



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

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

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

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Title - Sujet Mass Spectrometer	
Solicitation No. - N° de l'invitation 01804-200386/A	Date 2019-10-25
Client Reference No. - N° de référence du client 01804-20-0386	
GETS Reference No. - N° de référence de SEAG PW-\$HAL-501-10808	
File No. - N° de dossier HAL-9-83109 (501)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-12-09	Time Zone Fuseau horaire Atlantic Standard Time AST
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: Beck, Sue	Buyer Id - Id de l'acheteur hal501
Telephone No. - N° de téléphone (902) 240-5159 ()	FAX No. - N° de FAX (902) 496-5016
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF AGRICULTURE AND AGRI-FOOD RESEARCH STN 32 MAIN STREET KENTVILLE NOVA SCOTIA B4N1J5 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

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

Issuing Office - Bureau de distribution

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

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 Security Requirements

There is no security applicable for this requirement.

1.2 Requirement

Public Service Procurement Canada on behalf of Agriculture and Agri-Food Canada (AAFC), Kentville Research and Development Centre (KRDC), Kentville, NS has a requirement to supply, deliver, install, train and provide warranty of one (1) new Mass Spectrometry (MS) system for proteomics and metabolomics projects related to food attribute and plant biology research.

The Work to be performed is detailed under **Annex "A"** of the resulting contract clauses.

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

1.4 Trade Agreements

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

1.5 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](#) (2019-03-04) 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

2.2 Submission of Bids

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

Bid Receiving
Public Works and Government Services Canada
1713 Bedford Row,
Halifax, N.S.
B3J 1T3

TPSGC.RAReceptionSoumissionsNE-ARBidReceivingNS.PWGSC@tpsgc-pwgsc.gc.ca

Note: Bids will not be accepted if emailed directly to this email address. This email address is to be used to open an epost Connect conversation, as detailed in Standard Instructions [2003](#), or to send bids through an epost Connect message if the bidder is using its own licensing agreement for epost Connect.

Facsimile number: (902)496-5016

Due to the nature of the request for bids, faxed submissions to PWGSC will not be accepted

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 Nova Scotia.

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

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

- 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. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

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 (two hard copy)
Section II: Financial Bid (one hard copy)
Section III: Certifications (one hard copy)

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

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

3.1.1 Electronic Payment of Invoices – Bid

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

If **Annex “D”** 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

3.1.3 SACC Manual Clauses

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 clearly demonstrate compliance with each mandatory technical criteria (refer to Annex “B”). Failure to demonstrate compliance will result in the bid being deemed non-responsive, and be given no further consideration.

4.1.2 Financial Evaluation

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

4.2 Basis of Selection

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

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

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

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

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

5.1 Certifications Required with the Bid

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

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

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

Public Service Procurement Canada on behalf of Agriculture and Agri-Food Canada (AAFC), Kentville Research and Development Centre (KRDC), Kentville, NS has a requirement to supply, deliver, install, train and provide warranty of one (1) new Mass Spectrometry (MS) system for proteomics and metabolomics projects related to food attribute and plant biology research.

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.

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6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from date of Contract to January 31, 2020 inclusive.

6.4.2 Mandatory Delivery Date

All the deliverables must be received on or before January 31, 2020.

6.4.3 Delivery Points

Delivery of the requirement will be made to delivery point(s) specified at Annex "C" of the Contract.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Sue Beck
Title: A/Supply Officer
Public Works and Government Services Canada
Acquisitions Branch
Address: 1713 Bedford Row, Halifax, NS B3J1T3

Telephone: (902) 240-5159
Facsimile: (902) 496-5016
E-mail address: sue.beck@pwgsc-tpsgc.gc.ca

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

6.5.2 Project Authority

The Project Authority for the Contract is: (To be determined and filled out at contract award).

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.

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6.5.3 Contractor's Representative (bidder to complete)

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 a firm price, as specified in Annex "C" 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 Limitation of Price

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

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.

6.6.3 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.

6.6.4 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);
- 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 or certification and payment.

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 Nova Scotia.

6.10 Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the General Conditions [2010A](#) (2018-06-21), General Conditions - Goods (Medium Complexity),
- (c) Annex A, Requirement
- (d) Annex B, Mandatory Technical Criteria
- (e) Annex C, Basis of Payment
- (f) Annex D, Electronic Payment Instruments
- (g) Annex E, Integrity Provisions – List of Directors
- (h) the Contractor's bid dated _____ (*insert date of bid*)

6.11 SACC Manual Clauses

- a) SACC Manual clause B1501C (2018-06-21) Electrical Equipment
- b) SACC Manual clause B7500C (2006-06-16) Excess Goods
- c) SACC Manual clause G1005C (2016-01-28) Insurance

ANNEX "A"

REQUIREMENT

Request for tender for a high resolution accurate mass spectrometer

1. Overview:

Agriculture and Agri-Food Canada (AAFC), Kentville Research and Development Centre (KRDC), Kentville, NS requires the supply, delivery, installation, training and warranty of one (1) new Mass Spectrometry (MS) system for proteomics and metabolomics projects related to food attribute and plant biology research. The instrument will be situated in a pre-existing LC-mass spectrometry laboratory to be used by researchers for the identification and quantitation of proteins and small molecules/metabolites in biological samples. Equipment will be accessible to researchers with a range of training and expertise and thus must be robust, modifiable and easy to operate. **Delivery is mandatory on or before January 31, 2020.**

2. Background

MS is more sensitive and specific than other analytical techniques and thus can identify picomole or even femtomole or femtogram levels of peptides and/or small molecules, often within very complex matrices, without the requirement for authentic standards. The MS is required for the screening, identification and quantitation of peptides (proteins) and metabolites in biological samples of plants, fruit, microbial and food products in support of various 'omic' research projects at KRDC. It will be used in the identification of previously uncharacterized compounds and to confirm the identity of compounds identified by other analytical techniques. It will be used for trace quantitation in complex matrices for identification of compounds for which no reference materials are available. To facilitate training, maintenance and analysis, it is desirable that the MS be capable of connection and communication with the Dionex, Ultimate3000 and/or Waters Nano-Acquity LC systems which are currently located in the facility. The MS must be in current use in the market place and not a prototype.

3. Mandatory Technical Specifications

- 3.1 The MS system, to be suitable for proteomic and metabolomics and quantitation in complex matrices, must perform MS/MS;
- 3.2 The MS system must be capable of performing precursor ion survey scans of mass range of at least m/z 50-2000, coupled with precursor selection for fragmentation (MS/MS) and product ion identification, to facilitate both discovery based and quantitative analysis of proteomic and metabolomics analysis of biological samples (data dependent acquisition, DDA and data independent acquisition, DIA), and must maintain mass accuracy across the full range;
- 3.3 Resolution: the instrument must have a minimum resolving power of 35,000 (FWHM) at m/z 200 for both full scan and >30,000 at MS/MS scanning modes;
- 3.4 Mass accuracy: the instrument must < 1 ppm root mean square (RMS) mass accuracy under internal calibration conditions and <3 ppm RMS mass accuracy under external calibration. Must perform accurate mass calibration and control of calibration. High mass accuracy must be obtained scan-by-scan without the need for scan averaging;
- 3.5 Within DIA, successive pre-defined ranges of precursor m/z values can be isolated and subjected to co-fragmentation.
- 3.6 The MS must be able to perform MS/MS targeted quantitative studies by Selected/Multiple Reaction Monitoring (MRM/SRM) or similar approaches such as Parallel Reaction Monitoring (PRM).
- 3.7 The MS must support Selected Ion Monitoring (SIM) and MS/MS;
- 3.8 Scan Speed: under standard experimental conditions, the instrument must perform data-dependent acquisitions at a speed of >12 Hz (resolution >15,000 at m/z 200);

- 3.9 Sensitivity: the instrument must detect in the femtogram (fg) range of analyte;
- 3.10 The MS must perform with detection range greater than 5 orders of linear dynamic range. In spectrum, and a linear dynamic range ≥ 4 orders of magnitude without loss of mass accuracy;
- 3.11 The MS must be supplied with an ESI and an APCI probe that is compatible with liquid flow rates from 100 nL/min to 1 mL/min. Both probes must perform in both positive and negative modes;
- 3.12 The MS must support optional interchangeable ionization sources and probes and must perform rapid switchover between these sources/probes;
- 3.13 The MS must support rapid polarity switching from positive to negative mode so that both modes may be used during the same run, that is, one full cycle in < 1.5 sec (one full scan positive mode and one full scan negative mode at resolution setting of $< 35,000$);

4. Computer Specifications

- 4.1 The contractor must supply a computer system that provides complete **control** of the MS system.

5. Software Specifications

- 5.1 The MS must include all software packages, starter kits and licenses that perform batch analysis of MS and MS/MS data sets for proteomics and metabolomics data analysis packages. Site licenses' for at least one (1) additional license for data analysis on a separate work station is required.
- 5.2 The operating system must be compatible with Window 10 Professional, 64 bit to ensure compatibility with local area network;
- 5.3 The software must control functions of MS instruments on various modes and must collect data in the form of mass spectra in a format that is compatible with commercial MS data bases;
- 5.4 The software must include automated deconvolution and reporting software packages installed on the instrument computer for the analysis of intact molecules and calculation of exact molecular weights;
- 5.5 The software must include the functionality of data analysis including reports;
- 5.6 The contractor must provide all software updates and new releases to AAFC for a period of two (2) years following the acceptance, at no additional cost.

6. Installation and Training

- 6.1 Delivery of all instrument components in two (2) months from purchase or by **January 31, 2020**, whichever is sooner.
- 6.2 Shipping charge must be included.
- 6.3 The contractor must provide installation including labor and travel and on-site operator training for up to five (5) people; and will be provided within one (1) month of receipt of the equipment. The on-site training, in English, must include use and maintenance of the system. All consumables required for the training must be provided. A user manual and a maintenance manual must be provided in hard copy or electronic format in English.
- 6.4 The contractor must respond and be on-site within 72 hours of a service call from Agriculture & Agri-Food Canada. The contractor must provide the following:
 - a) A list of after-sales service and repair facilities located close to the MS System delivery destination;
 - b) A list of locations that can provide replacement parts from consumables to major components;
 - c) Response times for service calls, and an escalation schedule (i.e. number of days with no resolution to a problem until a more experienced person is called in, and from which location;
 - d) A list outlining the frequency of routine maintenance visits provided by a qualified service technician during the warranty period, if applicable and included in the price.

7. Additional requirements:

- 7.1. All equipment must be certified or approved for use in accordance with the Canadian Electrical Code; The MS system must be CSA certified upon delivery.

Warranty

The Contractor **must** supply a minimum of two (2) years total warranty on components, parts, and installation, with replacement of instrument while it is undergoing service, for the costs incurred to replace defective parts and components in accordance with the requirements established by the manufacturer for the optimum performance of the system; which includes associated equipment, and is applicable throughout the warranty period.

Warranty Maintenance and Repairs

The Contractor must perform warranty maintenance and repairs on the Mass Spectrometer system.

The warranty maintenance and repairs must be in accordance with the requirements established by the manufacturer for the optimum performance of the system; which includes associated equipment, and is applicable throughout the warranty period.

1. Warranty Maintenance and Repairs Schedule

- A. The Contractor **must** provide to the Technical Authority a Warranty Repairs and Maintenance Schedule that meets the specific requirements established by the manufacturer for the optimum performance of the system, and associated equipment, **during the warranty period.**
- B. The Contractor **must** perform the Warranty Maintenance and Repairs of the equipment in accordance with the schedule.
- C. The warranty **must** include **online or telephone-accessible technical support for on-demand troubleshooting and data analysis assistance.**
- D. If Warranty Maintenance and Repairs Services are to be carried out on the AAFC site the service person **must** arrive on site to perform the work within 72 hours from the time that the Contractor is notified.
- E. The Contractor must be capable of providing warranty service, on an "as and when" requested basis, and must have ready access to parts inventory from an authorized service/repair facility.

Integrated Logistical Support

The MS system must be delivered to the following address:

Agriculture and Agri-Food Canada
Kentville Research and Development Centre
32 Main Street
Kentville, Nova Scotia B4N 1J5

2. Documentation

- A. The Contractor **must** provide the following documentation:
 - i) Equipment Manuals - Manuals required for safe operation, maintenance and repair of the equipment.
 - ii) Warranty Letter - The Contractor **must** send a copy of the Warranty Letter, in electronic

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- iii) format, to the Technical Authority, at shipment.
The contractor must provide (2) two copies of the 'site preparation' documents at the award of the contract.
- iv) The contractor must provide Standard Operating Procedures (SOPs).

ANNEX "B"

MANDATORY TECHNICAL CRITERIA

Instructions: Bidders **must** indicate whether or not they comply with the Mandatory Technical Criteria. Bidders must include one (1) copy of descriptive literature for the item(s) offered in sufficient detail to clearly indicate compliance with each of the individual requirements from the Mandatory Technical Criteria detailed herein.

Bidders **should** comment / cross reference the page number and highlight the specification in your technical data sheets or brochure to demonstrate and support your compliance for each of the Mandatory Technical Criteria.

The Bidder **must** address each Mandatory Technical Criteria listed below and must indicate whether the product/service offered **"Meets"** or **"Does Not Meet"**.

Bidders must provide as much detail as possible to support your comments and your claims of compliance for each specification.

NOTE: The Crown is under NO obligation to seek clarification of the bid(s) or the supporting technical documentation provided. Failure to meet any of the following will render your proposal non-compliant and will be given no further consideration.

No.	Mass Spectrometer Specifications	Compliance		Comment(s) / Cross Reference
		Meets	Does Not Meet	
I.				
A.	The Mass Spectrometer (MS) system, to be suitable for proteomic and metabolomics and quantitation in complex matrices, must perform MS/MS (Mass Spectrometers coupled together using an additional reaction step to increase the ability to analyze the chemicals.)			
B	The MS system must be capable of performing precursor ion survey scans of mass range of at least m/z 50-2000, coupled with precursor selection for fragmentation (MS/MS) and product ion Identification, to facilitate both discovery based and quantitative analysis of proteomic and metabolomics analysis of biological samples data dependent acquisition, (DDA) and data in-dependent acquisition, (DIA), and must maintain mass accuracy across the full range.			
C	Resolution: the instrument must have a minimum resolving power of 35,000 (FWHM) at m/z 200 for both full scan and >30,000 at MS/MS scanning modes.			

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No.	Specification	Compliance		Comment(s)/ Cross Reference
		Meet	Does Not Meet	
D	Within DIA, successive pre-defined ranges of precursor m/z values can be isolated and subjected to co-fragmentation.			
E	The MS must be able to perform MS/MS targeted quantitative studies by Selected/Multiple Reaction Monitoring (MRM/SRM) or similar approaches such as Parallel Reaction Monitoring (PRM).			
F	Scan Speed: under standard experimental conditions, the instrument must perform data-dependent acquisitions at a speed of >12 Hz (resolution >15,000 at m/z 200);			
G	The MS must be supplied with an ESI and an APCI probe that is compatible with liquid flow rates from 100 nL/min to 1 mL/min. Both probes must perform in both positive and negative modes;			

II.				
	Computer and Software Specifications			
A.	The software must include automated deconvolution and reporting software packages installed on the instrument computer for the analysis of intact molecules and calculation of exact molecular weights.			

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ANNEX "C"

BASIS OF PAYMENT

Bidders must submit firm unit prices for each item listed below to be given further consideration. A financial bid addressing only a portion of the requirement will be declared non-responsive.

Pricing offered must be in Canadian dollars, Applicable Taxes excluded, FOB destination, Canadian customs duties and excise taxes included.

No further charges will be allowed.

Item	Description	Qty.	U of I.	Extended Price
1	Mass Spectrometer	1	each	\$
2	Computer / Software Specifications	1	lot	\$
3	On-Site Install, Labor & Travel	1	lot	\$
4	Training as per Annex A	1	lot	\$
5	Warranty on Components, Parts and Installation – 2 Years	1	lot	\$
Evaluated Bid Price (GST/HST not included)				\$

Mandatory Delivery Date:

The delivery at destination is required **on or before** January 31, 2020.

Please provide best delivery: _____.

Delivery Location

Agriculture and Agri-Food Canada
Kentville Research Centre
32 Main Street, Kentville, NS
B4N 1J5

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ANNEX "D"

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);
- Large Value Transfer System (LVTS) (Over \$25M)

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ANNEX "E"

INTEGRITY PROVISIONS – LIST OF DIRECTORS

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. In the case of a joint venture - For a Joint Venture - the names of all current members of the Joint venture;

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