



RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:

Bid Receiving
PWGSC
33 City Centre Drive
Suite 480C
Mississauga
Ontario
L5B 2N5
Bid Fax: (905) 615-2095

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

Address inquiries to the Contracting Authority at
Hussain.Noor@pwgsc-tpsgc.gc.ca

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
Ontario Region
33 City Centre Drive
Suite 480
Mississauga
Ontario
L5B 2N5

Title - Sujet Plasma Mass Spectrometer	
Solicitation No. - N° de l'invitation KW405-190405/A	Date 2018-12-14
Client Reference No. - N° de référence du client KW405-190405	
GETS Reference No. - N° de référence de SEAG PW-\$TOR-007-7677	
File No. - N° de dossier TOR-8-41115 (007)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-01-28	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: Noor, Hussain	Buyer Id - Id de l'acheteur tor007
Telephone No. - N° de téléphone (905) 615-2077 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF THE ENVIRONMENT 867 Lakeshore Road Burlington Ontario L7R4A6 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 - GENERAL INFORMATION

1.1 Requirement

The requirement is detailed under Article 6.2 of the resulting contract clauses.

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), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and the Canadian Free Trade Agreement (CFTA).

1.4 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.

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.

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:

Courier/Post: Bid Receiving Unit – PWGSC Ontario Region
33 City Center Drive, Suite 480C
Mississauga ON L5B 2N5

epost: TPSGC.orreceptiondessoumissions-orbidreceiving.PWGSC@tpsgc-pwgsc.gc.ca
(Bids 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)

Bid Fax: 905-615-2095

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 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

- 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 (2 hard copies)
Section II: Financial Bid (1 hard copy)
Section III: Certifications (1 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 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.

Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment.

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

Section III: Certifications

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

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

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

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

Bidders must provide documentation demonstrating that their proposed product meets all the technical specifications detailed below.

Item #	Mandatory Requirement	Page # (Identify page number in your proposal where the information can be found)
<u>1</u>	<p>The proposed unit must have two tandem quadrupole mass spectrometers separated by one multipole in the collision reaction cell, as defined for a Triple-Quad ICP-MS in the IUPAC 2013 definition:</p> <p>The IUPAC 2013 defines a triple quad as “A tandem mass spectrometer comprising of two transmission quadrupole mass spectrometers in series, with a (non-selecting) RF-only quadrupole (or other multipole) between them to act as a collision cell.”</p>	
<u>2</u>	The first filter must only allow a 1 (one) AMU mass range or less for each compound to enter separately into the Collision Reaction cell.	
<u>3</u>	<p>Must have, as an option, an integrated injection flow system with a 1 mL Teflon sample loop. The internal diameter of the Teflon tubing for the loop must be 1.0 mm or less (an ID bigger than 1.0 mm will not be accepted).</p> <p>The pump must include, as an option, a reliable flow rate of 3 ml/minute for the sample loading in the flow injection system.</p>	
<u>4</u>	Must have an on-line internal standard addition capability.	
<u>5</u>	The Autosampler must have a second rinse capability for a 20% methanol rinse between samples, if a flow injection is used. The pump and pump tubes must be capable of withstanding the 20% Methanol solution.	
<u>6</u>	The Flow injection system tubing and T mixing connectors must not contain any PVC or latex joints or pump tubes.	
<u>7</u>	<p>The instrument must be provided, as an option with a CETAC ASX-520 or equivalent autosampler containing four racks of 60 test tubes 17 x 100 mm, with a Teflon coated carbide probe (ID 1.0 mm). The number of samples per rack must be 60.</p> <p>The Autosampler CETAC ASX 520 and equivalent autosampler containing four racks of 60 test tubes 17 x 100 mm must be compatible with the instrument software.</p>	

<u>8</u>	The electronic background must be 1.0 count per second (cps) or less.																									
<u>9</u>	The abundance sensitivity must be 5×10^{-8} or lower.																									
<u>10</u>	<p>The detection limits specified below must be achieved at installation. When tests are to be made in Single-Quad mode, the quadrupole mass analyzer must operate with < 1 amu resolution. When tests are to be made in MS/MS mode, both quadrupole mass filter and quadrupole mass analyzer must operate with < 1 amu resolution. The Cerium Oxide to Cerium ratio must be no more than 2%.</p> <p>In the no-gas and Single-Quad modes with a 0.3 second integration/replicate/isotope:</p> <table> <tr> <td>Beryllium</td><td>0.5</td><td>PPT</td></tr> <tr> <td>Indium</td><td>0.1</td><td>PPT</td></tr> <tr> <td>Bismuth or Uranium238</td><td>0.1</td><td>PPT</td></tr> </table> <p>In the reaction and MS/MS mode with the following integration/replicate/isotope in seconds:</p> <table> <tr> <td></td><td>Integration/replicate/isotope</td><td></td></tr> <tr> <td>Sulfur</td><td>0.2</td><td>PPB 3s</td></tr> <tr> <td>Phosphorus</td><td>0.05</td><td>PPB 3s</td></tr> <tr> <td>Selenium</td><td>0.001</td><td>PPB 10s</td></tr> <tr> <td>Arsenic</td><td>0.001</td><td>PPB 0.5s</td></tr> </table>	Beryllium	0.5	PPT	Indium	0.1	PPT	Bismuth or Uranium238	0.1	PPT		Integration/replicate/isotope		Sulfur	0.2	PPB 3s	Phosphorus	0.05	PPB 3s	Selenium	0.001	PPB 10s	Arsenic	0.001	PPB 0.5s	
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<u>11</u>	The report for the data results must be exportable to Microsoft EXCEL for further data processing.																									
<u>12</u>	The Reaction Collision cell must be equipped with at least 2 high and 1 (one) Low Flow Mass Flow controllers.																									

4.1.1.2 Point Rated Technical Criteria

Technical Criteria

700 Points Maximum

A minimum score of 450 points must be obtained for the proposal to be considered responsive.

Bidders should provide documentation demonstrating that their proposed product meets all the technical specifications detailed below. If no documents are provided then the bidder will receive zero (0) points for that item. The documentation could be a pamphlet, a flyer, an application note, an instrument tune, or an analysis report.

Item #	Description	Maximum Points Available	Page # (Identify page number in your proposal where the information can be found)
1	<p>Maximum electronic Background noise in counts per second CPS.</p> <ul style="list-style-type: none"> - If the electronic background is from 0.00 to 0.20 CPS (100 points). - If the electronic background is from 0.21 to 0.50 CPS (70 points). - If the electronic background is from 0.51 CPS to 0.70 CPS (30 points). - If the electronic background is from 0.71 CPS to 0.99 CPS (10 points). 	100	
2	<p>Abundance sensitivity in MS/MS mode as ratio (to be evaluated at Masses 237/238 or 132/133).</p> <ul style="list-style-type: none"> - If the abundance sensitivity in MS/MS mode is lower or equal to 1×10^{-10} (100 Points). - If the abundance sensitivity in MS/MS mode is lower or equal to 5×10^{-10} (50 Points). - If the abundance sensitivity in MS/MS mode is lower or equal to 1×10^{-9} (30 Points). - If the abundance sensitivity in MS/MS mode is lower or equal to 5×10^{-9} (10 Points). - If the abundance sensitivity in MS/MS mode is lower or equal to 5×10^{-8} (1 Points). 	100	
	<p>For items 3 to 5 bidders must use the following as instrument conditions:</p> <p>Single-Quad mode and Cerium oxide/Cerium ratio of 2 % or less, optimized for mid-mass, under identical conditions for the entire mass range with the exception of the last mass filter for mass selection at a resolution of ≤ 1 amu.</p>		
3	<p>Sensitivity in Single-Quad mode (no gas mode – Q1 being an ion guide) in counts per second per part per billion CPS/PPB for the isotope ^7Li</p> <ul style="list-style-type: none"> - If the Lithium sensitivity is greater or equal to 300,000 CPS/PPB (60 points) - If the Lithium sensitivity is 200,000 to 299,000 CPS/PPB (40 points) - If the Lithium sensitivity is 100,000 to 199,000 CPS/PPB (20 points) - If the Lithium sensitivity is 20,000 to 99,000 CPS/PPB (10 points) 	60	

4	<p>Sensitivity in Single-Quad mode (no gas mode – Q1 being an ion guide) in counts per second per part per billion CPS/PPB for the isotope ¹¹⁵In</p> <ul style="list-style-type: none"> - If the Indium sensitivity is greater or equal to 1,000,000 CPS/PPB (60 points) - If the Indium sensitivity is 750,000 to 999,000 CPS/PPB (40 points) - If the Indium sensitivity is 500,000 to 749,000 CPS/PPB (30 points) - If the Indium sensitivity is 200,000 to 499,000 CPS/PPB (10 points) 	60	
5	<p>Sensitivity in Single-Quad mode (no gas mode – Q1 being an ion guide) in counts per second per part per billion CPS/PPB for the isotope ²³⁸U</p> <ul style="list-style-type: none"> - If the Uranium sensitivity is greater or equal to 1,000,000 CPS/PPB (60 points) - If the Uranium sensitivity is 750,000 to 999,000 CPS/PPB (40 points) - If the Uranium sensitivity is 500,000 to 749,000 CPS/PPB (20 points) - If the Uranium sensitivity is 200,000 to 499,000 CPS/PPB (10 points) 	60	
6	<p>In the No-Gas mode, maximum guaranteed Cerium oxide level CeO+/Ce+ as % Cerium oxide</p> <ul style="list-style-type: none"> - If the Oxyde level is lower than or equal to 1.5 % (40 Points). - If the Oxyde level is greater than 1.5 % but lower than 2.0 % (20 Points). - If the Oxyde level is greater than 2.0 % but lower than 3.0 % (10 Points). 	40	
7	<p>In the No-Gas mode, maximum guaranteed double charge Ce++/Ce+ as % Cerium double charge</p> <ul style="list-style-type: none"> - If the double charge is lower than or equal to 3.0 % (40 Points). - If the double charge is greater than 3.0 % but lower than 3.5 % (20 Points). - If the double charge is greater than 3.5 % but lower than 4.5 % (10 Points). 	40	
	<p>For items 8 to 15, bidders must provide a raw count in counts per second (CPS) for the reaction mode at the specified mass with a resolution for the first filter of ≤ 1.0 amu, an oxide level of $\leq 2\%$.</p> <p>Bidders must use the same combination of gas options and</p>		

	<p>flows for the plasma and the reaction cell for all the items.</p> <p>The following masses must be analysed in order to get points for the items 8 to 15. Please provide the instrument printout of the raw counts (CPS) of the following masses for each solution:</p> <table><tr><td>Quadrupole 1</td><td>Quadrupole 2</td></tr><tr><td>31</td><td>47</td></tr><tr><td>32</td><td>48</td></tr><tr><td>43 *</td><td>43 *</td></tr><tr><td>45</td><td>61</td></tr><tr><td>48</td><td>64</td></tr><tr><td>51</td><td>67</td></tr></table> <ul style="list-style-type: none">The mass 43 must be done in the no-gas mode	Quadrupole 1	Quadrupole 2	31	47	32	48	43 *	43 *	45	61	48	64	51	67		
Quadrupole 1	Quadrupole 2																
31	47																
32	48																
43 *	43 *																
45	61																
48	64																
51	67																
8	<p>10 PPB Sulfur analysed at mass 48</p> <ul style="list-style-type: none">- If 10 PPB of Sulfur is equal to or greater than 200,000 CPS (30 Points).- If 10 PPB of Sulfur is 100,000 to 199,000 CPS (20 Points).- If 10 PPB of Sulfur is 50,000 to 99,000 CPS (10 Points).	30															
9	<p>Note: The interference will be evaluated in concentration for this item.</p> <p>100 PPM Phosphorous analysed at mass 48 (Interference on Sulfur)</p> <ul style="list-style-type: none">- If the interference is between 0 and 9 PPT (30 Points).- If the interference is between 10 and 99 PPT (20 Points).- If the interference is between 100 and 1000 PPT (10 Points).	30															
10	<p>10 PPB Scandium analysed at mass 61</p> <ul style="list-style-type: none">- If 10 PPB of Scandium is greater than 500,000 CPS (30 Points).- If 10 PPB of Scandium is 200,000 to 499,000 CPS (20 Points).- If 10 PPB of Scandium is 100,000 to 199,000 CPS (10 Points).	30															
11	<p>Note: The interference will be evaluated in concentration for this item.</p> <p>100 PPM Calcium analysed at mass 61 (Interference on Scandium)</p>	30															

	<ul style="list-style-type: none"> - If the interference is between 0 and 9 PPT (30 Points). - If the interference is between 10 and 99 PPT (20 Points). - If the interference is between 100 and 1000 PPT (10 Points). 		
12	10 PPB Titanium analysed at mass 64 <ul style="list-style-type: none"> - If 10 PPB of Titanium is equal to or greater than 500,000 CPS (30 Points). - If 10 PPB of Titanium is 200,000 to 499,000 CPS (20 Points). - If 10 PPB of Titanium is 100,000 to 199,000 CPS (10 Points). 	30	
13	Note: The interference will be evaluated in concentration for this item. 100 PPM Calcium analysed at mass 64 (Interference on Titanium) <ul style="list-style-type: none"> - If the interference is between 10 and 500 PPT (30 Points). - If the interference is between 501 and 1000 PPT (20 Points). - If the interference is between 1001 and 5000 PPT (10 Points). 	30	
14	10 PPB Vanadium analysed at mass 67 <ul style="list-style-type: none"> - If 10 PPB of Vanadium is equal to or greater than 500,000 CPS (30 Points). - If 10 PPB of Vanadium is 200,000 to 499,000 CPS (20 Points). - If 10 PPB of Vanadium is 100,000 to 199,000 CPS (10 Points). 	30	
15	Note: The interference will be evaluated in concentration for this item. 10 PPM Titanium analysed at mass 67 (Interference on Vanadium) <ul style="list-style-type: none"> - If the interference is between 0 and 10 PPT (30 Points). - If the interference is between 11 and 100 PPT (20 Points). - If the interference is between 101 and 1000 PPT (10 Points). 	30	

4.1.2 Financial Evaluation

1. Bidders must submit pricing in accordance with Annex B, Basis of Payment, in Canadian Funds;
2. The price used in the evaluation will be the sum of the Extended Prices for both Firm and Optional Requirements at Annex B, Basis of Payment. This will be calculated by multiplying the Quantity by the Firm Unit Price for the Firm and Optional Requirements;
3. The price of the bid will be evaluated in Canadian dollars, Applicable Taxes excluded, FOB destination, delivery charges included, Canadian customs duties and excise taxes included.

4.2 Basis of Selection

4.2.1 Basis of Selection – Highest Combined Rating of Technical Merit and Price

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation; and
 - b. meet all mandatory criteria; and
 - c. obtain the required minimum of 450 points overall for the technical evaluation criteria which are subject to point rating.
The rating is performed on a scale of 700 points.
2. Bids not meeting (a) or (b) or (c) will be declared non-responsive.
3. The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 70% for the technical merit and 30% for the price.
4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 70%.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 30%.
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

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 [Inteligibility 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 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 [Inteligibility 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](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969) website (http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969).

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

PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

6.2 Requirement

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

6.3 Standard Clauses and Conditions

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

6.3.2 Supplemental General Conditions

4001 (2015-04-01) Hardware Purchase, Lease and Maintenance, apply to and form part of the Contract

4003 (2010-08-16), Licensed Software, apply to and form part of the Contract

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 April 30, 2025 inclusive.

6.4.2 Delivery Date

All the firm deliverables including installation must be received and completed on or before March 29, 2019.

6.4.3 Optional Goods

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at Annex A of the Contract under the same conditions and at the prices and/or rates stated in 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 at any time before the expiry of the Contract by sending a written notice to the Contractor.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Hussain Noor
Supply Officer
Public Works and Government Services Canada
33 City Centre Dr., Suite 480C
Mississauga, ON
L5N 2N5

Telephone: 905-615-2080
Facsimile: 905-615-2060
E-mail address: Hussain.Noor@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 Project Authority *(to be inserted 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 completed by bidder)*

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 as specified in Annex B, Basis of Payment, for a cost of \$_____. 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 SACC Manual Clauses

H1000C Single Payment (2008-05-12)

6.6.3 Advance Payment

Canada will pay the Contractor in advance for the Work described in 4. Extended Warranty of the Requirement in Annex 'A' – Requirement 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.

6.6.4 Electronic Payment of Invoices – Contract

If applicable, where payment of invoices will be made using electronic payment instruments, Refer to Annex "C" Electronic Payment Instruments, where the Bidder indicated which electronic payment instruments are accepted and change the text below accordingly.

Delete 6.6.3 if bidder does not accept electronic payment

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 address shown on page 1 of the Contract for certification and payment.
 - b. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled authorities of the Contract.

6.8 Certifications 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.

6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____ (*Insert the name of the province or territory as specified by the Bidder in its bid, if applicable*).

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, 4003 (2019-08-16) Licensed Software & 4004 (2013-04-25) Maintenance and Support Services for Licensed Software;

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- (c) the general conditions 2010A (2018-06-21), General Conditions – Goods (Medium Complexity);
 - (d) Annex A, Requirement;
 - (e) Annex B, Basis of Payment;
 - (f) the Contractor's bid dated _____. *(to be inserted at contract award)*

6.11 Insurance

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

ANNEX "A"

REQUIREMENT

1. Background

The Environmental Scientific and Technology Laboratories Division (ESTL) is seeking to replace four old inductively coupled plasma mass spectrometers ICP-MS with the latest version of Triple-Quad ICP-MS. The four laboratories within this division seeking a new Triple-Quad ICP-MS are as follows:

- (1) National Laboratory for Environmental Testing (NLET - Burlington);
- (2) Quebec Laboratory for Environmental Testing (QLET – Montreal);
- (3) Prairie and Northern Laboratory for Environmental Testing (PNLET – Edmonton); and
- (4) Pacific and Yukon Laboratory for Environmental Testing (PYLET – Vancouver).

ESTL analyses thousands of samples of various matrices (water, sediments and biota) every year for over seventy projects for samples submitted across the country. Some of these samples have a very high amount of salts such as Calcium, Sodium, silicates, Magnesium, Potassium and Chloride and high amounts of organic material such as the oily samples from the Oil Sands projects. Close to 60 isotopes per sample are monitored. Therefore, the speed of analysis, background, interference removal and sensitivity will be critical in achieving an equivalent level of service we've offered to our clients for the past 10 years using our High resolution and triple-quad ICP-MS from the National Laboratory for Environmental Testing (NLET). The goal is to ensure that all divisional labs can achieve the same type of sensitivity (millions of counts per second per parts per billion CPS/PPB), background (<0.1 CPS) and interference removal (Medium and High resolution achieved on the High Resolution ICP-MS). This will allow to harmonize services offered in the sister labs within the division and allow for optimal flexibility in managing workload at a divisional level.

2. Firm Requirement

2.1 The new ICP-MS must achieve very low detection limits, a high sensitivity, a low electronic background and low abundance sensitivity. It must also be able to completely remove all the interferences found in samples in order to achieve accurate results at a part per trillion concentrations with some species found at the parts per million concentrations.

2.2 The new instrument must have a quick rinse time and a low memory effect for a very low processing cost and low resource consumption.

2.3 Inductively Coupled Plasma – Mass Spectrometer as per the following specifications:

- Must come complete with Windows10 operating system, software, license, Excel software, computer, monitor, printer, rotary pump, gas regulators and piping, startup consumables, solutions, spare parts, installation and delivery.
- Must have two tandem quadrupole mass spectrometers separated by one multipole in the collision reaction cell, as defined for a Triple-Quad ICP-MS in the IUPAC 2013 definition:
 - o The IUPAC 2013 defines a triple quad as "A tandem mass spectrometer comprising of two transmission quadrupole mass spectrometers in series, with a (non-selecting) RF-only quadrupole (or other multipole) between them to act as a collision cell."
- The first filter must only allow a 1 AMU mass range or less for each compound to enter separately into the Collision/Reaction cell.
- Must have, as an option, an integrated injection flow system with a 1 mL Teflon sample loop. The internal diameter of the Teflon tubing for the loop must be 1.0 mm or less. An ID bigger than 1.0 mm will not be accepted.

- The pump must include, as an option, a reliable flow rate of 3 ml/min for the sample loading in the flow injection system.
- Must have a reliable on-line internal standard addition capability.
- The Autosampler must have a second rinse capability for a 20% methanol rinse between samples, if a flow injection is used. The pump and pump tubes must be capable of withstanding the 20% Methanol solution.
- The Flow injection system tubing and T mixing connectors must not contain any PVC or latex joints or pump tubes.
- The instrument must be provided, as an option with a CETAC ASX-520 or equivalent, with a Teflon coated carbide probe (ID 1.0 mm). The number of samples per rack must be 60.
- The Autosampler CETAC ASX 520 must be compatible with the instrument software.
- The electronic background must be 1.0 count per second (cps) or less. The High Resolution ICP-MS background was < 0.1 cps.
- The abundance sensitivity must be 5×10^{-8} or lower.
- The detection limits specified below must be achieved at installation. When tests are to be made in Single-Quad mode, the quadrupole mass analyzer must operate with ≤ 1 amu resolution. When tests are to be made in MS/MS mode, both quadrupole mass filter and quadrupole mass analyzer must operate with ≤ 1 amu resolution. The Cerium Oxide to Cerium ratio must be no more than 2%.

In the no-gas and Single-Quad modes with a 0.3 second integration/replicate/isotope:

Beryllium	0.5	PPT
Indium	0.1	PPT
Bismuth or Uranium238	0.1	PPT

In the reaction and MS/MS mode with the following integration/replicate/isotope in seconds:

	Integration/replicate/isotope		
Sulfur	0.2	PPB	3s
Phosphorus	0.05	PPB	3s
Selenium	0.001	PPB	10s
Arsenic	0.001	PPB	0.5s

- The report for the data results must be exportable to EXCEL for further data processing.
- The Reaction/Collision cell must be equipped with at least 2 high and 1 Low Flow Mass Flow controllers.

3. Delivery

Delivery of each unit will be direct. One unit delivered to each of the following locations.

- (1) National Laboratory for Environmental Testing (NLET - Burlington), at 867 Lakeshore Road, Burlington, Ontario, L7S 1A1
- (2) Quebec Laboratory for Environmental Testing (QLET – Montreal), at 105 McGill Street, Montreal, Quebec, H2Y 2E7
- (3) Prairie and Northern Laboratory for Environmental Testing (PNLET – Edmonton), at 5320-122 Street, Edmonton, Ontario, T6H 3S5
- (4) Pacific and Yukon Laboratory for Environmental Testing (PYLET – Vancouver), at the Pacific Environmental Science Centre, 2645 Dollarton Hwy, North Vancouver, British Columbia, V7H 1B1 (Option)

4. Extended Warranty

A 5 year warranty must be available. Each extended warranty for Triple-Quad ICP-MS must be for a 12 month period and must include parts, labour, service, travel and transportation.

ANNEX "B"

BASIS OF PAYMENT

Firm, all-inclusive prices in Canadian Funds. F.O.B destination including all delivery charges, Canadian Customs Duties and excise taxes included as applicable. The total amount of Goods and Services Tax (GST) or Harmonized Sales Tax (HST) is to be shown separately, if applicable.

Content in Italics will be removed from any resultant Contract.

1. Firm Requirement

Year 1 - Date of Contract Award to March 31, 2019

No.	Item Description	Quantity	Firm Unit Price	Total Extended Price
1.	Triple-Quad ICP-MS for National Laboratory for Environmental Testing (NLET - Burlington), as per Annex A, including delivery and installation.	1	\$_____	\$_____
2.	Triple-Quad ICP-MS for Quebec Laboratory for Environmental Testing (QLET – Montreal), as per Annex A, including delivery and installation.	1	\$_____	\$_____
3.	Triple-Quad ICP-MS for Prairie and Northern Laboratory for Environmental Testing (PNLET – Edmonton), as per Annex A, including delivery and installation.	1	\$_____	\$_____

Total Cost: \$_____

2. Optional Requirements

Year 1 - Date of Contract Award to March 31, 2019

No.	Item Description	Quantity	Firm Unit Price	Total Extended Price
1.	Chiller	Up to 3	\$_____	\$_____
2.	Flow injection system with a 1 ml 1.0 mm ID Teflon loop	Up to 3	\$_____	\$_____
3.	Training (for up to 3 technicians) National Laboratory for Environmental Testing (NLET - Burlington), at 867 Lakeshore Road, Burlington, Ontario, L7S 1A1	1	\$_____	\$_____
4.	Training (for up to 3 technicians) Quebec Laboratory for Environmental Testing (QLET – Montreal), at 105 McGill Street, Montreal, Quebec, H2Y 2E7	1	\$_____	\$_____
5.	Training (for up to 3 technicians) Prairie and Northern Laboratory for	1	\$_____	\$_____

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	Environmental Testing (PNLET – Edmonton), at 5320-122 Street, Edmonton, Ontario, T6H 3S5			
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Total Estimated Cost: \$ _____

Year 2 – April 01, 2019 to March 31, 2020

No.	Item Description	Quantity	Firm Unit Price	Total Extended Price
1.	Triple-Quad ICP-MS for Pacific and Yukon Laboratory for Environmental Testing (PYLET – Vancouver), as per Annex A, including delivery and installation.	1	\$ _____	\$ _____
2.	Chiller	1	\$ _____	\$ _____
3.	Training (for up to 3 technicians) Pacific and Yukon Laboratory for Environmental Testing (PYLET – Vancouver), at the Pacific Environmental Science Centre, 2645 Dollarton Hwy, North Vancouver, British Columbia, V7H 1B1	1	\$ _____	\$ _____
4.	Flow injection system with a 1 ml 1.0 mm ID Teflon loop	1	\$ _____	\$ _____
5.	Extended Warranty for Triple-Quad ICP-MS, as per Annex A.	Up to 3	\$ _____	\$ _____

Total Estimated Cost: \$ _____

Year 3 – April 01, 2020 to March 31, 2021

No.	Item Description	Quantity	Firm Unit Price	Total Extended Price
1.	Extended Warranty for Triple-Quad ICP-MS, as per Annex A.	Up to 4	\$ _____	\$ _____

Total Estimated Cost: \$ _____

Year 4 – April 01, 2021 to March 31, 2022

No.	Item Description	Quantity	Firm Unit Price	Total Extended Price
1.	Extended Warranty for Triple-Quad ICP-MS, as per Annex A.	Up to 4	\$ _____	\$ _____

Total Estimated Cost: \$ _____

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Year 5 – April 01, 2022 to March 31, 2023

No.	Item Description	Quantity	Firm Unit Price	Total Extended Price
1.	Extended Warranty for Triple-Quad ICP-MS, as per Annex A.	Up to 4	\$_____	\$_____

Total Estimated Cost: \$_____

Year 6 – April 01, 2023 to March 31, 2024

No.	Item Description	Quantity	Firm Unit Price	Total Extended Price
1.	Extended Warranty for Triple-Quad ICP-MS, as per Annex A.	Up to 4	\$_____	\$_____

Total Estimated Cost: \$_____

Year 7 – April 01, 2024 to March 31, 2025

No.	Item Description	Quantity	Firm Unit Price	Total Extended Price
1.	Extended Warranty for Triple-Quad ICP-MS, as per Annex A.	1	\$_____	\$_____

Total Estimated Cost: \$_____

Total Evaluated Price = \$_____ + _____
(Firm Requirement) + (Optional Requirement)

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ANNEX "C" to PART 6 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

As indicated in Part 6, clause 6.6.3, 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)