WAAS).
 - M19 The satellite compass shall not emit visible light (for example, a power ON or other indicator) under normal operating conditions.
 - D1 The satellite compass should be available in black.

Appendix A LIST OF ACRONYMS AND ABBREVIATIONS

ANSI	American National Standards Institute
CCG	Canadian Coast Guard
DC	Direct Current
DGLONASS	Differential GLONASS
DGPS	Differential GPS
EIA	Electronic Industries Alliance
GLONASS	Globalnaya Navigazionnaya Sputnikovaya Sistema
GMDSS	Global Maritime Distress and Safety System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
IEC	International Technical Commission
IMO	International Maritime Organization
MSC	Maritime Safety Committee
NMEA	National Marine Electronics Association
RTCM	Radio Technical Commission for Maritime Services
SBAS	Satellite Based Augment System
THD	Transmitting Heading Device
TIA	Telecommunications Industry Alliance
TSOR	Technical Statement of Requirement
WAAS	Wide Area Augmentation System

Solicitation No. - N° de l'invitation
F1701-160105
Client Ref. No. - N° de réf. du client
F1701-160105

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

Buyer ID - Id de l'acheteur
xlvl66
CCC No./N° CCC - FMS No./N° VME

BASIS OF PAYMENT

The pricing schedule below shall, upon completion and incorporation into the Contract, form the basis of payment for the work described in Annex A.

The price of the bid will be in Canadian Dollars, Delivered Duty Paid (DDP) to the destination stated in Article 6-4.1. Customs duties must be included in all pricing and Applicable Taxes are extra.

Item	Description	QTY	Unit Price	Extended Price
1	Satellite Compass as per Annex A.	20		
2	Shipping DDP to Sidney, BC, Canada as per 6.4.1	LOT		
3	TOTAL PRICE (excluding tax)			

TECHNICAL EVALUATION – SOLICITATION F1701-160105

NAME OF BIDDER:

PART 1: MANDATORY CRITERIA

Item	Minimum Mandatory Requirements	Pass / Fail	Bid Ref Page #	Comments
1.0	Regulatory Requirements The Compass must meet the following requirements:			
1.1	M1 The satellite compass shall be certified to conform to IMO Resolution MSC.116(73) Performance Standards for Marine Transmitting Heading Devices (THDs).			
1.2	M2 The satellite compass shall be certified to conform to IMO Resolution MSC.112(73) Adoption of the Revised Performance Standards for Shipborne Global Positioning System (GPS) Receiver Equipment.			
1.3	M3 The satellite compass shall be certified to conform to IMO Resolution MSC.113(73) Adoption of the Revised Performance Standards for Shipborne GLONASS Receiver Equipment.			

Item	Minimum Mandatory Requirements	Pass / Fail	Bid Ref Page #	Comments
1.4	M4 The satellite compass shall be certified to conform to IMO Resolution MSC.114(73) Adoption of the Revised Performance Standards for Shipborne DGPS and DGLONASS Radio Beacon Receiver Equipment.			
1.5	M5 The satellite compass shall be certified to conform to IMO Resolution MSC.115(73) Adoption of the Revised Performance Standards for Shipborne Combined GPS-GLONASS Receiver Equipment.			
1.6	M6 The satellite compass shall be certified to conform to IMO Resolution A.694(17) General Requirements for Ship-borne Radio Equipment Forming Part to the Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids.			
2.0	Standards The compass must meet the following standards:			
2.1	M7 The satellite compass shall be certified to conform to International Technical Commission (IEC) standard IEC 60533.			

Item	Minimum Mandatory Requirements	Pass / Fail	Bid Ref Page #	Comments
2.2	M8 The satellite compass shall be certified to conform to IEC 60945.			
2.3	M9 The satellite compass shall be certified to conform to IEC 61162-1, 2, and 3.			
2.4	M10 The satellite compass shall be compatible with the NMEA 0183 and 2000 protocol.			
2.5	M11 The satellite compass shall be certified to conform to American National Standards Institute (ANSI) standard RS-422 ANSI/TIA/EIA-422-B Electrical Characteristics of Balanced Voltage Differential Interface Circuits.			
2.7	M12 The satellite compass shall be compatible with the Radio Technical Commission for Maritime Services Special Committee RTCM SC104 protocol.			
3.0	Operational Requirements The compass must meet the following requirements:			

Item	Minimum Mandatory Requirements	Pass / Fail	Bid Ref Page #	Comments
3.1	M13 The dimensions of the satellite compass shall not exceed 750 x 250 x 150 mm (L x W x H).			
3.2	M14 The satellite compass shall operate using a nominal voltage of 12 or 24 Volts DC \pm 10%.			
3.3	M15 The satellite compass shall operate over an ambient temperature range of -30 to +70 degrees Celsius.			
3.4	M16 The satellite compass shall have an internal antenna capable of receiving and processing DGPS beacon signals			
3.5	M17 The satellite compass shall have an internal antenna capable of receiving Global Navigation Satellite System (GNSS) corrections from Satellite Based Augmentation Systems (SBAS).			

Item	Minimum Mandatory Requirements	Pass / Fail	Bid Ref Page #	Comments
3.6	M18 The satellite compass shall be able to process SBAS from North America's Wide Area Augmentation System (WAAS).			
3.7	M19 The satellite compass shall not emit visible light (for example, a power ON or other indicator) under normal operating conditions.			
4.0	D1 DESIRED - The satellite compass should be available in black.			

SUMMARY OF EVALUATION:		
Technical Evaluators:		
Name	Signature	Date

Solicitation No. - N° de l'invitation
F1701-160105
Client Ref. No. - N° de réf. du client
F1701-160105

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

Buyer ID - Id de l'acheteur
xlvl66
CCC No./N° CCC - FMS No./N° VME

ANNEX D

INFORMATION REQUIRED FOR INTEGRITY PROVISIONS VERIFICATION

Please provide list of names of the following entities, according to the ownership nature of the company

1. For a Corporation - each current member of the Bidder's Board of Directors;

2. For a Partnership, General Partnership or Limited Partnership - the names of all current partners;

3. For a Sole Proprietorship or an individual doing business under a firm name - the name of the sole proprietor or individual;

4. For a Joint Venture - the names of all current members of the Joint venture;

5. For an individual - the full name of the person
