



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Réception des soumissions - TPSGC / Bid Receiving
- PWGSC

1550, Avenue d'Estimauville

1550, D'Estimauville Avenue

Québec

Québec

G1J 0C7

REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

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

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

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

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du

fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

TPSGC/PWGSC

601-1550, Avenue d'Estimauville

Québec

Québec

G1J 0C7

Title - Sujet Software Prototype - Spectroscopic	
Solicitation No. - N° de l'invitation W7701-196913/A	Date 2018-11-23
Client Reference No. - N° de référence du client W7701-196913	
GETS Reference No. - N° de référence de SEAG PW-\$QCL-050-17550	
File No. - N° de dossier QCL-8-41062 (050)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-12-11	Time Zone Fuseau horaire Heure Normale du l'Est HNE
F.O.B. - F.A.B. Specified Herein - Précisé dans les présentes Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input checked="" type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Martinich, Estefania	Buyer Id - Id de l'acheteur qcl050
Telephone No. - N° de téléphone (418) 649-2782 ()	FAX No. - N° de FAX (418) 648-2209
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: RDDC-R ET D DÉFENSE CANADA-VALCARTIER DRDC-DEFENCE R&D CANADA-VALCARTIER BÂTISSE 53 2459, ROUTE DE LA BRAVOURE QUEBEC Québec G3J1X5 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée Voir doc	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 Introduction

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides Bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications and Additional Information: includes the certifications and additional information to be provided;
- Part 6 Financial Requirements
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work, the Basis of Payment and the Contractor Disclosure of Foreground Information.

The Attachments include the Method of Total bid price calculation, the Mandatory and Point-Rated Technical Criteria and the Electronic Payment Instruments.

1.2 Summary

- a. **Title:** Artificial neural networks pattern classification software for the analysis of spectroscopic signatures produced by high power lasers.

- b. **Description of work**

The type of reactions occurring when a High Power Laser (HPL) is incident onto a solid object is highly dependent on the incident beam properties. In fact, incident beam power, diameter and pointing stability are amongst the parameters that determine if the laser will heat, melt, oxidize or vaporize the material. As the distance between the laser and the object is augmented, it becomes increasingly difficult to assess for the impact of the laser on the object.

This contract aims to develop an automated software to analyze, nearly in real-time, the data collected and inform the user about the nature of the object interrogated as well as the processes that took place.

- c. **Client Department**

The organization for which the services are to be rendered is Defence Research and Development Canada – Valcartier Research Centre.

d. Period of the contract

The period of contract is up to 4 years after the date of contract award.

e. Important Information

- i. Defence Research and Development Canada - Valcartier Research Centre has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada.
- ii. Work Location: The Work must be performed on Contractor site. The Contractor is not required to travel.
- iii. The requirement is limited to Canadian services.
- iv. The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA).
- v. The Federal Contractors Program (FCP) for employment equity applies to this procurement; refer to Part 5 – Certifications and Additional Information.
- vi. 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.

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.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

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

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2018-05-22) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 120 days

2.1.1 SACC Manual Clauses

A7035T (2007-05-25), List of Proposed Subcontractors

2.2 Submission of Bids

2.2.1 Mail

Bids must be submitted to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the Request for proposal. Bidders must submit their bid at:

Bid Receiving – PWGSC
1550, d'Estimauville Avenue
Quebec, Quebec
G1J 0C7

2.2.2 Epost Connect

By using the epost Connect service provided by Canada Post Corporation (https://www.canadapost.ca/web/en/products/details.page?article=epost_connect_send_a)

The email address of PWGSC Quebec region Bid Receiving Unit is:

TPSGC.RQReceptionSoumissions-QRSupplyTendersReception.PWGSC@tpsgc-pwgsc.gc.ca.

The Solicitation number must be identified in the epost Connect message field of all electronic transfers.

NOTE THAT YOU SHOULD NOT SEND YOUR OFFERS DIRECTLY TO THIS EMAIL ADDRESS, BUT PROCEED THROUGH CANADA POST EPOST CONNECT SERVICE. REFER TO THE 2003 STANDARD INSTRUCTIONS (2018-05-22).

2.2.3 Facsimile

Bids can also be submitted by fax to # 418-648-2209

2.3 Former Public Servant – Competitive Bid

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the Financial Administration Act, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the Public Service Superannuation Act (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the Supplementary Retirement Benefits Act, R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the Canadian Forces Superannuation Act, R.S., 1985, c. C-17, the Defence Services Pension Continuation Act, 1970, c. D-3, the Royal Canadian Mounted Police Pension Continuation Act, 1970, c. R-10, and the Royal Canadian Mounted Police Superannuation Act, R.S., 1985, c. R-11, the Members of Parliament Retiring Allowances Act, R.S. 1985, c. M-5, and that portion of pension payable to the Canada Pension Plan Act, R.S., 1985, c. C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes () No ()**

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes () No ()**

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

2.4 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority, preferably via email to Estefania.Martinich@tpsgc-pwgsc.gc.ca, no later than **seven (7)** 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.

2.5 Applicable Laws

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

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.

2.6 Basis for Canada's Ownership of Intellectual Property

The Defence Research and Development Canada - Valcartier Research Centre has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, for the following reasons, as set out in the [Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts](#):

- the main purpose of the Contract, or of the deliverables contracted for, is to augment an existing body of Canada's Background Information as a prerequisite to the transfer of the expanded Background to the private sector, through licensing or assignment of ownership (not necessarily to the original Contractor), for the purposes of Commercial Exploitation.

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
Section IV: Additional Information

- 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 (5 hard copies)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

Section IV: Additional Information (1 hard 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>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

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

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

The technical bid consists of the following:

- (i) All the information required to demonstrate its conformity with the Mandatory and Point Rated Technical Criteria described in Attachment 2 - Mandatory and Point Rated Technical Criteria.

Section II: Financial Bid

3.1.1 Bidders must submit their financial bid in accordance with the Basis of Payment in Annex "B".

3.1.2 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Attachment 3 - Electronic Payment Instruments, to identify which ones are accepted.

If Attachment 3 - 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.

3.1.3 Exchange Rate Fluctuation

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

3.1.4 SACC Manual Clauses

Section III: Certifications

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

Section IV: Additional Information

- (a) Bidders must provide a list of names, or other related information as needed, pursuant to section 01 of Standard Instructions 2003 (2018-05-22).
- (b) For services requirements, Bidders in receipt of a pension or a lump sum payment must provide the required information as detailed in article 3 of Part 2 of the bid solicitation.

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(c) Canada requests that bidders provide the following information:

Administrative representative :

Name : _____

Telephone : _____

Facsimile : _____

Email : _____

Technical representative :

Name : _____

Telephone : _____

Facsimile : _____

Email : _____

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 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

Each bid will be reviewed for compliance with the mandatory requirements of the bid solicitation. All elements of the bid solicitation that are mandatory requirements are identified specifically with the words "must" or "mandatory". Bids that do not comply with each and every mandatory requirement will be considered non-responsive and be disqualified.

Refer to Attachment 2, Mandatory and Point Rated Technical Criteria.

4.1.1.2 Point Rated Technical Criteria

Each bid will be rated by assigning a score to the rated requirements, which are identified in the bid solicitation by the word "rated" or by reference to a score. Bidders who fail to submit complete bids with all the information requested by this bid solicitation will be rated accordingly.

Refer to Attachment 2, Mandatory and Point Rated Technical Criteria.

4.1.2 Financial Evaluation

4.1.2.1 Mandatory Financial Criteria

Bidders must present their financial bid in accordance with article 3.1.1, Section II: Financial Bid of Part 3 of the Request for Proposals.

4.1.2.2 Method of calculation used

For evaluation purposes only, the total bid price will be calculated according to Attachment 1 – Method of total bid price calculation.

4.1.2.3 Evaluation of price

The price of the bid will be evaluated in Canadian dollars, applicable taxes excluded, FOB destination, Canadian customs duties and excise taxes included.

4.2 Basis of Selection

4.2.1 Basis of Selection - Highest Combined Rating of Technical Merit (30%) and Price (70%)

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation;
 - b. meet all mandatory technical evaluation criteria; and

- c. obtain the required minimum points for the technical evaluation criteria which are subject to point rating.
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 price and technical merit. The ratio will be 70 % for the price and 30 % for the technical merit.
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 30%.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 70%.
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.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 30/70 ratio of technical merit and price, respectively. The total available points equals 135 and the lowest evaluated price is \$45,000 (45).

Basis of Selection - Highest Combined Rating Technical Merit (30%) and Price (70%)

		Bidder 1	Bidder 2	Bidder 3
Overall Technical Score		115/135	89/135	92/135
Bid Evaluated Price		\$55,000.00	\$50,000.00	\$45,000.00
Calculations	Technical Merit Score	$115/135 \times 30 = 25.55$	$89/135 \times 30 = 19.78$	$92/135 \times 30 = 20.44$
	Pricing Score	$45/55 \times 70 = 57.27$	$45/50 \times 70 = 63.00$	$45/45 \times 70 = 70.00$
Combinated Rating		82.82	82.78	90.44
Overall Rating		2 nd	3 rd	1 st

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 Integrity 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.

5.1.2 Additional Certifications Required with the Bid

5.1.2.1 Canadian Content Certification

This procurement is limited to Canadian services.

The Bidder certifies that:

() the service offered is a Canadian service as defined in paragraph 2 of clause [A3050T](#).

5.1.2.1.1 SACC Manual clause [A3050T](#) (2014-11-27) Canadian Content Definition

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 specified 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 procurement agreement of the [Ineligibility and Suspension Policy](#) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

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](#)

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(ESDC) - Labour's website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

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

5.2.3 Additional Certifications Precedent to Contract Award

5.2.3.1 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

5.2.3.2 Education and Experience

The Bidder certifies that all the information provided in the résumés and supporting material submitted with its bid, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Bidder to be true and accurate. Furthermore, the Bidder warrants that every individual proposed by the Bidder for the requirement is capable of performing the Work described in the resulting contract.

5.2.3.3 Language Capability

The Bidder certifies that it has the language capability required to perform the Work, as stipulated in the Statement of Work.

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W7701-196913/A
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W7701-196913

Amd. No. - N° de la modif.
File No. - N° du dossier
QCL-8-41062

Buyer ID - Id de l'acheteur
QCL050
CCC No./N° CCC - FMS No./N° VME

PART 6 – FINANCIAL REQUIREMENTS

6.1 Financial Capability

SACC Manual clause [A9033T](#) (2012-07-16), Financial Capability

PART 7 - RESULTING CONTRACT CLAUSES

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

7.1 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex "A" and the Contractor's technical bid, dated _____. **(to be completed at contract award)**

7.1.1 Optional Goods and/or Services

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at the Statement of Work 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.

7.2 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.

7.2.1 General Conditions

[2040](#) (2018-06-21), General Conditions - Research & Development, apply to and form part of the Contract.

7.2.2 Supplemental General Conditions

The following supplemental general conditions apply to and form part of the Contract:

4002 (2010-08-16), Software Development or Modification Services

7.2.3 SACC Manual Clauses

K3410C (2015-02-25), Canada to Own Intellectual Property Rights in Foreground Information

K3305C (2008-05-12), License to Intellectual Property Rights in Foreground Information

7.3 Security Requirements

7.3.1 There is no security requirement applicable to the Contract.

7.4 Term of Contract

7.4.1 Period of the Contract

The period of the Contract is from the date of Contract award up to 4 years after Contract award.

7.4.2 Delivery Date

All the deliverables dates are established at Annex A – Statement of Work.

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7.4.3 Delivery Points

Delivery of the requirement will be made to DRDC Valcartier Research Center (2459, de la Bravoure Rd., Québec, QC, G3J 1X5, CANADA.)

7.5 Authorities

7.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Estefania Martinich
Title: Procurement Officer
Public Works and Government Services Canada
Acquisitions Branch
601-1550, avenue d'Estimauville
Québec (Québec) G1J 0C7
Telephone: 418-649-2782
Facsimile: 418-648-2209
E-mail address: Estefania.Martinich@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.

7.5.2 Technical Authority *(to be completed at contract award)*

The Technical Authority for the Contract is:

Name : _____
Title : _____
Organization : _____
Address : _____
Telephone: ____ ____ ____
Facsimile: ____ ____ ____
E-mail address: _____

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

7.5.3 DND Procurement Authority *(to be completed at contract award)*

The DND Procurement Authority for the Contract is:

Name : _____
Title : _____
Organization : _____
Address : _____
Telephone: _____
Facsimile: _____

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Buyer ID - Id de l'acheteur
QCL050
CCC No./N° CCC - FMS No./N° VME

E-mail: _____.

The DND Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The DND Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the DND Procurement Authority however the DND Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

7.5.4 Contractor's Representative

Administrative representative :

Name : _____
Telephone : _____
Facsimile : _____
Email : _____

Technical representative :

Name : _____
Telephone : _____
Facsimile : _____
Email : _____

7.6 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a [Public Service Superannuation Act](#) (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with [Contracting Policy Notice: 2012-2](#) of the Treasury Board Secretariat of Canada.

7.7 Payment

7.7.1 Basis of Payment

7.7.1.1 For the portion of work under Tasks 5.1 to 5.4.

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price of \$ _____ (**to be completed at contract award**), according to Table B1 of the Basis of payment in Annex B. Customs duties are included and Applicable Taxes are extra.

7.7.1.2 For the portion of work under Optional Task 5.5.

For the Work described in Task 5.5 of the Statement of Work in Annex A:

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm unit price, as specified in Table B2 of Annex B. 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.

7.7.2 Limitation of Price

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

7.7.3 Method of payment

7.7.3.1 Milestone Payments - Not subject to holdback

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract if:

- an accurate and complete claim for payment using [PWGSC-TPSGC 1111](#), Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- all the certificates appearing on form [PWGSC-TPSGC 1111](#) have been signed by the respective authorized representatives;
- all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

7.7.3.2 Schedule of Milestones

The schedule of milestones for which payments will be made in accordance with the Contract is as follows:

Milestone No.	Description or Deliverable	Firm Amount	Delivery date
1	<u>Deliverable for Task 5.1 High level definition of the software architecture</u> (See Annex A – Statement of work)	10% of the All-inclusive firm price of the Table B1 in Annex B- Basis of payment	Within 4 months after contract award.
2	<u>Deliverable for Task 5.2 Artificial neural networks pattern classification software development and experimental training canvas</u> (See Annex A – Statement of work)	25% of the All-inclusive firm price of the Table B1 in Annex B- Basis of payment	Within 4 months after acceptance of deliverable 6.1.
3	<u>Deliverable for Task 5.3 Algorithm in-depth training and validation testing</u> (See Annex A – Statement of work)	30% of the All-inclusive firm price of the Table B1 in Annex B- Basis of payment	Within 6 months after acceptance of deliverable 6.2.
4	<u>Deliverable for Task 5.4 Algorithm training and validation testing on data acquired during field testing</u> (See Annex A – Statement of work)	35% of the All-inclusive firm price of the Table B1 in Annex B- Basis of payment	Within 4 months after acceptance of deliverable 6.3.
5 OPTIONAL	<u>Deliverable for Task 5.5 Optional TASK - On-demand Services for continuing software training on new samples</u> (See Annex A – Statement of work)	100% of the total firm price for each additional test made in the laboratory on different samples, according to Table B2 in Annex B- Basis of payment	Within 6 months after modification of contract adding optional services.

7.7.4 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Direct Deposit (Domestic and International);
- b. Electronic Data Interchange (EDI);

7.8 Invoicing Instructions

1. The Contractor must submit a claim for payment using form [PWGSC-TPSGC 1111](#), Claim for Progress Payment.

Each claim must show:

- a. all information required on form [PWGSC-TPSGC 1111](#);
- b. all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;
- c. the description and value of the milestone claimed as detailed in the Contract.

Each claim must be supported by:

(a) a copy of the letter or email from the Technical Authority certifying that all deliverables associated to the claim are accepted.

2. Applicable Taxes must be calculated on the total amount of each claim.

3. The Contractor must prepare and certify one original and two (2) copies of the claim on form [PWGSC-TPSGC 1111](#), and forward it to the following address for appropriate certification:

Supply and Support Clerk
Public Works and Government Services Canada
601-1550, D'Estimauville Ave., Quebec City, QC, G1J 0C7

For additional information: QueReclamation.QueClaim@tpsgc-pwgsc.gc.ca

7.9 Certifications and Additional Information

7.9.1 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.

7.9.2 SACC Manual Clauses

A3060C (2008-05-12), Canadian Content Certification

7.10 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____ (*to be inserted at contract award*).

7.11 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 [4002](#) (2010-08-16), Software Development or Modification Services;
- (c) the general conditions [2040](#) (2018-06-21), General Conditions - Research & Development;
- (d) Annex A, Statement of Work;
- (e) Annex B, Basis of Payment;
- (f) Annex C, Contractor Disclosure of Foreground Information;
- (g) the Contractor's bid dated _____, **(to be completed at contract award)**.

7.12 Defence Contract

SACC Manual clause [A9006C](#) (2012-07-16) Defence Contract

7.13 Foreign Nationals (Canadian Contractor)

SACC Manual clause [A2000C](#) (2006-06-16) Foreign Nationals (Canadian Contractor)

7.14 Insurance

SACC Manual clause [G1005C](#) (2016-01-28) Insurance – No Specific Requirement

7.15 Progress Reports

1. The Contractor must submit monthly reports, in electronic format, on the progress of the Work, to both the Technical Authority and the Contracting Authority.

2. The progress report must contain two parts:

(a) PART 1: The Contractor must answer the following three questions:

- (i) Is the project on schedule?
- (ii) Is the project within budget?
- (iii) Is the project free of any areas of concern in which the assistance or guidance of Canada may be required?

Each negative response must be supported with an explanation.

(b) PART 2: A narrative report, brief, yet sufficiently detailed to enable the Technical Authority to evaluate the progress of the Work, containing as a minimum:

- (i) A description of the progress of each task and of the Work as a whole during the period of the report. Sufficient sketches, diagrams, photographs, etc., must be included, if necessary, to describe the progress accomplished.
- (ii) An explanation of any variation from the work plan.
- (iii) A description of trips or conferences connected with the Contract during the period of the report.
- (iv) A description of any major equipment purchased or constructed during the period of the report.

ANNEX "A" - STATEMENT OF WORK

1. TITLE

Artificial neural networks pattern classification software for the analysis of spectroscopic signatures produced by high power lasers

2. BACKGROUND

The type of reactions occurring when a High Power Laser (HPL) is incident onto a solid object is highly dependent on the incident beam properties. In fact, incident beam power, diameter and pointing stability are amongst the parameters that determine if the laser will heat, melt, oxidize or vaporize the material. As the distance between the laser and the object is augmented, it becomes increasingly difficult to assess for the impact of the laser on the object.

An automated sensor suite is needed to remotely monitor the impact of the laser in real-time and inform the operator. Such a device is currently in development at Defence Research and Development Canada (DRDC) which monitors in real-time the temperature of the object as well as the spectrum of the produced combustion plume. An automated software is needed to analyze, nearly in real-time, the data collected and inform the user about the nature of the object interrogated as well as the processes that took place.

3. ACRONYMS

DRDC	Defence Research and Development Canada
HPL	High Power Laser
NIST	National Institute of Standards and Technology
µm	Micrometer
kW	Kilowatt

4. APPLICABLE DOCUMENTS & REFERENCES

AD1: Spectroscopic instrument, <https://www.avantes.com/products/spectrometers/sensline/item/972-avaspec-uls-x64tec>

AD2: Spectroscopic identification software, <https://www.avantes.com/products/software/item/308-specline-analytical-software>

5. TASKS

The software to be developed by the Contractor must be able to:

- Configure the AvaSpec-ULS2048x64TEC spectrometer from the manufacturer Avantes and the infrared temperature sensor (referred to as 'instruments') prior to acquisition.
- Perform real-time analysis of the spectral signatures collected during the HPL event.
- Perform real-time analysis of the temperature profile collected during the HPL event using the infrared temperature sensor.
- Perform real-time adjustment of the acquisition parameters of the spectroscopic and temperature sensors to ensure optimal dynamic range use.
- Inform the operator with the identification of the material exposed to the HPL as well as the reactions that took place (heating, melting, vaporizing, oxidizing...).
- Leverage on existing databases (for example the database of the National Institute of Standards and Technology (NIST)) and spectroscopic tools such as SpecLine for the identification of species.
- Recognize and identify the different samples exposed to HPL, performed from a training via laboratory measurements on a variety of samples.

The software must control the data acquisition for the instruments on-board of the sensor suite, adjust in real time the acquisition parameters of the instruments, acquire and store the data in memory, analyze the data (real-time) and inform the user about the reaction that took place. The information provided must include molecules and atoms identified in the spectra, the identification of the sample illuminated by the laser as well as a time lapse of the interactions that took place (heating, melting, oxidizing, vaporizing, etc.). Two interfaces must be available, one for on-the-move analysis where the non-expert operator receive a rapid and basic report of the event that includes family of material (metal, plastic, wood...) and the temperature profile achieved, and a second one for spectroscopy experts and forensics analysis.

The software must leverage on existing platforms for the spectroscopic sensors available at DRDC. DRDC is planning to use Avantes spectrometers in the sensor suite such that the software must be developed around the Avantes software platform.

Training of the software must be performed with a continuous-wave laser system emitting radiation at $\lambda = 1.05 \pm 0.05$ micrometer (μm) and capable of at least 12 kW of power. The Contractor, as well as the operator once the tool is ready, must have the possibility of varying the laser power from 1 Kilowatt (kW) to 12 kW (or more) as well as adjusting the beam diameter incident on the sample from 0.5 centimeter to 3 centimeters.

The workload required in order to complete the software is subdivided into the following separate tasks:

5.1 High level definition of the software architecture

The Contractor must:

- 5.1.1 Elaborate a high level schematic description of the software functionalities and operation.
- 5.1.2 Evaluate communication strategies between the instruments and the software.
- 5.1.3 Develop high level architecture for the data acquisition system.
- 5.1.4 Develop high level architecture for the data analysis.
- 5.1.5 Propose a preliminary user interface layout for the operator and scientific versions.
- 5.1.6 Provide a structure for the artificial neural networks pattern classification algorithm.
- 5.1.7 Propose a preliminary experimental canvas for the software laboratory training with the HPL.

The high level definition plan must cover all the criteria listed in the introduction of section 5.

5.2 Artificial neural networks pattern classification software development and experimental training canvas

The Contractor must:

- 5.2.1 Design the artificial neural networks pattern classification algorithm that will be used for training.
- 5.2.2 Design the artificial neural networks pattern classification algorithm that will be used for spectral features analysis. The analysis must be performed in real-time during the HPL event. The algorithm must leverage on existing databases (for example the database of the National Institute of Standards and Technology (NIST)) and spectroscopic tools such as SpecLine for the identification of species.
- 5.2.3 Develop the self-adjustment mechanisms for instruments acquisition parameters including, but not limited to, acquisition rate, exposure time and, gain. The acquisition parameters must be adjusted in real-time to optimize the instruments dynamic range and avoid saturation of the sensors.
- 5.2.4 Perform initial testing of the software in the laboratory with a HPL. After this step, the software must be able to acquire the signal, control the acquisition parameters of the instruments, identify the spectral features observed and start providing initial guesses for the identification of the samples.

The artificial neural network classification software must cover all the criteria listed in the introduction of section 5.

5.3 Algorithm in-depth training and validation testing

The Contractor must:

5.3.1 Teach the software with the HPL in the laboratory to differentiate between 10 dissimilar materials. The choice of the samples will be determined by the Technical Authority based on the previous experimentations, but among the possible candidates we have aluminum, carbon steel, stainless steel, wood, sand, polymers, paints, etc.

5.3.2 Validate the performances of the algorithm to differentiate between the 10 dissimilar samples.

5.3.3 Teach the software with the HPL in the laboratory to differentiate between 3 similar materials. The choice of the samples will be determined by the Technical Authority based on the previous experimentations, but among the possible candidates we have 3 types of aluminum, 3 types of carbon steel, etc.

5.3.4 Validate the performances of the algorithm to differentiate between the 3 similar samples.

5.4 Algorithm training and validation testing on data acquired during field testing

For this portion of the work, DRDC will provide data that has been collected by DRDC during field testing. As opposed to laboratory training, both the HPL and the detection instruments will be placed 200 meters away from the samples. The algorithm must once again be tested by the Contractor with the samples identified in section 5.3.

Using this data, the Contractor must:

5.4.1 Validate the performances of the algorithm to differentiate between the 10 dissimilar samples.

5.4.2 Validate the performances of the algorithm to differentiate between the 3 similar samples.

5.4.3 Correct the algorithm for any troubles induced by the operational configuration.

5.5 Optional TASK - On-demand Services for continuing software training on new samples

This task is valid for up to 18 months after acceptance of deliverable 6.4.

The Contractor must:

5.5.1 Continue the training process in the laboratory on at most 10 new samples identified by the Technical Authority (TA). The choice of the samples will be determined by the TA.

6. DELIVERABLES

6.1 Deliverables for task 5.1

6.1.1 Report describing the following:

- a. High level flux diagram of the software functionalities and operation.
- b. Communications strategies between the instruments and the software.
- c. High level architecture for the data acquisition system.
- d. High level architecture for the data analysis.
- e. Preliminary user interface layout for the operator and scientific versions.
- f. Structure for the artificial neural networks pattern classification algorithm.
- g. Preliminary experimental canvas for the software laboratory training with the HPL.

The report must be written in English and be provided on a CD, in 1 electronic copy in Word and 1 electronic copy in Adobe PDF.

6.2 Deliverables for task 5.2

6.2.1 Report describing the following:

- a. Artificial neural networks pattern classification algorithm that will be used for training.
- b. Artificial neural networks pattern classification algorithm that will be used for spectral features analysis.
- c. Self-adjustment mechanisms for instruments acquisition parameters.
- d. Experimental canvas (initial testing) for data acquisition and software training.
- e. Lessons learned from the first experimental tests.
- f. The strategy to be used for the neural network training

The report must be written in English and be provided on a CD, in 1 electronic copy in Word and 1 electronic copy in Adobe PDF.

6.3 Deliverables for task 5.3

First prototype

6.3.1 One Software, that respects all criteria specified in section 5, provided on a USB drive including the algorithms for the automated acquisition, spectral signatures analysis and spectral signature learning and recognition.

6.3.2 Report describing the following:

- a. Features and specifications of the current prototype.
- b. Procedures of operation (user manual).

The report must be written in English and be provided on a CD, 1 electronic copy in Word and 1 electronic copy in Adobe PDF.

6.4 Deliverables for task 5.4

Final prototype corrected for operation in the field.

6.4.1 One Software, that respects all criteria specified in section 5, provided on a USB drive including the algorithms for the automated acquisition, spectral signatures analysis and spectral signature learning and recognition.

6.4.2 Report describing the following:

- a. New features and specifications added and corrected with respect to the previous version.
- b. Updated procedures of operation (user manual).

The report must be written in English and be provided on a CD, 1 electronic copy in Word and 1 electronic copy in Adobe PDF.

6.5 Deliverables for task 5.5

6.5.1 Software modified with the additional sample recognition routines including the algorithms for the automated acquisition, spectral signatures analysis and spectral signature learning and recognition.

6.5.2 Report describing the following:

- a. New features and specifications added and corrected with respect to the previous version.
- b. Updated procedures of operation (user manual).

The report must be written in English and be provided on a CD, in 1 electronic copy in Word and 1 electronic copy in Adobe PDF.

7. DATE OF DELIVERY

Deliverable 6.1: Within 4 months after contract award.

Deliverable 6.2: Within 4 months after acceptance of deliverable 6.1.

Deliverable 6.3: Within 6 months after acceptance of deliverable 6.2.

Deliverable 6.4: Within 4 months after acceptance of deliverable 6.3.

Deliverable 6.5: Within 6 months after modification of contract adding optional services.

Deliverables 6.1 through 6.4 must be delivered and accepted within 24 months of contract award.

8. LANGUAGE OF WORK

English or French.

9. LOCATION OF WORK

The Work must be performed on Contractor site.

10. TRAVEL

The Contractor is not required to travel.

11. MEETINGS

Meetings will be held at the Contractor's site or by Video Teleconference and will be planned as necessary throughout the duration of the contract.

12. GOVERNMENT SUPPLIED MATERIAL (GSM)

None

13. GOVERNMENT FURNISHED EQUIPMENT (GFE)

None

14. SPECIAL CONSIDERATIONS

The Contractor must have access to a high power laser with solids. A high power laser is defined as having an average power of 12 kW or more.

ANNEX "B" - BASIS OF PAYMENT

Table B1 – All-inclusive Firm price for Work described at Task 5.1 to Task 5.4.

Task 5.1 to 5.4	All-inclusive Firm price (CAD) Taxes not included
Work described at Task 5.1 to Task 5.4 of Statement of Work, in Annex A. Must include all deliverables 6.1 to 6.4. DDP (2459, de la Bravoure Rd., Québec, QC, G3J 1X5, CANADA.), including handling and shipping.	\$ _____

Table B2 – Firm price for On-demand Services for continuing software training on new samples (Optional Task 5.5)

For Task 5.5 of Statement of Work in Annex A, Contractor must submit a firm unit price for each additional test made in the laboratory on different samples, according to the number of additional tests requested. The price must include the Deliverable 6.5.

	DESCRIPTION	Firm unit price (CAD)*** Taxes not included
A	Firm unit price per test if we ask to continue software training on 1 to 3 new samples	\$ _____ per each additional sample
B	Firm unit price per test if we ask to continue software training on 4 to 7 new samples	\$ _____ per each additional sample
C	Firm unit price per test if we ask to continue software training on 8 to 10 new samples	\$ _____ per each additional sample

***** DO NOT SUBMIT A LOT PRICE. YOU MUST SUBMIT A FIRM UNIT PRICE FOR EACH NEW TEST, DEPENDING ON THE QUANTITY OF TESTS THAT COULD BE REQUESTED BY THE TECHNICAL AUTHORITY*****

When the contract will be in force, the contractor will be paid the firm unit price indicated in Table B2 for each additional test, according to the number of additional tests requested by the TA.

Refer to Attachment 1 for an example.

ANNEX C - CONTRACTOR DISCLOSURE OF FOREGROUND INFORMATION

Please refer to **Article 1 - Interpretation of 2040 General Conditions** for the definition of Foreground Information to determine what information must be disclosed.

The Contractor must provide the following information:

1. Contract No.:
2. What is the descriptive title of the FIP (Foreground Intellectual Property)?
3. Abbreviated description of the FIP and, if applicable, of the different systems and sub-systems.
4. What is or was the objective of the project?
5. Explain how the FIP meets the objective of the project (for example: the advantage of the new solution, what problem did the FIP resolve or what benefits did the FIP deliver).
6. Under which category (ies) would you best describe the FIP and why: Patents, Inventions, Trade Secrets, Copyright, Industrial Designs, Rights in Integrated Circuit Topography, Know-how, Other?
7. Describe the features or aspects of the FIP that are novel, useful and not obvious.
8. Has the FIP been tested or demonstrated? If yes, please summarise the results.
9. Has any publication or disclosure to others been made? If so, to whom, when, where and how?
10. Provide names and addresses of the inventors.
11. Provide an explicit and detailed description of the FIP developed during the contract (Refer to pertinent section of the technical report, if necessary).

Please specify name and position of person approving / authorizing this disclosure. This person is to sign and date the disclosure.

Signature Date

Name Title

(Internal DRDC Valcartier)

Signature Date

Name Title (Technical authority)

ATTACHMENT 1 – METHOD OF TOTAL BID PRICE CALCULATION

For evaluation purposes only, the total price of the bid will be calculated by adding the price of Table B1 in Annex B – Basis of payment and the average firm unit price per additional test on Table B2 multiplied by an estimated quantity of 5 tests.

Below is an example of a Total Bid price calculation:

Table B1 – All-inclusive Firm price for Work described at Task 5.1 to Task 5.4.

Task 5.1 to 5.4	All-inclusive Firm price (CAD) Taxes not included
Work described at Task 5.1 to Task 5.4 of Statement of Work, in Annex A. Must include all deliverables 6.1 to 6.4. DDP (2459, de la Bravoure Rd., Québec, QC, G3J 1X5, CANADA.), including handling and shipping.	\$_____150,000.00_____

These prices are provided as an example only and must not be interpreted as an indicator of the real cost of the project.

Table B2 – Firm price for On-demand Services for continuing software training on new samples (Optional Task 5.5)

For Task 5.5 of Statement of Work in Annex A, Contractor must submit a firm unit price for each additional test made in the laboratory on different samples, according to the number of additional tests requested. The price must include the Deliverable 6.5.

	DESCRIPTION	QTY	Firm unit price (CAD) Taxes not included
A	Firm unit price per test if we ask to continue software training on 1 to 3 new samples	1	\$_____1,400.00_____ea
B	Firm unit price per test if we ask to continue software training on 4 to 7 new samples	1	\$_____1,200.00_____ea
C	Firm unit price per test if we ask to continue software training on 8 to 10 new samples	1	\$_____1000,00_____ea
D	Average firm unit price per additional test requested. (A+B+C)/3	1	\$_____1,200.00_____ea

These prices are provided as an example only and must not be interpreted as an indicator of the real price of the tests.

TOTAL BID PRICE (CAD) = 150,000.00 + (1,200.00 X 5) = \$ 156,000.00

***For evaluation purposes only, the estimated quantity of additional tests required is five (5).**

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*****An average firm unit price for additional tests is calculated only for evaluation purposes.***

When the contract will be in force, the contractor will be paid the firm unit price indicated in Table B2 for each additional test, according to the number of additional tests requested by the TA.

For example:

- If the TA requests to do additional tests on 8 new samples, the contractor will be payed 8,000.00\$ (1,000.00\$ x 8) for Task 5.5.*
- If the TA requests to do additional tests on 2 new samples, the contractor will be payed 2,800.00\$ (1,400.00\$ x 2) for Task 5.5.*

ATTACHMENT 2 – MANDATORY AND POINTED-RATED TECHNICAL CRITERIA

1. MANDATORY EVALUATION CRITERIA

In their proposals, bidders must demonstrate they meet the following mandatory criteria. Failure to meet any of the mandatory criteria will render the bid non-compliant and it will be given no further consideration.

For each criteria M1, M2 and M3, the Bidder must indicate the names of the proposed resources. Only the names proposed by the Bidder for each criteria will be evaluated for that criteria. The same resource can be proposed for different criteria.

	CRITERIA	MET	NOT MET
M1	The proposed resource that will handle the laboratory testing has at least 36 months of experience in acquisition and analysis of spectroscopic signatures produced during the interaction of a high power laser with solids. A high power laser is defined as having an average power of 12 kW or more.		
M2	The proposed resource for the conception of the artificial neural network for the identification of the spectral signatures has at least 30 months of experience in the field of neural networks development. Experience must have been acquired within the last 6 years.		
M3	The project manager must have worked on at least 3 projects. Only completed projects in the field of scientific research and development with a budget of more than \$150,000 each and for which the participation of the proposed resource was longer than three months are to be considered.		

Evaluation of the experience of the proposed resources

- 1- For each proposed resource, the Bidder must indicate experience in terms of months of experience. This experience should be demonstrated in a clear, precise and concrete manner. Concomitant experience will not be accepted. For example, if the resource worked on a project from June 2013 to May 2014, and worked on another project from May 2014 to June 2015, we will consider the month of May 2014 only once.
- 2- To determine whether the experience is acceptable, the Bidder must supply a detailed description of projects and work in which the available resources have acquired experience. The following information should be provided for each project:
 - a) the subject;
 - (b) the objectives;
 - (c) the project periods (beginning and ending month and year) during which the proposed resource participated;
 - d) the role of the proposed resource in the project;
 - e) a description of the tasks performed by the proposed resource;
 - f) the duration of each task performed by the proposed resource;
 - g) In the case of a project manager, the project budget.

2. RATED TECHNICAL CRITERIA

	CRITERION	Evaluation Scale	Max	Min
1	Technical proposal		20	12
1.1	<p><u>Demonstrated understanding of context, scope and objectives of the tasks.</u></p> <p>The Bidder should demonstrate its understanding of the Statement of Work (SOW) by providing, in its own words, a convincing demonstration of its understanding of the context, scope and objectives of the resulting contract. The demonstrated understanding of the context, scope and objectives should be complete and should not be limited to the description of the SOW.</p>	The qualitative criteria evaluation grid included at the end of this document will be used for evaluating this criterion.	10	6
1.2	<p><u>Effort allocation</u></p> <p>The Bidder should clearly describe how they intend to allocate hours of work to each project task, i.e., the role of each person with regard to each task and the estimated number of hours to be worked by each person.</p> <p>The level of effort allocated to each task and the personnel assignments should be appropriate, realistic, and make it possible for the project's objectives to be met.</p>	The qualitative criteria evaluation grid included at the end of this document will be used for evaluating this criterion.	10	6

QUALITATIVE CRITERIA EVALUATION GRID

Non-responsive	Extremely weak	Very weak	Weak	Acceptable	Average	Superior	Exceptional
0 point	1-2 points	3-4 points	5 points	6 points	7-8 points	9 points	10 points
Did not submit information that could be evaluated	Does not meet requirements	Generally does not meet requirements	Lacks details	Barely meets requirements	Meets requirements	Exceeds requirements	Far exceeds requirements
	Weaknesses cannot be corrected	Generally doubtful that weaknesses can be corrected	Weaknesses can be corrected	Weaknesses can be easily corrected	No significant weaknesses	No weaknesses identified	No weaknesses
	Unacceptable	Extremely weak, insufficient to meet performance requirements	Little chance of meeting performance requirements	Minimum acceptable capability, should meet minimum performance	Average capability, should be adequate for effective results	Superior capability, should deliver very effective results	Exceptional capability, should deliver extremely effective results

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ATTACHMENT 3 - ELECTRONIC PAYMENT INSTRUMENTS

The Bidder accepts to be paid by any of the following Electronic Payment Instrument(s):

- () Direct Deposit (Domestic and International);
- () Electronic Data Interchange (EDI);