



**RETURN BIDS TO:**

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Bid Receiving - PWGSC / Réception des  
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11 Laurier St./ 11 rue, Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau, Québec K1A 0S5

Bid Fax: (819) 997-9776

**LETTER OF INTEREST**

**LETTRE D'INTÉRÊT**

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

6A2, Place du Portage

Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> LOI - Field IMS/MS for Drug and Exp	
<b>Solicitation No. - N° de l'invitation</b> 47419-193059/A	<b>Date</b> 2018-08-14
<b>Client Reference No. - N° de référence du client</b> 1000343059	<b>GETS Ref. No. - N° de réf. de SEAG</b> PW-\$\$PV-873-75270
<b>File No. - N° de dossier</b> pv873.47419-193059	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2018-09-14</b>	
<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Daylight Saving Time EDT	
<b>F.O.B. - F.A.B.</b> Specified Herein - Précisé dans les présentes <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input checked="" type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Shannahan, Cassandra	<b>Buyer Id - Id de l'acheteur</b> pv873
<b>Telephone No. - N° de téléphone</b> (819) 420-1068 ( )	<b>FAX No. - N° de FAX</b> (819) 956-3814
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>  Specified Herein Précisé dans les présentes	

Instructions: See Herein

Instructions: Voir aux présentes

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



## LETTER OF INTEREST (LOI)

### FIELD ION MOBILITY SPECTROMETER (IMS) AND MASS SPECTROMETER (MS) FOR DRUG AND EXPLOSIVES DETECTION

#### 1. Background for this Letter of Interest (LOI)

The Canada Border Services Agency (CBSA) has a requirement to investigate the use of ion mobility spectrometry and mass spectrometry technologies for the field detection of trace and bulk illicit drugs and explosives for securing the Canadian border.

#### 2. Purpose of this Letter of Interest

The purpose of this LOI is to allow stakeholders and instrument manufacturers an opportunity to provide feedback on the specifications for the detection equipment in the field using either ion mobility spectrometry (IMS) and/or mass spectrometry (MS), according to the following streams:

Stream 1: Field non-radioactive ion mobility spectrometer for field detection and identification of illicit drugs and explosives

Stream 2: Field mass spectrometer for field detection and identification of illicit drugs and explosives

##### 2.1 The objectives of the LOI are:

- A) To request feedback and recommendations from industry on the specifications described in Annex A, Minimum Product Specifications;
- B) to identify field detection equipment which complies with the LOI specifications described in Annex A, Minimum Product Specifications;
- C) to identify the advantages, limitations and technology gaps of the field detection equipment;
- D) to identify manufacturers that would be willing to provide a laboratory demonstration of selected technology against manufacturer claims and CBSA field requirements.

The information will be used for planning purposes only and there is no guarantee that the project will be approved or subsequent contracts awarded.

#### 3. Nature of the LOI

A Letter of Interest (LOI) is used when detailed information and feedback is required from suppliers. Such requests might outline a potential requirement and request suppliers to describe their ability to satisfy the requirement. This LOI contains background and technical information.

#### 4. Note to Potential Respondents

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This is not a bid solicitation. This LOI will not result in the award of any contract or lead to any development funding initiative. Potential suppliers of any goods described in this LOI should not reserve stock as a result of any information contained in the LOI. This LOI will not result in the creation of any source list. Therefore, whether or not any potential supplier responds to this LOI will not preclude that supplier from participating in any future procurement. The procurement of any of the goods described in this LOI will not necessarily follow this LOI. This LOI is simply intended to solicit feedback from industry with respect to the matters described in this LOI.

#### 4.1 Response Costs

Canada will not reimburse any respondent for expenses incurred in responding to this LOI.

#### 5. Nature and Responses Requested

**Use of Responses:** Responses will not be formally evaluated. However, the responses received may be used by Canada to develop or modify procurement strategies or any draft documents contained in this LOI. Canada will review all responses received by the LOI closing date. Canada may, in its discretion, review responses received after the LOI closing date.

**Review Team:** A review team composed of representatives of Canada will review the responses. Canada reserves the right to hire any independent consultant, or use any Government resources that it considers necessary to review any response.

**Confidentiality:** Respondents should mark any portions of their response that they consider proprietary or confidential. Canada will handle the responses in accordance with the *Access to Information Act*.

**Follow-up Activity:** Canada may, at its discretion, meet with respondents who indicate in their responses that they wish to participate in a follow-up meeting. Such follow-up activity, if conducted, may include, but is not limited to, individual meetings and/or conferences. Canada may, in its discretion, contact any respondents to follow up with additional questions, for clarification of any aspect of a response or to arrange an instrument demonstration.

#### 6. Format of Responses Requested

**Note:** Responses to this LOI should be submitted by instrument manufacturers and not instrument distributors.

**Cover Page:** If the response includes multiple volumes, respondents are requested to indicate on the front cover page of each volume the title of the response, the solicitation number, the volume number and the full legal name and address of the respondent.

**Title Page:** The first page of each volume of the response, after the cover page, should be the title page, which should contain:

- the title of the respondent's response and the volume number;



- the name and address of the respondent;
- the name, address and telephone number of the respondent's contact;
- the date; and
- the LOI number.

**Numbering System:** Respondents are requested to prepare their response using a numbering system corresponding to the one in this LOI. All references to descriptive material, technical manuals and brochures included as part of the response should be referenced accordingly. Respondents are asked to complete Annex A (Minimum product specifications).

**Number of Copies:** Respondents are requested to submit one soft copy of their response, in PDF format.

## 7. Enquiries

Respondents with questions regarding this Letter of Interest should direct their enquiries, preferably via email, to:

Cassandra Shannahan  
Public Services and Procurement Canada  
11 Laurier Street, 6A2, Phase III  
Place du Portage, Gatineau, Quebec, K1A 0S5

Telephone: (819) 420-1068  
Facsimile: (819) 956-3814  
Email address: [cassandra.shannahan@pwgsc-tpsgc.gc.ca](mailto:cassandra.shannahan@pwgsc-tpsgc.gc.ca)

## 8. Submission of Responses

**Time and Place for Submission of Responses:** Respondents should send responses electronically via e-mail to the Contracting Authority's address identified herein by the date specified on the front page of the LOI.

**Responsibility for Timely Delivery:** Each respondent is solely responsible for ensuring its response is delivered on time to the correct location.

## 9. Closing Date

Responses to this Letter of Interest will be accepted any time until 14:00 EST, September 14, 2018.

## 10. Contents of this LOI

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This LOI contains specifications for Stream 1 (portable ion mobility spectrometer) and Stream 2 (portable mass spectrometer), for which Public Services and Procurement Canada and the Canada Border Services Agency are seeking feedback from industry.

To enable this assessment, interested manufacturers are asked to provide answers to the following questions:

1. Does your instrument qualify for Stream 1 or Stream 2?
2. Does your instrument meet all of the requirements in the Appendix? Please complete the table found in Annex A.
3. Are you willing to provide an on-site demonstration of your instrument at the Science and Engineering Directorate (Ottawa, Ontario) at your cost?
4. What is the size (i.e., dimensions) of your instrument?
5. What is the weight of your instrument?
6. What makes your instrument usable in the field? Explain in detail, citing previous experience if possible
7. Is your instrument considered a hand-held or benchtop?
8. What is the start-up time of your instrument (i.e., from cold start up to ready to run a sample)?
9. What is the analysis time for your instrument (i.e., how long does it take to run a sample)? Explain.
10. Does your instrument have various administrative level capabilities? Please describe each level.
11. Does your instrument display the measurements/analysis performed (e.g., plasmagram, mass spectrum)?
12. What is the operating temperature range of your instrument?
13. Is your system sealed and suitable for decontamination?
14. Is your instrument suitable for trace or bulk analysis?
15. What maintenance is required for your instrument?
16. How does your instrument vent exhaust?
17. Does your instrument have any safety features to vent volatile fumes from suspected highly toxic substances (e.g., fentanyl)
18. What is the detection limit on your instrument for the following compounds?
  - a) Fentanyl
  - b) Cocaine
  - c) Trinitrotoluene (TNT)
  - d) Nitroglycerin (NG)

**The following questions apply to Stream 1 (field ion mobility spectrometry)**

19. What substances can your instrument detect and identify? Please list each compound
20. Does your instrument do simultaneous detection of explosives and narcotics?
21. What is your instrument's resolving power?
22. Is your instrument able to be fully operational with batteries?
23. Does your instrument use another separation technique coupled to the IMS?



24. Does the air exhaust from your instrument go through filters? (for organic and particulate)
25. Does your instrument use single use swabs? For the purposes of this LOI, “single use” means the instrument must allow swabs to be “blanked” to prove no alarm; or swabs must be stored in a way that prevent contamination (e.g., individually packaged)
26. Does your instrument include software to view instrument results on another computer?

**The following questions apply to Stream 2 (field mass spectrometry)**

27. What mass analyzer is used in your instrument?
28. Does your instrument use another separation technique coupled to the mass analyzer?
29. Does your instrument require a gas supply? Explain (i.e., what gas?)
30. Does your instrument use MS/MS analysis?
31. Does your instrument require a computer/laptop interface?
32. How is the sample introduced to the mass analyzer? What sample preparation is involved?
33. Does your instrument have a direct sample introduction device (i.e., where no sample preparation is required)? Explain how is the sample introduced to the MS without any sample preparation
34. What file extension format(s) does your instrument produce when exporting results?
35. What software or licenses are required to view instrument results on another computer?
36. What file extension format(s) can be imported and then added to a customized library database?
37. What spectral libraries are compatible with your instrument?



## Annex A - Minimum Product Specifications

Note: All references to descriptive material, technical manuals, specifications and brochures should be included in your response

### Ion mobility spectrometer (Stream 1)

Item	Minimum Product Specification	Met / Not met	Comment
2.1	Must include a non-radioactive IMS source		
2.2	Must have dual mode (explosives and drugs) and a single drug mode		
2.3	Must have a detection library		
2.4	Must be able to add chemicals to the detection library		
2.5	Must have network connection (USB, Ethernet)		
2.6	Must not require an external gas supply		
2.7	Available on the market (Technology Readiness Level (TRL) <sup>1</sup> 8 or 9)		

### Mass spectrometer (Stream 2)

Item	Minimum Product Specification	Met / Not met	Comment
3.1	Must operate on a power supply of 110 V		
3.2	Must include library search capability		
3.3	Must be able to add instrument spectra to a customized detection library		

<sup>1</sup> Please refer to [the following for more information on TRLs: https://buyandsell.gc.ca/initiatives-and-programs/build-in-canada-innovation-program-bcip/program-specifics/technology-readiness-levels](https://buyandsell.gc.ca/initiatives-and-programs/build-in-canada-innovation-program-bcip/program-specifics/technology-readiness-levels)



3.4	Must be able to export instrument spectra		
3.5	Must be able to import spectra to add to a customized detection library		
3.6	Must have network connection (USB or Ethernet)		
3.7	Available on the market (TRL 8 or 9)		