



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

**Bid Receiving - PWGSC / Réception des
soumissions - TPSGC**
11 Laurier St./ 11 rue, Laurier
Place du Portage, Phase III
Core 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

**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

Vendor/Firm Name and Address

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

Issuing Office - Bureau de distribution

Scientific, Medical and Photographic Division / Division de
l'équipement scientifique, des produits photographiques et
pharmaceutiques
11 Laurier St./ 11 rue, Laurier
6B1, Place du Portage
Gatineau, Québec K1A 0S5

Title - Sujet Active Hydrogen Maser	
Solicitation No. - N° de l'invitation 31184-171887/A	Date 2016-12-22
Client Reference No. - N° de référence du client 31184-171887	
GETS Reference No. - N° de référence de SEAG PW-\$SPV-941-72138	
File No. - N° de dossier pv941.31184-171887	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-02-01	Time Zone Fuseau horaire Eastern Standard Time EST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Martins, Christina	Buyer Id - Id de l'acheteur pv941
Telephone No. - N° de téléphone (613) 355-1973 ()	FAX No. - N° de FAX (819) 956-3814
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: NATIONAL RESEARCH COUNCIL CANADA BLDG M-36 1200 MONTREAL RD OTTAWA Ontario K1A0R6 Canada	

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

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Part 1 – REQUIREMENT

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PRICING TABLE

Solicitation No. - N° de l'invitation
31184-171887/A
Client Ref. No. - N° de réf. du client
31184-171887

Amd. No. - N° de la modif.
File No. - N° du dossier
pv94131184-171887

Buyer ID - Id de l'acheteur
pv941
CCC No./N° CCC - FMS No./N° VME

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PART 1 - GENERAL INFORMATION

1.1 Requirement

The requirement is detailed under Annex "A".

1.2 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.

1.3 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), and the Agreement on Internal Trade (AIT)."

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

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

Subsection 5.4 of [2003](#), Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days
Insert: 120 days

2.1.1 SACC Manual Clauses

SACC Manual clause [B1000T](#) (2014-06-26) Condition of Material

2.2 Submission of Bids

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

Bid Receiving - PWGSC

Place du Portage, Phase III, Tower B
11 Laurier Street
Gatineau, Quebec
For couriers: J8X 4A6
For regular mail: K1A 0S5

Telephone: (819) 956-3370
Fax No.: (819) 997-9776

The above address is for the sole purpose of bid submission. No other communications are to be forwarded to this address.

No proposal shall be sent directly to the PWGSC Contracting Authority. Proposals sent directly to the PWGSC Contracting Authority will not be considered.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) calendar days before the bid closing date. Enquiries received after that time may not be answered.

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

2.4 Applicable Laws

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

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

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that Bidders provide their bid in separately bound sections as follows:

Section I:	Technical Bid (three hard copies and three soft copies on USB)
Section II:	Financial Bid (one hard copy and one soft copy on USB)
Section III:	Certifications (one hard copy)

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, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

The technical bid consists of the following:

- (a) **Supporting Technical documentation:** Technical brochures or technical data to demonstrate compliancy to the technical mandatory specifications.
- (b) **List of Products:** Bidders must include a complete product list identifying: the product name; the name of manufacturer; the model and part number of each component which make up the system. Bidders must also state the point of manufacture and shipping of goods or where service is to be performed: The bidder is requested to use the form provided in Annex "C".
- (c) **Description of the Bidder's Maintenance and Support Services:** Bidders should include a description of its warranty, maintenance and support services, which must be consistent with all the requirements described in Annex "A". At a minimum, Bidders should include the following:
 - (i) Location of available service facilities (after sales service and repair). List the service facilities closest to the destination.
 - (ii) Locations of available replacement parts from consumables to major components.
 - (iii) Response time re: service calls, and escalation schedule, i.e. (how many days with no resolution to a problem until a more experienced person is called in, and from which location).

- (iv) List the frequency of routine maintenance visits provided by a qualified service technician during the warranty period, if applicable and included in the price.

Section II: Financial Bid

- (a) **Pricing:** Bidders must submit their financial bid in accordance with the Basis of Payment including Annex "B" – Pricing Table.
- (b) **All Costs to be Included:** The financial bid must include all costs for the requirement described in the bid solicitation for the entire Contract Period, including any option years. The identification of all necessary equipment, software, peripherals, cabling and components required to meet the requirements of the bid solicitation and the associated costs of these items is the sole responsibility of the Bidder.
- (c) **Blank Prices:** Bidders are requested to insert "\$0.00" for any item for which it does not intend to charge or for items that are already included in other prices set out in the tables. If the Bidder leaves any price blank, Canada will treat the price as "\$0.00" for evaluation purposes and may request that the Bidder confirm that the price is, in fact, \$0.00. No bidder will be permitted to add or change a price as part of this confirmation. Any bidder who does not confirm that the price for a blank item is \$0.00 will be declared non-responsive.

3.1.1 Electronic Payment of Invoices – Bid

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

If Annex "E" 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

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

Section III: Certifications

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

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

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

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Evaluation Criteria

The mandatory technical evaluation criteria are detailed in Annex 'A', Part 2.1.

4.1.2 Financial Evaluation

The financial evaluation will be conducted by calculating the Total Aggregated Bid Price in accordance with the pricing tables provided in Annex "B" - Pricing Tables.

Evaluation of Price - Bid

The price of the bid will be evaluated in Canadian dollars, Applicable Taxes excluded, DDP (Ottawa, Ontario) Incoterms® 2000, Canadian customs duties and excise taxes included.

Unless the bid solicitation specifically requires bids to be submitted in Canadian currency, bids submitted in foreign currency will be converted to Canadian currency for evaluation purposes. The rate given by the Bank of Canada in effect on the bid solicitation closing date, or on another date specified in the bid solicitation, will be applied as a conversion factor to the bids submitted in foreign currency.

4.2 Basis of Selection

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

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

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

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

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

5.1 Certifications Required with the Bid

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

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide with its bid the required documentation, as applicable, to be given further consideration in the procurement process.

5.1.2 Additional Certifications Required with the Bid

5.1.2.1 Product Conformance

The Bidder certifies that all goods proposed conform, and will continue to conform throughout the period of the contract, to the requirement detailed under Annex "A".

Bidder's authorized representative signature

Date

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/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

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 Requirement

6.2.1 Requirement

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

6.3 Standard Clauses and Conditions

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

6.3.1 General Conditions

2010A (2016-04-04) General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

Subsection 9.1 of 2010A (2016-04-04) General Conditions - Goods or Services, is amended as follows:

Delete in its entirety and replace with the following:

"Despite inspection and acceptance of the Work by or on behalf of Canada and without restricting any provisions of the Contract or any condition, warranty or provision imposed by law, the Contractor, if requested by Canada to do so, must replace, repair or correct, at its own option and expense any work that becomes defective or fails to conform to the requirements of the Contract, where applicable. The warranty period will be 84 months after delivery and acceptance of the Work or the length of the Contractor's or manufacturer's standard warranty period, whichever is longer."

The 2010A (2016-04-04), General Conditions - Goods (Medium Complexity) is appended with Section 31 - Intellectual Property Infringement and Royalties, as follows:

- 1) The Contractor represents and warrants that, to the best of its knowledge, neither it nor Canada will infringe any third party's intellectual property rights in performing or using the Work, and that Canada will have no obligation to pay royalties of any kind to anyone in connection with the Work.
- 2) If anyone makes a claim against Canada or the Contractor concerning intellectual property infringement or royalties related to the Work, that Party agrees to notify the other Party in writing immediately. If anyone brings a claim against Canada, according to Department of Justice Act, R.S. 1985, c. J-2, the Attorney General of Canada must have the regulation and conduct of all litigation for or against Canada, but the Attorney General may request that the Contractor defend Canada against the claim. In either case, the Contractor agrees to participate fully in the defence and any settlement negotiations and to pay all costs, damages and legal costs incurred or payable as a result of the claim, including the amount of any settlement. Both Parties agree not to settle any claim unless the other Party first approves the settlement in writing.
- 3) The Contractor has no obligation regarding claims that were only made because:
 - (a) Canada modified the Work or part of the Work without the Contractor's consent or used the Work or part of the Work without following a requirement of the Contract; or
 - (b) Canada used the Work or part of the Work with a product that the Contractor did not supply under the Contract (unless that use is described in the Contract or the manufacturer's specifications); or
 - (c) the Contractor used equipment, drawings, specifications or other information supplied to the Contractor by Canada (or by someone authorized by Canada); or
 - (d) the Contractor used a specific item of equipment or software that it obtained because of specific instructions from the Contracting Authority; however, this exception only applies if the Contractor has included the following language in its own contract with the supplier of that equipment or software: "[Supplier name] acknowledges that the purchased items will be used by the Government of Canada. If a third party claims that equipment or software supplied under this contract infringes any intellectual property right, [supplier name], if requested to do so by either [Contractor name] or Canada, will defend both [Contractor name] and Canada against that claim at its own expense and will pay all costs, damages and legal fees payable as a result of that infringement." Obtaining this protection from the supplier is the Contractor's responsibility and, if the Contractor does not do so, it will be responsible to Canada for the claim.
- 4) If anyone claims that, as a result of the Work, the Contractor or Canada is infringing its intellectual property rights, the Contractor must immediately do one of the following:
 - (a) take whatever steps are necessary to allow Canada to continue to use the allegedly infringing part of the Work; or
 - (b) modify or replace the Work to avoid intellectual property infringement, while ensuring that the Work continues to meet all the requirements of the Contract; or
 - (c) take back the Work and refund any part of the Contract Price that Canada has already paid.

If the Contractor determines that none of these alternatives can reasonably be achieved, or if the Contractor fails to take any of these steps within a reasonable amount of time, Canada may choose either to require the Contractor to do (c), or to take whatever steps are necessary to acquire the rights to use the allegedly infringing part(s) of the Work itself, in which case the Contractor must reimburse Canada for all the costs it incurs to do so.

6.3.2 Supplemental General Conditions

4001 (2015-04-01) Hardware Purchase, Lease and Maintenance,
4003 (2010-08-16) Licensed Software, and
4004 (2013-04-25) Maintenance and Support Services for Licensed Software,

apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from date of Contract _____ to _____ inclusive **(fill in end date of the period)**

6.4.2 Delivery Date

All the deliverables are requested on or before April 3, 2017.

6.4.3 Delivery Point

Delivery of the requirement will be made to delivery point specified at Annex "A" of the Contract.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Christina Martins
Supply Specialist
Acquisitions Branch
Commercial and Consumer Products Directorate
Public Services and Procurement Canada
11 Laurier St. Gatineau, Quebec
K1A 0S5

Telephone: (613) 355-1973
Facsimile: (819) 956-3814
Christina.Martins@pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.5.2 Technical Authority (to be filled in only at contract award)

The Technical Authority for the Contract is:

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

Telephone: _____
E-mail address: _____

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.3 Accounts Payable Contact (to be filled in only at contract award)

Name: _____
Telephone: _____
E-mail address: _____

6.5.4 Contractor's Representative (to be completed by the bidder)

The telephone number (with extension if applicable) of the person responsible for:

General enquiries

Name: _____
Tel. No. _____ ext: _____
E-mail address: _____

Delivery Follow-up

Name: _____
Tel. No. _____ ext: _____
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 a firm lot price, as specified in Annex "B" – Pricing Table for a cost of \$_____ (to be filled in only at contract award). Customs duties are excluded 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 SACC Manual Clauses

SACC Manual clause C2000C (2007-11-30) Taxes - Foreign-Based Contractor
SACC Manual clause 2605C (2008-05-12) Customs Duty and Sales Tax
SACC Manual clause H1000C (2008-05-12) Single Payment

6.6.3 Electronic Payment of Invoices – Contract

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);

6.7 Invoicing Instructions

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

National Research Council Canada
BLDG M22
1200 Montreal Road
Ontario
K1A 0R6
 - (b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.
 - (c) one (1) copy must be forwarded to the consignee.
 - (d) To facilitate the payment process, it is important that the Contractor quote the contract number on all the invoices, shipping bills and packing slips. Failure to do so will delay payment and the date used for calculating interest on overdue accounts.

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 Ontario.

6.10 Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the supplemental general conditions 4001(2015-04-01) Hardware Purchase, Lease and Maintenance;
- (c) the supplemental general conditions 4003(2010-08-16) Licensed Software,
- (d) the supplemental general conditions 4004(2013-04-25) Maintenance and Support Services for Licensed Software,
- (e) the general conditions 2010A (2016-04-04) General Conditions - Goods (Medium Complexity);
- (f) Annex "A", Requirement;
- (g) Annex "C", – List of Products;
- (h) Annex "B", – Pricing Table; and
- (i) the Contractor's bid dated _____ (*insert date of bid*) (*If the bid was clarified or amended, insert at the time of contract award: “, as clarified on _____” or “, as amended on _____” and insert date(s) of clarification(s) or amendment(s)*)

6.11 SACC Manual Clauses

B1501C	Electrical Equipment	2006-06-16
G1005C	Insurance	2016-01-28

6.12 Shipping Instructions

6.12.1 Shipping Instructions – Delivered Duty Paid

1. Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP) (Ottawa, Ontario) Incoterms 2000 for shipments from a commercial contractor.
2. The Contractor will be responsible for all delivery charges, administration, costs and risk of transport and customs clearance, including the payment of customs duties and taxes.

ANNEX "A"
Part 1 - REQUIREMENT

The National Research Council of Canada has a requirement for the supply, seven year extended warranty and manuals for an Active Hydrogen Maser which must meet all of the mandatory technical requirements as specified below and the mandatory evaluation criteria as specified at Part 2.1 - Mandatory Technical Evaluation Criteria. The requirement (must include all of the following):

Delivery will be made to the following address:
National Research Council Canada
Bldg. M36, 1200 Montreal Road
Ottawa, Ontario K1A 0R6
Canada

1.0 Manuals:

One copy of all applicable manuals and detailed system schematics related to the maser must be provided in English. An additional copy must be provided on either CD/DVD, USB memory stick or via email.

2.0 Service

The Active Hydrogen Maser must include: regional technical support; technical phone support; support via the Internet; and support via a fax-back document system.

Also, provide the following with your bid:

- a) Location of available service facilities (after sales service and repair). List the service facilities closest to the destination.
-
-
-
- b) Locations of available replacement parts from consumables to major components.
-
-
-
- c) Response time re: service calls, and escalation schedule, i.e. (how many days with no resolution to a problem until a more experienced person is called in, and from which location).
-
-
-
- d) List the frequency of routine maintenance visits provided by a qualified service technician during the warranty period, if applicable and included in the price.
-
-

3.0 Frequency Stability:

- a. The Frequency Stability at normal operating conditions measured in 1Hz bandwidth must meet these specifications.

Averaging Time TAU [seconds]	Allan Deviation ADEV
1	$\leq 8.0 \text{ E}^{-14}$
10	$\leq 1.8 \text{ E}^{-14}$
100	$\leq 4.0 \text{ E}^{-15}$
1000	$\leq 2.0 \text{ E}^{-15}$
10000	$\leq 1.5 \text{ E}^{-15}$

- b. The Frequency Drift achieved after one year of unperturbed operation under normal operating conditions at $\pm 0.25 \text{ }^{\circ}\text{K}$ ambient temperature stability must be $\leq 3.0\text{E-}16$ / day.

4.0 Phase Noise:

Phase Noise at normal operating conditions must meet these specifications.

Carrier Frequency [MHz]	5	100
Offset from Carrier [Hz]	Phase Noise [dBc/Hz]	
1	≤ -127	≤ -100
10	≤ -140	≤ -110
100	≤ -150	≤ -120
1k	≤ -150	≤ -130
10k	≤ -150	≤ -140
100k	≤ -150	≤ -140

5.0 Temperature Sensitivity:

The fractional frequency change per 1°K must be $\leq 1.0 \text{ E}^{-15}$

6.0 Magnetic Sensitivity:

The fractional frequency change per 1°Gauss must be $\leq 1.0 \text{ E}^{-14}$

7.0 Synthesizer Frequency Control:

- a. The synthesizer frequency control range must be $\geq 1.0 \text{ E}^{-10}$
b. The synthesizer frequency control resolution must be $\leq 1.0 \text{ E}^{-16}$

8.0 Output Signals:

- a. The Sine Output Signals must meet these specifications

Frequency [MHz]	Quantity	Amplitude [dBm]	Load Impedance [Ω]
5 MHz	≥ 2	$\geq +10$	50
10 MHz	≥ 1		
100 MHz	≥ 2		

b. The 1PPS Output Signals parameters must be:

1PPS Output Signal Parameters	Value	Conditions
Quantity	≥ 1	
Amplitude [Vpp]	≥ 2.5	
Load Impedance [Ω]	50	
Risetime [ns]	≤ 4	
Pulse Width [μ s]	≥ 10	
Pulse Timing Settability [ns/step] or Sync to 1PPS input [ns]	≤ 50	Achievable with 1PPS Sync Input or via control interface

9.0 Power Source:

- a. The AC Power Source must be with levels at 115 ± 15 [V] 60 [Hz]
b. The DC 22 to 28 [V] with a power of ≤ 250 [W]

10.0 Remote Control and Monitoring:

The Remote Control and Monitoring for maser critical operation parameters must be via RS-232 or LAN.

11.0 Reference Information:

Suppliers must include in their bid submissions a listing identifying at least three maser installation sites over the past five consecutive years. These listings must include installation locations, contact person(s), and contact data including, but not restricted to, telephone numbers and email addresses.

The requirement must work and operate at all times in accordance with the following mandatory technical requirements and the mandatory evaluation criteria as specified below at Part 2.1 - Mandatory Technical Evaluation Criteria.

Part 2.1 - MANDATORY TECHNICAL EVALUATION CRITERIA

The following requirements are the mandatory technical evaluation criteria which will be evaluated during the Bid Evaluation. In addition the Contractor will be required to meet all of the mandatory technical requirements for the duration of the Contract

Bidders are requested to cross reference the mandatory technical criteria in a concise format by using page, paragraph(s) & sub-paragraphs as applicable to their supporting technical documentation.

Evaluation Criteria:

ITEM	CRITERIA	MUST BE PROVIDED WITH THE BID FOR EVALUATION	REFERENCE TO SUBSTANTIATION IN THE TECHNICAL BID.
3.0 a	Frequency Stability	Maser signal Alan Deviation measurement results in the form of a graph or a table with the accompanying description of the experimental setup and the equipment, and the laboratory name where the measurements were conducted.	

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3.0 b	Frequency Drift	Phase or frequency measurements of the maser that show the level of the frequency drift with respect to a stable timescale such as UTC, UTC(k) or other. The results have to be provided in a graph or a table with the accompanying description of the experimental setup and equipment and the laboratory name where the measurements were conducted.	
4.0	Phase Noise	Maser signal Phase Noise Power Spectral Density measurement results in the form of a graph or a table with the accompanying description of the experimental setup and the equipment, and the laboratory name where the measurements were conducted.	
5.0.	Temperature Sensitivity	Maser signal output frequency as the function of the ambient temperature measurement results in the form of a graph or a table with the accompanying description of the experimental setup and the equipment, and the laboratory name where the measurements were conducted.	
6.0.	Magnetic Sensitivity	Maser signal output frequency as the function of the magnetic field measurement results in the form of a graph or a table with the accompanying description of the experimental setup and the equipment, and the laboratory name where the measurements were conducted.	

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ANNEX "B"
PRICING TABLE

The Bidder must provide all of the pricing requested in the following Tables in accordance with Article 6.6.1 - Basis of Payment.

Table 1: Initial Requirement:

Item	Description	Number of Units	Unit of Issue	Firm, All-Inclusive Unit Price
1	Active Hydrogen Maser in accordance with the Requirement listed in Annex "A." Shipping, 7-year extended warranty and manuals included.	1	LOT	\$ _____

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ANNEX “C”
LIST OF PRODUCTS

Product Name	Model/Part Number	Name of Manufacture		

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ANNEX "D"
COMPLETE LIST OF DIRECTORS

(As per Standard Instructions, Clauses and Conditions Part 2)

Name	Position
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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ANNEX “E” to PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

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);