



RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Travaux publics et Services gouvernementaux
Canada
Place Bonaventure, portail Sud-Est
800, rue de La Gauchetière Ouest
7^{ème} étage
Montréal
Québec
H5A 1L6
FAX pour soumissions: (514) 496-3822

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 High Speed Camera	
Solicitation No. - N° de l'invitation 31241-164766/A	Date 2017-01-19
Client Reference No. - N° de référence du client 31241-16-4766	
GETS Reference No. - N° de référence de SEAG PW-\$MTA-405-14198	
File No. - N° de dossier MTA-6-39338 (405)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-02-10	
Time Zone Fuseau horaire Heure Normale du l'Est HNE	
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: Séguin, Caroline	Buyer Id - Id de l'acheteur mta405
Telephone No. - N° de téléphone (514) 496-3734 ()	FAX No. - N° de FAX (514) 496-3822
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: CONSEIL NATIONAL DE RECHERCHES DU CANADA UNIVERSITÉ DE MONTRÉAL 5145, AVENUE DECELLES MONTREAL Québec H3T 2B2 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

Travaux publics et Services gouvernementaux Canada
Place Bonaventure, portail Sud-Est
800, rue de La Gauchetière Ouest
7^{ème} étage
Montréal
Québec
H5A 1L6

Delivery Required - Livraison exigée	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

TABLE OF CONTENTS

PART 1 - GENERAL INFORMATION	2
1.1 SECURITY REQUIREMENTS	2
1.2 REQUIREMENT	2
1.3 DEBRIEFINGS	2
1.4 TRADE AGREEMENTS	2
1.5 CANADIAN CONTENT	2
PART 2 - BIDDER INSTRUCTIONS	3
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS	3
2.2 SUBMISSION OF BIDS.....	3
2.3 ENQUIRIES - BID SOLICITATION.....	3
2.4 APPLICABLE LAWS.....	3
PART 3 - BID PREPARATION INSTRUCTIONS.....	4
3.1 BID PREPARATION INSTRUCTIONS	4
PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION	5
4.1 EVALUATION PROCEDURES.....	5
4.2 BASIS OF SELECTION.....	5
PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION	6
5.1 CERTIFICATIONS REQUIRED WITH THE BID.....	6
5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION	6
PART 6 - RESULTING CONTRACT CLAUSES	8
6.1 SECURITY REQUIREMENTS	8
6.2 REQUIREMENT	8
6.3 STANDARD CLAUSES AND CONDITIONS.....	8
6.4 TERM OF CONTRACT	8
6.5 AUTHORITIES	8
6.6 PAYMENT	9
6.7 INVOICING INSTRUCTIONS	10
6.8 CERTIFICATIONS AND ADDITIONAL INFORMATION.....	10
6.9 APPLICABLE LAWS.....	10
6.10 PRIORITY OF DOCUMENTS	11
6.11 SACC <i>MANUAL</i> CLAUSES	11
ANNEX "A".....	12
REQUIREMENT.....	12
ANNEX "B".....	14
BASIS OF PAYMENT	14

N° de l'invitation - Solicitation No.
31241-164766/A
N° de réf. du client - Client Ref. No.
31241-16-4766

N° de la modif - Amd. No.
File No. - N° du dossier
MTA-6-39338

Id de l'acheteur - Buyer ID
MTA405
N° CCC / CCC No./ N° VME - FMS

PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement applicable to this requirement.

1.2 Requirement

The requirement is detailed under annex A "Requirement" 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 Agreement on Internal Trade (AIT).

1.5 Canadian Content

The requirement is limited to Canadian goods and/or services.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

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

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

The **2003** (2016-04-04) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2.2 Submission of Bids

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

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) 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 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.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

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

Section I: Technical Bid: two (2) hard copies
Section II: Financial Bid: one (1) hard copy
Section III: Certifications: one (1) hard copy

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

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

Section I: Technical Bid

In their technical bid, Bidders should 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. The total amount of Applicable Taxes must be shown separately.

3.1.2 Exchange Rate Fluctuation

[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

The mandatory technical criteria indicated under section 3 of Annex A "Requirement" will be evaluated.

4.1.2 Financial Evaluation

The total indicated in Annex B "Basis of Payment" will be evaluated.

4.1.2.1 SACC Manual Clause

SACC Manual Clause [A0222T](#) (2014-06-26), Evaluation of Price

4.2 Basis of Selection

4.2.1 Basis of Selection – Mandatory Technical Criteria

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

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

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

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

5.1 Certifications Required with the Bid

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

5.1.1 Integrity Provisions - Declaration of Convicted Offences

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

5.1.2 Additional Certifications Required with the Bid

5.1.2.1 Canadian Content Certification

This procurement is limited to Canadian goods.

The Bidder certifies that:

() the good(s) offered are Canadian goods as defined in paragraph 1 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 provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

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

N° de l'invitation - Solicitation No.
31241-164766/A
N° de réf. du client - Client Ref. No.
31241-16-4766

N° de la modif - Amd. No.
File No. - N° du dossier
MTA-6-39338

Id de l'acheteur - Buyer ID
MTA405
N° CCC / CCC No./ N° VME - FMS

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969) website (http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969).

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

PART 6 - RESULTING CONTRACT CLAUSES

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

6.1 Security Requirements

There is no security requirement applicable to the Contract.

6.2 Requirement

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

6.3 Standard Clauses and Conditions

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

6.3.1 General Conditions

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

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from date of Contract to April 14th 2017 inclusive.

6.4.2 Delivery Date

All the deliverables must be received on or before March 31st 2017.

6.4.3 Delivery Points

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

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Caroline Séguin
Supply Officer
Public Works and Government Services Canada
Acquisitions Branch, Quebec Region
800 de la Gauchetière Street West, Suite 7300, Montreal (Quebec), H5A 1L6

N° de l'invitation - Solicitation No.
31241-164766/A
N° de réf. du client - Client Ref. No.
31241-16-4766

N° de la modif - Amd. No.
File No. - N° du dossier
MTA-6-39338

Id de l'acheteur - Buyer ID
MTA405
N° CCC / CCC No./ N° VME - FMS

Telephone: (514) 496-3734
Facsimile: (514) 496-3822
E-mail address: Caroline.Z.Seguin@tpsgc-pwgsc.gc.ca

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

6.5.2 Technical Authority

This section will be completed at contract award.

The Technical Authority for the Contract is:

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

Telephone: _____
Facsimile: _____
E-mail address: _____

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

6.5.3 Contractor's Representative

The Contractor's representative is:

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 the Annex B "Basis of Payment" for a cost of \$ _____ (the amount will be inserted at contract award). Customs duties are subject to exemption 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](#) (2011-05-16), Limitation of Price

6.6.3 Single Payment

SACC Manual clause [H1000C](#) (2008-05-12), Single Payment

6.6.4 SACC Manual Clauses

SACC Manual clause [C2000C](#) (2007-11-30), Taxes – Foreign-based Contractor

SACC Manual clause [C2602C](#) (2008-05-12), Custom Duties Exempt National Research Council of Canada)

6.7 Invoicing Instructions

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

6.8 Certifications and Additional Information

6.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

6.8.2 SACC Manual Clauses

SACC Manual clause [A3060C](#) (2008-05-12), Canadian Content Certification

6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____.

N° de l'invitation - Solicitation No.
31241-164766/A
N° de réf. du client - Client Ref. No.
31241-16-4766

N° de la modif - Amd. No.
File No. - N° du dossier
MTA-6-39338

Id de l'acheteur - Buyer ID
MTA405
N° CCC / CCC No./ N° VME - FMS

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](#) (2016-04-04), General Conditions - Goods (Medium Complexity);
- (c) Annex A, Requirement;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated _____

6.11 SACC Manual Clauses

SACC Manual clause [A9068C](#) (2010-01-11), Government Site Regulations

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

ANNEX "A"

REQUIREMENT

1. Object

The material removal group (MR) at SMM-Montreal - NRC is working with its industrial partners on the development of advanced high speed machining processes of aerospace materials. Such processes involve ultrafast phenomena, such as, chip formation, Minimum Quantity Lubrication (MQL) aerosol flow and Liquid Nitrogen flow in cryogenic machining. The ability of capturing and recording such phenomena represent an imperative need for the industry to understand the physics of such processes, which is required for their characterization, development and optimization. The Precise process imaging via high speed cameras (HSC) has revealed new aspects and enabled the analysis of ultrafast phenomena of several processes in different research fields. Therefore, the characterization of such phenomena for process development necessitates using a reliable and accurate High Speed Camera (HSC). This would strengthen the research capabilities of NRC for such processes, which will create and improve the collaboration with current and potential industrial partners. Within this mandate, the MR group at SMM-MTL has defined the purchase of a High Speed Camera system as a priority for this year. The work consists of supply and delivery of the system at the NRC address.

2. Constraints

The High Speed Camera (HSC) must have a dimension envelope less than 125 mm width, 125 mm length and 100 mm height to fit inside the existing machining centers of the MR group at SMM-MTL without affecting or interfering with the machining setup.

3. Mandatory technical specifications

The delivered equipment must have the following mandatory specifications:

- 3.1 The HSC must have at least a full resolution of 1280 X 1240.
- 3.2 The HSC must have, at least, a frame rate 4,000 fps at full resolution window.
- 3.3 The HSC must have a sensitivity of at least 9,000 in monochrome according to ISO standard (measured in SAT 12232).
- 3.4 The HSC must include 32GB or more of onboard memory.
- 3.5 The HSC must be compatible with C-mount, F-mount and G-mount.
- 3.6 The HSC must reach a recording speed up to 700,000 frames per second.
- 3.7 The weight of the HSC must not exceed 1.5 kg for installation requirements.
- 3.8 The HSC system must include three lenses or more (6 mm lens, 17 mm lens and 50 mm lens).
- 3.9 The system software and output format must be compatible with Windows operating system (Windows 7 or more recent).

N° de l'invitation - Solicitation No.
31241-164766/A
N° de réf. du client - Client Ref. No.
31241-16-4766

N° de la modif - Amd. No.
File No. - N° du dossier
MTA-6-39338

Id de l'acheteur - Buyer ID
MTA405
N° CCC / CCC No./ N° VME - FMS

4. Deliverables:

- 4.1 **Equipment:** The high speed camera system must include the main camera body, lenses, software and cables required for connection that fulfill the above mentioned specifications. The update of the software must be done with no additional cost. The software license number is therefore required.
- 4.2 **Technical documentation:** The high speed camera system must include at least one operating manual in English or French upon delivery, soft copy and/or hard copy.
- 4.3 **Accessories:** The acquired system must include the necessary accessories; namely, tripod and light to install and operate the high speed camera in the machining centers.
- 4.4 **A training about the use of the HSC system is required.** The training must be offered on site to at least three (3) people. The training must include a demonstration and an explanation of the software and the system operation.

5. Delivery and Installation

The system must be delivered and installed at the Material Removal group (MR) at SMM-MTL at 5145 Decelles avenue, Montréal, Quebec, H3T 2B2.

N° de l'invitation - Solicitation No.
31241-164766/A
N° de réf. du client - Client Ref. No.
31241-16-4766

N° de la modif - Amd. No.
File No. - N° du dossier
MTA-6-39338

Id de l'acheteur - Buyer ID
MTA405
N° CCC / CCC No./ N° VME - FMS

ANNEX "B"

BASIS OF PAYMENT

The bidder must complete this annex in order for the proposal to be compliant.

ITEMS	PRICE (\$ CAD) *
High speed camera (HSC) system, delivered and installed, with respect to the requirement specified in Annex A « Requirement », sections 4.1 to 4.3	\$ _____
Training as specified in Annex A "Requirement", section 4.4	\$ _____
Total	\$ _____

* The prices indicated in Annex B « Basis of Payment » exclude applicable taxes.