

**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**
Réception des soumissions - TPSGC / Bid
Receiving - PWGSC
1550 Avenue d'Estimauville
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

Title - Sujet Optique atmosphérique		
Solicitation No. - N° de l'invitation W7701-125216/A	Date 2012-06-27	
Client Reference No. - N° de référence du client W7701-12-5216		
GETS Reference No. - N° de référence de SEAG PW-\$QCL-018-14700		
File No. - N° de dossier QCL-1-34731 (018)	CCC No./N° CCC - FMS No./N° VME	
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2012-07-18		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: Piras, Gabriel		Buyer Id - Id de l'acheteur qcl018
Telephone No. - N° de téléphone (418) 649-2870 ()		FAX No. - N° de FAX (418) 648-2209
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: R & D POUR LA DÉFENSE CANADA - VALCARTIER BATIMENT 53 2459 BOUL. PIE XI NORD QUÉBEC Québec G3J1X5 Canada		

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

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

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

Issuing Office - Bureau de distribution

TPSGC/PWGSC
1550 Avenue d'Estimauville
Québec
Québec
G1J 0C7

TITLE : WORK IN ATMOSPHERIC OPTICS

TABLE OF CONTENTS

PART 1 - GENERAL INFORMATION

1. Introduction
2. Summary
3. Debriefings

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions
2. Submission of Bids
3. Enquiries - Bid Solicitation
4. Applicable Laws
5. Basis for Canada's Ownership of Intellectual Property
6. Maximum Funding

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions:
 - Section I : Technical Bid
 - Section II : Financial Bid
 - Section III : Certifications

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures
2. Basis of Selection

PART 5 - CERTIFICATIONS

1. Certifications Precedent to Contract Award

PART 6 - SECURITY AND FINANCIAL REQUIREMENTS

1. Security Requirement
2. Financial Capability

PART 7 - RESULTING CONTRACT CLAUSES

1. Statement of Work
2. Standard Clauses and Conditions
3. Security Requirement

Solicitation No. - N° de l'invitation

W7701-125216/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

qcl018

Client Ref. No. - N° de réf. du client

W7701-12-5216

File No. - N° du dossier

QCL-1-34731

CCC No./N° CCC - FMS No/ N° VME

-
4. Term of Contract
 5. Authorities
 6. Payment
 7. Invoicing Instructions
 8. Certifications
 9. Applicable Laws
 10. Priority of Documents
 11. Defence Contract
 12. Foreign Nationals (Canadian Contractor)
 13. Insurance
 14. Progress Reports
 15. Site Regulations
 16. Identification Badge

List of Annexes

- | | |
|---------|---|
| Annex A | Statement of Work or Requirement |
| Annex B | Basis of Payment |
| Annex C | Contractor Disclosure of Foreground Information |
| Annex D | Security Requirements Check List |
| Annex E | DND 626, Task Authorization Form |

List of Attachments

- | | |
|--------------|--|
| Attachment 1 | Financial Bid Presentation Sheet |
| Attachment 2 | Mandatory and Point Rated Technical Criteria |
| Attachment 3 | Certifications Precedent to Contract Award |
| Attachment 4 | Evaluation of Price |

PART 1 - GENERAL INFORMATION

1. Introduction

The bid solicitation document 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, if applicable, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Security and Financial Requirements: includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The annexes include :

Annex A	Statement of Work or Requirement
Annex B	Basis of Payment
Annex C	Contractor Disclosure of Foreground Information
Annex D	Security Requirements Check List
Annex E	DND 626, Task Authorization Form

2. Summary

The objectives of this contract with task authorizations are as follows:

- 1) Carry out research work in the field of atmospheric optics relating to airborne and remote panchromatic, multispectral and hyperspectral imaging applications.
- 2) Provide tools to determine the atmosphere's effects on the formation of remote sensing images and tools for the correction or compensation of atmospheric effects in these images in order to derive as much information as possible from the images.

This contract includes a firm portion and a task authorization portion.

i. Firm portion

The Contractor must carry out the three tasks described below.

Task A: Estimation of the level of performance required for the atmospheric correction of thermal hyperspectral images for airborne sensors - 1) Determine a set of performance parameters required by atmospheric correction algorithms in the context of target detection for airborne remote sensing; 2) Construct a model that will provide the performance objectives to be

attained for the parameters determined in objective 1) required by atmospheric correction algorithms in a specific detection context.

Task B: Studies on atmospheric correction under difficult conditions - Provide a tool for determining whether, under specific operating conditions, thermal hyperspectral imaging in the LWIR wavelength range is practical based on the user's intended application (military). The intended application is the detection of gas, liquid and solid targets of all kinds.

Task C: Simulation of the polarization characteristics of the radiation emitted by a target in thermal hyperspectral imaging - Determine the scientific and technical work that must be carried out, the potential prospects for developing atmospheric correction tools and techniques involving the use of polarization data in airborne thermal hyperspectral imaging as well as any problems likely to be encountered.

ii. Tasks subject to the task authorization process

The Contractor must provide the services described in tasks 3A to 3I below. The tasks will be carried out on an "as and when requested basis" through task authorizations (TAs). A TA may refer to more than one task and the same task may be repeated several times during the term of the contract.

Task 3A: Theoretical studies of imaging-related atmospheric optics

Task 3B: Processing and analysis of imaging data relating to atmospheric optics

Task 3C: Development, implementation and testing of image processing algorithms

Task 3D: Evaluation, validation and comparison of image processing algorithms

Task 3E: Design and development of experiments in atmospheric optics

Task 3F: Conducting experimental work in atmospheric optics

Task 3G: Processing and analysis of ground data acquired during experiments

Task 3H: Development and maintenance of measuring systems for the acquisition of ground-truth data

Task 3I: Participate with the Technical Authority in international exchange programs

The organization for which the services are to be rendered is Defence Research and Development Canada - Valcartier (DRDC - Valcartier).

The period of the Contract is from date of Contract to March 31st, 2016, inclusive. Firm portion of the Work must be completed no later than 12 months after Contract award.

Available funding for this contract : \$150,000, GST extra, for the firm portion of the Work and \$750,000, GST extra, for the portion of the Work to be performed on an "as and when requested basis" using a Task Authorization.

Most of the work is to be carried out on site at Defence Research and Development Canada - Valcartier, located at 2459 Pie-XI Blvd North, Quebec City, Quebec.

There is a security requirement associated with this requirement. For additional information, consult Part 6 - Security, Financial and Other Requirements, and Part 7 - Resulting Contract Clauses. Bidders should consult the "Security Requirements for PWGSC Bid Solicitations - Instructions for Bidders" (<http://www.tpsgc-pwgsc.gc.ca/app-acq/lc-pl/lc-pl-eng.html#a31>) document on the Departmental Standard Procurement Documents Web site.

The requirement is subject to the provisions of the Agreement on Internal Trade (AIT).

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

3. Debriefings

After contract award, 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 of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

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 (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) 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 (2012-03-02) 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: sixty (60) days

Insert: one hundred twenty (120) days

1.1 SACC Manual Clauses

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

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.

Due to the nature of the bid solicitation, bids transmitted by facsimile to PWGSC will not be accepted.

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority, preferably via email at gabriel.piras@tpsgc-pwgsc.gc.ca, **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 questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

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.

5. Basis for Canada's Ownership of Intellectual Property

Defence Research and Development Canada - Valcartier has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada.

The Treasury Board, granted Defence Research and Development Canada exemption from the Treasury Board Policy on "Title to Intellectual Property Arising Under Crown Procurement Contracts"

6. Maximum Funding

The maximum funding available for the contract resulting from the bid solicitation is 150,000.00 CAD *for the firm portion of the Work* (Section 2 of the Statement of Work in Annex A) (Goods and Services Tax or the Harmonized Sales Tax extra, as appropriate). Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

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

- Section I : Technical Bid (5 hard copies)
- Section II : Financial Bid (2 hard copies)
- Section III : Certifications (1 hard copy)

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft 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 30% recycled paper;
- (c) print double sided (duplex printing);
- (d) use a numbering system that corresponds to the bid solicitation; and
- (e) submit bound bids using cerlox, staples, etc., but no binders.

1.1 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 clearly address 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.

1.2 Section II : Financial Bid

Bidders must submit their financial bid in accordance with the following :

- (a) For the firm portion of the Work (Section 2 of the Statement of Work in Annex A) :

A Total Cost to a Limitation of Expenditure, which must not exceed the maximum funding specified in Part 2. The total amount of Goods and Services Tax or Harmonized Sales Tax is to be shown separately, if applicable. The information should be provided in accordance with the **Financial Bid Presentation Sheet at Attachment 1.**

- (b) *For the portion of the Work to be performed on an "as and when requested basis" using a Task Authorization (Section 3 of the Statement of Work in Annex A) :*

A firm all-inclusive hourly rate for each resource proposed, for each year of the contract period.

No travel and living expenses will be paid for services provided within the Quebec Region (including DRDC Valcartier facilities.) Further, Canada will not accept any travel and living expenses for travel between the contractor's place of business and the Quebec region (including DRDC Valcartier facilities). All these cost must be included in the firm all-inclusive hourly rates.

The information should be provided in accordance with the **Financial Bid Presentation Sheet in Attachment 1.**

- (c) Prices must be in Canadian funds, Canadian customs duties and excise taxes included, and Goods and Services Tax (GST) or Harmonized Sales Tax (HST) excluded.

1.2.1 SACC Manual Clauses

C3011T (2010-01-11), Exchange Rate Fluctuation

1.3 Section III : Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

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.

1.1 Technical Evaluation

Except where expressly provided otherwise, the experience described in the bid must be the experience of the Bidder itself (which includes the experience of any companies that formed the Bidder by way of a merger but does not include any experience acquired through a purchase of assets or an assignment of contract). The experience of the Bidder's affiliates (i.e. parent, subsidiary or sister corporations), subcontractors, or suppliers will not be considered.

1.1.1 Mandatory Technical Criteria

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

1.1.2 Point Rated Technical Criteria

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

1.2 Financial Evaluation

1.2.1 Evaluation of Price

The price of the bid will be evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, FOB destination, Canadian customs duties and excise taxes included.

For evaluation purposes only, the price of the bid will be determined as detailed in Attachment 4, Evaluation of Price.

2. Basis of Selection

2.1 Basis of Selection - Highest Combined Rating of Technical Merit and Price

- 1. To be declared responsive, a bid must:
 - (a) comply with all the requirements of the bid solicitation;
 - (b) meet all mandatory criteria; and
 - (c) obtain the required minimum points for each criterion and each group of criteria with a pass mark; and

2. Bids not meeting (a) or (b) or (c) will be declared non-responsive.
3. The evaluation will be based on the highest responsive combined rating of technical merit and price. The ratio will be 70% for the technical merit and 30% for the price.
4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 70%.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 30%.
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 70/30 ratio of technical merit and price, respectively. The total available points equals 100 and the lowest evaluated price is \$665,103.15.

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

	Bidder		
	Bidder 1	Bidder 2	Bidder 3
Overall Technical Score	65/100	75/100	90/100
Bid Evaluated Price	665 103.15 \$	836 804.20 \$	1 198 092.66 \$
Calculations			
Technical Merit Score	$65/100 \times 70 = 45.5$	$75/100 \times 70 = 52.5$	$90/100 \times 70 = 63$
Pricing Score	$665/665 \times 30 = 30$	$665/837 \times 30 = 23.8$	$665/1198 \times 30 = 16.7$
Combined Rating	75.5	76.3	79.7
Overall Rating	3rd	2nd	1st

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications to be awarded a contract. Canada will declare a bid non-responsive if the required certifications are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify the bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

1. Certifications Precedent to Contract Award

The certifications in **Attachment 3, Certifications Precedent to Contract Award**, should be completed and submitted with the bid but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

1. Security Requirement

1. Before award of a contract, the following conditions must be met:
 - (a) the Bidder must hold a valid organization security clearance as indicated in Part 7 - Resulting Contract Clauses;
 - (b) the Bidder's proposed individuals requiring access to classified or protected information, assets or sensitive work site(s) must meet the security requirement as indicated in Part 7 - Resulting Contract Clauses;
 - (c) the Bidder must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites.
2. Bidders are reminded to obtain the required security clearance promptly. Any delay in the award of a contract to allow the successful bidder to obtain the required clearance will be at the entire discretion of the Contracting Authority.
3. For additional information on security requirements, bidders should consult the "Security Requirements for PWGSC Bid Solicitations - Instructions for Bidders" (<http://www.tpsgc-pwgsc.gc.ca/app-acq/lc-pl/lc-pl-eng.html#a31>) document on the Departmental Standard Procurement Documents Web site.

2. Financial Capability

SACC Manual clause A9033T (2011-05-16), 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.

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 entitled _____ (to be completed at Contract award), dated _____ (to be completed at Contract award).

1.1 Task Authorization

1.1.1 Task Authorization - Department of National Defence

The administration of the Task Authorization process will be carried out by **The Procurement and Payment group at Defence Research and Development Canada - Valcartier, represented by the DND Procurement Authority**. This process includes monitoring, controlling and reporting on expenditures of the contract with task authorizations to the Contracting Authority.

1.1.2 Task Authorization Process

Task Authorization:

The Work to be performed under the Contract will be on an "as and when requested basis" using a Task Authorization (TA). The Work described in the TA must be in accordance with the scope of the Contract.

Task Authorization Process:

1. The DND Procurement Authority will provide the Contractor with a description of the task using the DND 626, Task Authorization Form specified in Annex E.
2. The Task Authorization (TA) will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The TA will also include the applicable basis(bases) and methods of payment as specified in the Contract.
3. The Contractor must provide the DND Procurement Authority, **within five (5) calendar days** of its receipt, the proposed total estimated cost for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract.
4. The Contractor must not commence work until a TA authorized by the DND Procurement Authority has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been received will be done at the Contractor's own risk.

1.1.3 Task Authorization Limit

The DND Procurement Authority may authorize individual task authorizations up to a limit of **\$80,000.00**, Goods and Services Tax or Harmonized Sales Tax included, inclusive of any revisions.

Any task authorization to be issued in excess of these limits must be authorized by the Contracting Authority before issuance.

1.2 Disclosure Certification

On completion of the Work, the Contractor must submit to the Technical Authority and to the Contracting Authority a copy of the Disclosure Certification attached as Annex C stating that all applicable disclosures were submitted.

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 (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

2.1 General Conditions

2040 (2012-03-02), General Conditions - Research & Development, apply to and form part of the Contract.

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

2.3 SACC Manual Clauses

K3410C (2008-12-12), Canada to Own Intellectual Property Rights in Foreground Information

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

3. Security Requirement

SECURITY REQUIREMENT FOR CANADIAN SUPPLIER:
PWGSC FILE #: W7701-125216

1. The Contractor must, at all times during the performance of the Contract, hold a valid Facility Security Clearance at the level of SECRET, issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).

-
2. The Contractor personnel requiring access to CLASSIFIED information, assets or sensitive work site(s) must be a permanent resident of Canada or a citizen of Canada, Australia, United Kingdom, United States, or New Zealand, and must EACH hold a valid personnel security screening at the level of SECRET, granted or approved by CISD/PWGSC. Until the security screening of the Contractor personnel required by this Contract has been completed satisfactorily by the Canadian Industrial Security Directorate, Public Works and Government Services Canada, the Contractor personnel MAY NOT HAVE ACCESS to CLASSIFIED information or assets, and MAY NOT ENTER sites where such information or assets are kept, without an escort.
 3. The Contractor MUST NOT remove any CLASSIFIED information from the identified work site(s), and the Contractor must ensure that its personnel are made aware of and comply with this restriction.
 4. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.
 5. The Contractor must comply with the provisions of the:
 - (a) Security Requirements Check List and security guide (if applicable), attached at Annex D
 - (b) Industrial Security Manual (Latest Edition).

4. Term of Contract

4.1 Period of Contract

The period of the Contract is from date of Contract to March 31st, 2016, inclusive.

4.2 Delivery Date

For the firm portion of the Work (Section 2 of the Statement of Work in Annex A) :

All the deliverables must be received no later than 12 months after date of Contract.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Gabriel Piras
 Title: Supply Specialist
 Public Works and Government Services Canada
 Acquisitions Branch
 Quebec Region
 601-1550 Avenue D'Estimauville
 Québec, Qc, G1J 0C7
 CANADA

Telephone: 418-649-2870

Facsimile: 418-648-2209
 E-mail address: gabriel.piras@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.

5.2 Technical Authority

The Technical Authority for the Contract is: **(to be completed at contract award)**

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.

5.3 Contractor's Representative (to be completed at contract award)

Administrative representative:	Technical representative:
Name: _____	Name: _____
Title: _____	Title: _____
Telephone : ____-____-_____	Telephone : ____-____-_____
Facsimile : ____-____-_____	Facsimile : ____-____-_____
Email : _____	Email: _____

5.4 DND Procurement Authority (to be completed by Canada at the contract award)

The DND Procurement Authority for the Contract is:

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

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 Task Authorizations. The Contractor may discuss administrative matters identified in Task

Authorizations with the DND Procurement Authority however the DND Procurement Authority has no authority to authorize changes to the scope of the Work described in the Statement of Work at Annex A. Changes to the scope of Work described in the Statement of Work at Annex A can only be made through a contract amendment issued by the Contracting Authority.

6. Payment

6.1 Basis of Payment

6.1.1 Basis of Payment for the Firm Portion of the Work (Section 2 of the Statement of Work in Annex A)

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, and a profit, as determined in accordance with the Basis of Payment in Annex B, to a limitation of expenditure of \$_____ (*insert the amount at contract award*). Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

6.1.2 Basis of Payment for the portion of the Work to be performed on an "as and when requested basis" using a Task Authorization (Section 3 of the Statement of Work in Annex A)

One of the following types of basis of payment will form part of the approved Task Authorization (TA). The task price must be determined in accordance with the Basis of Payment at Annex B.

(a) Firm Unit Price(s) or Firm Lot Price TA

In consideration of the Contractor satisfactorily completing all of its obligations under the authorized Task Authorization (TA), the Contractor will be paid a firm price in accordance with the basis of payment, in Annex B, as specified in the authorized TA. Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been authorized, in writing, by the Contracting Authority before their incorporation into the Work.

(b) Ceiling Price TA

The Contractor will be reimbursed its costs reasonably and properly incurred in the performance of the Work, plus a profit, as determined in accordance with the Basis of Payment in Annex B, to the ceiling price specified in the approved TA. Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

The ceiling price is subject to downward adjustment so as not to exceed the actual costs reasonably incurred in the performance of the Work and computed in accordance with the Basis of Payment.

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 Technical Authority or the Contracting Authority, before their incorporation into the Work.

(c) TA subject to a Limitation of Expenditure

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work specified in the authorized Task Authorization (TA), as determined in accordance with the Basis of Payment in Annex B, to the limitation of expenditure specified in the authorized TA.

Canada's liability to the Contractor under the authorized TA must not exceed the limitation of expenditure specified in the authorized TA. Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

No increase in the liability of Canada or in the price of the Work specified in the authorized TA resulting from any design changes, modifications or interpretations of the Work will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been authorized, in writing, by the Contracting Authority before their incorporation into the Work.

6.2 Canada's Obligation - Portion of the Work - Task Authorizations

Canada's obligation with respect to the portion of the Work under the Contract that is performed through task authorizations is limited to the total amount of the actual tasks performed by the Contractor.

6.3 Limitation of Expenditure

1. Canada's total liability to the Contractor under the Contract must not exceed \$_____ **(amount to be inserted at contract award)** . Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.
2. No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - (a) when it is 75 percent committed, or
 - (b) four (4) months before the Contract expiry date, or
 - (c) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

whichever comes first.

3. If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

6.4 Method of Payment

6.4.1 Method of Payment for the Firm Portion of the Work (Section 2 of the Statement of Work in Annex A)

6.4.1.1 Progress Payments

1. Canada will make progress payments in accordance with the payment provisions of the Contract, no more than once a month, for cost incurred in the performance of the Work up to **90 percent** of the amount claimed and approved by Canada if:
 - (a) an accurate and complete claim for payment using form PWGSC-TPSGC 1111(<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>) and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
 - (b) the amount claimed is in accordance with the Basis of payment;
 - (c) the total amount for all progress payments paid by Canada does not exceed **90 percent** of the total amount to be paid under the Contract;
 - (d) all certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives.
2. The balance of the amount payable will be paid in accordance with the payment provisions of the Contract upon completion and delivery of the item if the Work has been accepted by Canada and a final claim for the payment is submitted.
3. Progress payments are interim payments only. Canada may conduct a government audit and interim time and cost verifications and reserves the right to make adjustments to the Contract from time to time during the performance of the Work. Any overpayment resulting from progress payments or otherwise must be refunded promptly to Canada.

6.4.2 Method of Payment for the portion of the Work to be performed on an "as and when requested basis" using a Task Authorization (Section 3 of the Statement of Work in Annex A)

Payments will be made not more frequently than once a month.

Depending on the method of payment specified in the applicable TA, one of the following method of payment clauses will apply.

6.4.2.1 Single Payment (For a Firm Price TA, for a TA subject to a Limitation of Expenditure or a Ceiling Price)

Canada will pay the Contractor upon completion and delivery of the Work in accordance with the payment provisions of the Task Authorization and the Contract if:

- (a) an accurate and complete claim for payment using PWGSC-TPSGC 1111, Claim for Progress Payment, and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (b) all such documents have been verified by Canada;
- (c) the Work delivered has been accepted by Canada.

6.4.2.2 Milestone Payments (For a Firm Price TA)

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

- (a) 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;
- (b) all the certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives;
- (c) all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

6.4.2.3 Progress Payments (For a TA subject to a Limitation of Expenditure or a Ceiling Price)

- (a) Canada will make progress payments in accordance with the payment provisions of the Task Authorization and the Contract for cost incurred in the performance of the Work up to 90 percent of the amount claimed and approved by Canada if:
 - (i) an accurate and complete complete claim for payment using form PWGSC-TPSGC 1111, Claim for Progress Payment, and and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
 - (ii) the amount claimed is in accordance with the Basis of payment and the Task Authorization;

(iii) the total amount for all progress payments paid by Canada does not exceed 90 percent of the total amount to be paid under the Task Authorization.

(iv) all certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives.

(b) The balance of the amount payable will be paid in accordance with the payment provisions of the Task Authorization and the Contract upon completion and delivery of all work required under the Task Authorization if the Work has been accepted by Canada and a final claim for the payment is submitted.

(c) Progress payments are interim payments only. Canada may conduct a government audit and interim time and cost verifications and reserves the right to make adjustments to the Contract from time to time during the performance of the Work. Any overpayment resulting from progress payments or otherwise must be refunded promptly to Canada.

6.5 SACC Manual Clauses

A9117C (2007-11-30), T1204 - Direct Request by Customer Department
C0305C (2008-05-12), Cost Submission

6.6 Discretionary Audit

SACC Manual Clause C0705C (2010-01-11), Discretionary Audit

6.7 Funding by Fiscal Year

For the firm portion of the Work (Section 2 of the Statement of Work in Annex A) :

Despite the Total Estimated Cost (Limitation of Expenditure) specified in the Contract, and unless otherwise authorized in writing by the Contracting Authority, the maximum amount which may be paid for work completed in the period ending 31 March of the year specified is as follows:

Period from date of Contract to 31 March 2013 :	\$100 000,00
Period of 1st April 2013 to Delivery date (see Section 4.2) :	\$50 000,00

7. Invoicing Instructions - Progress Claim

1. The Contractor must submit a claim for progress payment using form PWGSC-TPSGC 1111 (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>).

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 Task Authorization (TA) number, if applicable;

- (d) the description of the milestone invoiced, if applicable.
2. For the firm portion of the Work (Section 2 of the Statement of Work in Annex A) or for TAs subject to a Limitation of Expenditure or a Ceiling Price, each invoice must be supported by:
- (a) a list of all expenses;
 - (b) a copy of time sheets to support the time claimed;
 - (c) a copy of the invoices, receipts, vouchers for all direct expenses, travel and living expenses;
 - (d) a copy of the monthly progress report.
3. Goods and Services Tax (GST) or Harmonized Sales Tax (HST), as applicable, must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no GST/HST payable as it was claimed and payable under the previous claims for progress payments.
4. 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 certification.

ATTN : Mrs Suzanne Larrivée

Supply Support Clerk

Public Works and Government Services Canada

601-1550 Avenue D'Estimauville

Québec, Québec

G1J 0C7

E-mail address : suzanne.larrivee@tpsgc-pwgsc.gc.ca

The Contracting Authority will then forward the original and two (2) copies of the claim to the Technical Authority for certification and onward submission to the Payment Office for the remaining certification and payment action.

5. The Contractor must not submit claims until all work identified in the claim is completed.

8. Certifications

8.1 Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the entire contract period. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

8.2 SACC Manual Clauses

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

9. 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).

10. Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the supplemental general conditions 4002 (2010-08-16), Software Development or Modification Services;
- (c) the general conditions 2040 (2012-03-02), 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) Annex D, Security Requirements Check List;
- (h) Annex E, DND 626, Task Authorization Form;
- (i) the signed Task Authorizations, if applicable (including all of its annexes, if any);
- (j) the Contractor's bid dated _____ (insert date of bid)

11. Defence Contract

SACC Manual clause A9006C (2008-05-12), Defence Contract

12. Foreign Nationals (Canadian Contractor)

SACC Manual clause A2000C (2006-06-16), Foreign Nationals (Canadian Contractor)

13. Insurance

SACC Manual clause G1005C (2008-05-12), Insurance

14. 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.

15. Site Regulations

The Contractor must comply with all standing orders or other regulations, instructions and directives in force on the site where the Work is performed.

16. Identification Badge

SACC Manual clause A9065C (2006-06-16), Identification Badge

ANNEX A

STATEMENT OF WORK

1. General

1.1 Title: Work in atmospheric optics

1.2 Objectives

The objectives of this contract with task authorizations are as follows:

- 1) Carry out research work in the field of atmospheric optics relating to airborne and remote panchromatic, multispectral and hyperspectral imaging applications.
- 2) Provide tools to determine the atmosphere's effects on the formation of remote sensing images and tools for the correction or compensation of atmospheric effects in these images in order to derive as much information as possible from the images.

1.3 Context/background

DRDC Valcartier requires work in the processing and interpretation of hyperspectral, multispectral and panchromatic imaging acquired in wavelength bands ranging from far infrared to ultraviolet. The applications for which the images are acquired cover the field of airborne and remote sensing. In this project, we will be primarily interested in understanding the effects of the atmosphere and of the processing methods that can be used to mitigate the atmospheric effects on the images and on the subsequent image processing chain. The studies will therefore include the atmospheric effects per se as well as the effects of cascade processing and subsequent analyses applied to the images. The atmospheric effects described in the radiative transfer theory influence image formation and these effects will have to be analyzed and understood by the Contractor in order to be modelled, measured and mitigated by appropriate processing methods. Examples of these effects include absorption, diffusion, refraction, reflection and intrinsic or induced production of light by the targets or objects present in the sensors' field of view. The atmosphere is itself a complex environment that must be understood by the Contractor. The atmosphere is composed of various gases (natural and anthropogenic) and a wide range of solid and liquid particles which have effects on the data generated by the sensors. The microscopic and macroscopic motions of air masses must be considered, and thermal fluxes and profiles also have effects on data production. The sensors themselves have effects on data, either by spectrally or spatially distorting the data, or by introducing noise in the measurements. The Contractor must understand and master all these parameters in order to carry out the tasks assigned under this project. In addition, the Contractor must have sufficient expertise in electronics, optics, informatics, software engineering, radiative transfer, signal processing and image processing. More advanced knowledge in atmospheric correction of remote sensing images, atmospheric turbulence and meteorology would be extremely useful.

The main objective of this project is to conduct studies and experiments in atmospheric optics and in the processing of remote sensing images. The terminal objective of the project is to have tools for determining the effects of the atmosphere on the formation of remote sensing images and tools to correct or compensate for the atmospheric effects in these images in order to derive as much information as possible from the images.

1.4 Acronyms

DRDC: Defence Research and Development Canada

2. SCOPE OF THE WORK

This contract includes a firm portion and a task authorization portion.

2.1 Firm portion

The Contractor must carry out the three tasks described below.

Task A: Estimation of the level of performance required for the atmospheric correction of thermal hyperspectral images for airborne sensors

The objectives of the work requested in this task are as follows:

- 1) Determine a set of performance parameters required by atmospheric correction algorithms in the context of target detection for airborne remote sensing;
- 2) Construct a model that will provide the performance objectives to be attained for the parameters determined in objective 1) required by atmospheric correction algorithms in a specific detection context.

Atmospheric correction is an intermediate processing stage in the process leading to target detection. The performance objectives therefore depend on the objectives required by the detection algorithms and also on the quality of the data provided at the start of the atmospheric correction process, which is called the detection context.

The atmospheric correction of a hyperspectral image acquired in the far infrared wavelength range is the process by which the emissivity and temperature for each pixel of the image is estimated. The emissivities of various materials and targets of interest are recorded in spectral databases. The estimated emissivities in suspect pixels are compared with the content of the spectral database to determine their constituent materials. This process is called spectral identification, also known as target detection. The ability to identify a given material depends on several different factors which include but are not limited to:

- 1) Spectral specificity:
The spectral distance at which a given material is found from the other materials.
- 2) Spectral resolution of the sensor
The ability of a sensor to resolve the spectral characteristics of materials. In the case of gases, the required spectral resolution is often high. For solids or liquids, a lower spectral resolution may often be required. For certain types of processing such as atmospheric correction, a spectral resolution that makes it possible to easily see the characteristics of the gases that compose the atmosphere is required.
- 3) Sensor noise
Sensors introduce measurement noise in the signal. This noise may come from the measurement electronics in the sensor and also intrinsically from the particle

nature of light (shot noise). Noise reduction is often achieved by cooling the detectors (reduction in electronic noise) in the sensor or by increasing the signal level (relative reduction in shot noise). If the noise level is significantly higher than the level of the spectral characteristics of the materials, the possibilities of confusion between database components increases.

4) Quality of the sensor measurements

Hyperspectral sensors have a number of potential defects: optical defects such as smile (different location of the centroid of the same band depending on the position on the detector) or variations in the shape of the pixels' spectral response. The conditions in which the sensor operates can affect its behaviour. For example, a change in the temperature of the components can induce variations in the lag time or gain time applied to the raw measurements.

5) Quality of the processing carried out in order to determine emissivity

a. Signal conversion

In some systems, spectral measurement is indirect. For example, Fourier transform spectrometers measure an interferogram, which is actually the autocorrelation function of the signal entering the spectrometer. The spectrum is obtained by taking the Fourier transform of the interferogram. In some cases, apodization windows may be applied which modify the spectral response of each band which is then convolved with the response specific to the device.

b. Radiometric calibration

Radiometric calibration is the process by which the raw signal produced by the device is converted into units of radiance. It is usually performed by taking two or three measurements with calibration standards. Typically, two sources with high emissivities and a temperature contrast as well as a reflecting surface will be measured, making it possible to estimate the background radiation reflected by the high-emissivity surfaces. The surface emissivity and surface temperature of these calibration targets must be known. These measurements are tricky to perform and errors will introduce errors in the subsequent radiance readings of the sensor.

c. Atmospheric correction

Atmospheric correction is a process that can be used to obtain from airborne radiance measurements the emissivities and temperatures of the targets observed by the sensors. In this process, three optical parameters of the atmosphere are estimated: transmittance, path radiation and downward atmospheric radiation. If transmittance and path radiation are known, the radiation emanating from the ground can be determined. Using this parameter, the downward atmospheric radiation and an appropriate algorithm, the emissivity and temperature of the targets can then be determined. There are several processing methods that may be used; whether they are based on atmospheric modelling or the direct use of the image components, these methods introduce errors in the calculation of emissivities. These errors are increased by the imprecision introduced by prior processing of the data.

d. Specific processing algorithms (detection)

Several classes of processing algorithms exist and are focused on various possible uses of the images: target detection, mapping, etc. In this task, the focus will be on detection as such.

Description of the work

- 1) The Contractor must submit a work plan, for approval by the Technical Authority, that will describe how objectives 1 and 2 are to be attained as well as a risk assessment and an estimate of the time required to perform the work.
- 2) Following approval of the work plan, the Contractor will perform the work required to attain objectives 1 and 2.

Deliverables

- 1) Report containing the details of the analyses and modelling results in particular, the performance parameters, what they mean and the estimation method used;
- 2) The computer codes for estimating the performance required by the atmospheric correction algorithms, considering the detection context.

Deadline

The deliverables for this task must be delivered to DRDC within one year after the start of the project.

Task B: Studies on atmospheric correction under difficult conditions

Hyperspectral imaging is commonly used in ideal weather conditions, cloudless sky, during the day. In the LWIR wavelength range, objects emit intrinsic radiation which depends on their temperature and emissivity. Under operating conditions, sensors may be required under less than ideal conditions, i.e. with cloud cover, at night or at dawn/dusk.

Objective

- 1) Provide a tool for determining whether, under specific operating conditions, thermal hyperspectral imaging in the LWIR wavelength range is practical based on the user's intended application (military). The intended application is the detection of gas, liquid and solid targets of all kinds.

The specific operating conditions refer to the sensor, its attitude in space relative to the target observed (altitude and orientation) and its technical specifications (spectral response, noise, etc.). These operating conditions also refer to the weather conditions, atmospheric profile, cloud cover, etc. They also refer to the time of day: night-time, day-time, etc.

The results of the study should make it possible, using the weather and illumination conditions, the behaviour of the targets and the sensor prediction characteristics, as well as any other parameters that affect detection results, to determine whether or not an application is feasible.

The Contractor must submit a work plan describing how the objective of the task is to be attained, as well as a risk assessment and an estimate of the time required to perform this work.

Deliverables

- 1) Tool for predicting the probabilities of detection of targets as well as false alarms depending on operating conditions for a hyperspectral sensor of known characteristics;
- 2) Report containing the complete description of the methods developed;
- 3) Source codes and development codes produced in the course of carrying out the task.

Deadline

The deliverables for this task must be delivered to DRDC within one year after the start of the project.

Task C: Simulation of the polarization characteristics of the radiation emitted by a target in thermal hyperspectral imaging

Objectives:

- 1) Determine the scientific and technical work that must be carried out, the potential prospects for developing atmospheric correction tools and techniques involving the use of polarization data in airborne thermal hyperspectral imaging as well as any problems likely to be encountered.

Description:

DRDC Valcartier wishes to determine the work that must be carried out, the potential prospects for developing atmospheric correction tools and techniques involving the use of polarization data in airborne thermal hyperspectral imaging as well as any problems likely to be encountered in order to perform atmospheric correction of these images.

The Contractor must conduct a study that will address this requirement. It must consider the use of airborne sensors observing targets under various illumination conditions and under various look angles. To this end, the Contractor must adequately model the various components of the problem and integrate them in order to assess the impacts on target detection ability.

- 1) DRDC Valcartier wishes to determine the potential for using polarization data to aid in atmospheric correction in the thermal infrared band.
- 2) Whether and to what degree incorporating polarized signals in the atmospheric correction process would be problematic.
- 3) What are the preferred approaches and what are the areas where current knowledge is inadequate to perform atmospheric correction of hyperspectral images when the signal is polarized.
- 4) The technical approaches that are required in order to develop a tool that can be used to perform atmospheric correction of polarized hyperspectral images.

The Contractor must submit a work plan describing how the objective of the task is to be attained, as well as a risk assessment and an estimate of the time required to perform this work.

Deliverables

Report containing the answers to questions 1 to 4 in the task description.

Deadline

The deliverables for this task must be delivered to DRDC within six months of the start of the project.

2.2 Reports and other deliverables

Draft versions of the final deliverables must be provided to the Technical Authority for review at least four weeks before the deadline specified in the timetable. The Technical Authority will review the final draft version of these reports within 10 working days of receipt in order to provide comments to the Contractor for producing the final version of the reports in question. The draft versions of the documents must be provided in Microsoft® Word format on the project SharePoint site. The final version of the reports must be delivered within two weeks following receipt of the Technical Authority's comments resulting from the review of the reports. The soft and hard copies of all deliverables must be clearly identified. At the end of the contract, the Contractor shall provide 10 CD-ROM copies (in Microsoft® Word format and in Adobe® Acrobat® pdf format) and six hard copies, printed on both sides and bound, of all the reports.

2.3 Meetings

A general meeting will be held at the start of the contract. In addition, at the request of the Technical Authority and at least every two months, a meeting will be held to review the work progress. These meetings will take place for the entire duration of the work described above, will be held at DRDC Valcartier and notification will be provided at least one week in advance by the Technical Authority. At these meetings, the Contractor's project lead must present in writing:

- An up-to-date report of expenses;
- A statement of the work accomplished since the last meeting;
- Work progress relative to the overall objectives;
- A statement of any problems encountered; and
- Expectations for the next stage.

3.0. WORK PERFORMED ON AN "AS AND WHEN REQUESTED BASIS" THROUGH TASK AUTHORIZATIONS

3.1 Scope of the work

The Contractor must provide the services described in tasks 3A to 3I below. The tasks will be carried out on an "as and when requested basis" through task authorizations (TAs). A TA may refer to more than one task and the same task may be repeated several times during the term of the contract.

Task 3A: Theoretical studies of imaging-related atmospheric optics

For this type of task, the Contractor must provide scientific services in the modelling and description of atmospheric phenomena and their effects on image formation.

The Contractor may be asked to:

- Incorporate the effect of sensors in image production using sensor models
- Consider multiple effects such as absorption, diffusion and refraction on the light in the optical bands extending from the far infrared to ultraviolet wavelengths.
- Model the image processing effects of one component of a processing chain on the other components of the chain.

The applications concerned are airborne and remote hyperspectral, multispectral and panchromatic imaging. One example would be the processing effects of atmospheric correction on target detection algorithms.

Deliverables

Reports or sections of reports dealing with work relevant to work performed in the context of other tasks carried out under this contract, the data generated and the various computer codes produced.

The reports must be submitted in soft and hard copy and must include in relation to the theoretical studies:

- a. The analyses;
- b. The models;
- c. The simulation results;
- d. Recommendations concerning further studies.

The timeframe for delivery will be specified in the task authorization and will vary depending on the task effort and priority level.

Task 3B: Processing and analysis of imaging data relating to atmospheric optics

For this type of task, DRDC Valcartier will provide the Contractor with data sets which may include raw and calibrated images as well as ground-truth data. The images may come from hyperspectral, multispectral or panchromatic sensors. The sensors may be airborne or remote.

The Contractor must process the data in accordance with the specifications issued by the DRDC Valcartier Technical Authority.

The possible objectives of these tasks will be to:

- Understand the effects of the atmosphere on image formation;
- Correct the atmospheric effects;
- Evaluate the effects of various image processing methods on the desired results of the image processing applications and processes.

The Contractor will be responsible for the design, development and implementation of the processing chain, application to the images and analysis of the results.

Deliverables

Reports or sections of reports dealing with work relevant to work performed in the context of other tasks carried out under this contract, the data generated and the various computer codes produced.

- a) Provide details about the image processing performed, including:
 - a. Design and development;
 - b. Implementation;
 - c. Processing results;
 - d. Conclusions concerning the results;
 - e. Recommendations concerning suggested approaches.
- b) All the data produced during the work.

The timeframe for delivery will be specified in the task authorization and will vary depending on the task effort and priority level.

Task 3C: Development, implementation and testing of image processing algorithms

Some image processing methods can be used only under a certain set of conditions. The type and operating mode of the sensors and the applications for which the images are acquired affect the choice of image processing methods. For certain applications, there are no suitable methods available. Sometimes, certain methods could theoretically be used, but may need to be adapted or simply tested.

The Contractor may therefore be asked to:
Develop new methods and implement and test them.
If necessary, adapt existing methods and implement and test them.

The algorithms required will apply to applications on airborne or remote imager sensors. The images from these sensors may be hyperspectral, multispectral or panchromatic.

Deliverables

Reports or sections of reports dealing with work relevant to work performed in the context of other tasks carried out under this contract, the data generated and the various computer codes produced.

- a) The details on the development of the processing methods;
- b) The details on the implementation of the processing methods;
- c) The details on the tests applied to the algorithms and images;
- d) The detailed results of the analyses, tests and implementations;
- e) The computer codes produced during the work;
- f) The intermediate and final processing data;
- g) Any other deliverable likely to be produced, which will be detailed in the task description.

The timeframe for delivery will be specified in the task authorization and will vary depending on the task effort and priority level.

Task 3D: Evaluation, validation and comparison of image processing algorithms

Before deploying or selecting an algorithm developed to perform a given task, this algorithm must be evaluated and validated. Its performance must also be compared to similar algorithms, if they exist.

The Contractor may therefore be asked to:

- Validate the algorithms: validation serves to verify whether the algorithm effectively performs the task for which it was designed;
- Evaluate the algorithms: evaluation is the process whereby the algorithm's performance is estimated and compared where applicable to the algorithm's specifications;
- Compare algorithms: comparison is the process whereby the performance of algorithms with similar functions is compared based on the objectives for which they were designed.

These processes will be carried out by the Contractor for algorithms that will be provided to the Contractor by DRDC Valcartier along with data sets.

Deliverables

Reports or sections of reports dealing with work relevant to work performed in the context of other tasks carried out under this contract, the data generated and the various computer codes produced.

- a) The details on the algorithm validation operations
 - a. Development of the tests;
 - b. The results;
 - c. Recommendations concerning the use of the algorithms.
- b) The details on the algorithm evaluation
 - a. Development of performance parameters to be met;
 - b. Details on the tests used to verify attainment of these performance parameters;
 - c. The test results;
 - d. Recommendations concerning the use of the algorithms.
- c) The details on the algorithm comparisons
 - a. The development of comparison methods;
 - b. The details on the results;
 - c. Recommendations concerning the use of the algorithms.

The timeframe for delivery will be specified in the task authorization and will vary depending on the task effort and priority level.

Task 3E: Design and development of experiments in atmospheric optics

The models and algorithms used to describe or correct the atmospheric phenomena that occur in image formation must be studied and compared with the aid of data. The Contractor must provide the requisite expertise in experimental design for the purpose of developing experiments in order to test and verify the models and measure the effectiveness of the algorithms developed.

The Contractor may therefore be asked to:

- Analyze the needs and requirements to conduct the experimental verification/testing;
- Develop experimental setups;
- Provide the specifications for the systems or devices that will have to be developed in order to meet the needs and requirements.

Deliverables

Reports or sections of reports dealing with work relevant to work performed in the context of other tasks carried out under this contract, the data generated and the various computer codes produced.

- a) The details on the needs analyses and compilation of needs;
- b) The plans for the development of experiments and recommendations concerning the implementation and conduct of the experiments;
- c) All the specifications of the systems or devices that will have to be developed in order to meet the experimental needs and requirements.

The timeframe for delivery will be specified in the task authorization and will vary depending on the task effort and priority level.

Task 3F: Conducting experimental work in atmospheric optics

In the context of these tasks, the Contractor must travel on site to carry out the experiments in atmospheric optics designed and developed by the Contractor or by

DRDC. The Contractor must be able to use the measuring devices for the acquisition of ground-truth data such as the MRScan-300. These devices may include spectrometers, camera, locators, radiometers, etc. The Contractor must calibrate these devices when necessary and obtain and compile the measurements taken by them.

Deliverables

All the raw and processed data on soft and hard copy, depending on the acquisition method.

- a) The details on the experiments conducted;
- b) The report on the progress of the experiments;
- c) The raw data broken down by experiment;
- d) The processed data broken down by experiment.

The timeframe for delivery will be specified in the task authorization.

Task 3G: Processing and analysis of ground data acquired during experiments

Large volumes of ground data are acquired during the experiments. These data must be recorded, categorized, analyzed and interpreted. These data are required in order to make comparisons with the processing results of data acquired by airborne or remote sensors. The Contractor must process the data provided to it in accordance with the specifications and requirements issued by the DRDC Valcartier Technical Authority.

Examples of specifications include, but are not limited to, the following:

- Using spectral measurements, estimate the emissivity or reluctance of targets and materials found on the experimental sites;
- Estimate, from meteorological measurements, the intensity of atmospheric turbulence;
- Compile measurements in order to characterize the targets and the experimental sites, location, orientation, organization of the data in a logical series for subsequent use.

Deliverables

Hard or soft copy of the report including the results of the processing and analyses of ground-truth data. The results of the analyses and of the relevance of the experiments may also be included in the deliverable. The processed data will have to be copied onto an electronic medium in a format suitable for use by DRDC personnel.

- a) Classification of the data provided, by the experiments conducted;
- b) Analysis of the data provided;
- c) Compilation of the experimental results and comparison with the theoretically predicted results;
- d) Recommendations for improving processing or experimental methods.

The timeframe for delivery will be specified in the task authorization and will vary depending on the task effort and priority level.

Task 3H: Development and maintenance of measuring systems for the acquisition of ground-truth data

In several cases, the measuring systems and devices available at DRDC Valcartier or commercially available must be adapted for specific uses required during the experiments.

The Contractor may be asked to perform tasks which may include, without being limited to, the following:

In accordance with the required specifications, develop and implement software for the networking and automated measuring by existing devices, such as radiometers and spectrometers.

DRDC Valcartier has a ground-truth data acquisition system called MRScan-300. The Contractor must become proficient in using this system in the context of these tasks, if it does not already possess such expertise.

Deliverables: All the analysis documents and software, source codes, scripts and software compiled and operating on the field computer equipment owned by DRDC Valcartier and specified to the Contractor.

- a) The experimental equipment designed and developed;
- b) The plans and specifications;
- c) The tests and measurements performed on the equipment to verify operation.

The timeframe for delivery will be specified in the task authorization and will vary depending on the task effort and priority level.

Task 3I: Participate with the Technical Authority in international exchange programs

This work may include, without being limited to:

- i. Producing presentations related to the field of atmospheric optics concerning panchromatic, multispectral and hyperspectral imaging applications and presenting them at exchanges which DRDC organizes with international organizations in countries such as the US and France;
- ii. Presenting the work performed under the contract during meetings to national or international working and discussion groups. The work includes preparing presentations in English (in PowerPoint format) summarizing the work accomplished and participation in workshops, specialized working groups and symposia.

Deliverables: All the documents produced in order to perform the task (presentations or reports).

The timeframe for delivery will be specified in the task authorization and will vary depending on the task effort and priority level.

3.3 Reports and other deliverables

All the documents and reports to be delivered will be specified by the Technical Authority in each task authorization. The details will include language, format, number of copies and other terms and conditions that may prove relevant to the deliverables for each task authorization. N.B.: The services/materials must be delivered to the DRDC Valcartier supply section.

3.4 Meetings

Meetings will have to be held periodically during the performance of each task in order to verify the progress of the work comprising each task. Meetings will be held at the start and end of the work performed for a given task. During the process of carrying out a task, meetings will be held monthly. It is not required to separate meetings by task, and every effort should be made to ensure that if two or more tasks are carried out simultaneously, the meetings will be held at the same time. The agendas of these meetings must clearly distinguish the items relating to each task. The Contractor will be responsible for drafting the minutes of these meetings. The meetings may be held in person, by teleconference or by videoconference. A meeting in person will be held on commencement of the first task and thereafter at least once a year.

3.5 Government-supplied materials

The materials supplied by the government will be described in the context of the task authorizations if applicable.

3.6 Government-furnished equipment

The equipment supplied by the government will be described in the context of the task authorizations if applicable.

3.7 Site of the work

The work performed in this project may be classified depending on the task requested. In these cases, if the Contractor does not have facilities in which it can carry out the requested work, the Contractor will be required to perform the work on site at DRDC Valcartier. Certain tasks will require that the Contractor work on equipment owned by DRDC Valcartier. In such cases, the Contractor will be required to work on site at DRDC Valcartier.

4. PUBLICATIONS

Any manuscript for publication in scientific journals or other publications, as well as any abstract of an oral presentation or any other form of public disclosure must first be submitted to the Technical Authority for approval at least 90 days in advance of the planned presentation or publication. An explicit reference to federal government funding must be mentioned in a statement indicating that the authors are solely responsible for the content. The Technical Authority will provide a written objection if any specific elements (e.g., audience) are deemed to be incompatible with the best interests of the federal government.

DELIVERABLES

In addition to the disclosure obligation under Section 28 of the general conditions 2040, any Foreground Information must be fully disclosed and documented by the Contractor in the technical reports delivered by the Contractor to the Technical Authority under this Contract.

ANNEX A**BASIS OF PAYMENT**

(to be completed at Contract award)
(Bidders must submit their financial bid in accordance with the Financial Bid Presentation Sheet at Attachment 1)

Part A - For the firm portion of the Work (Section 2 of the Statement of Work in Annex A) :

1. **LABOUR:** at firm all-inclusive rates, GST/HST extra, in accordance with the following:

Proposed Resources	Firm Hourly Rate Proposed Contract Period	
	Date of Award to 31 March 2013	1 April 2013 to Delivery Date
Task A: Estimation of the level of performance required for the atmospheric correction of thermal hyperspectral images for airborne sensors 1. _____ 2. _____ 3. _____	\$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____
Task B: Studies on atmospheric correction under difficult conditions 1. _____ 2. _____ 3. _____	\$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____
Task C: Simulation of the polarization characteristics of the radiation emitted by a target in thermal hyperspectral imaging 1. _____ 2. _____ 3. _____	\$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____

Est.: \$ _____

2. **EQUIPMENT:** at laid down cost without markup

Est.: \$ _____

3. **RENTALS:** at actual cost without markup

Est.: \$ _____

4. **MATERIALS AND SUPPLIES:** at laid down cost without markup

Est.: \$ _____

5. TRAVEL AND LIVING EXPENSES:**Est.: \$ _____**

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the Treasury Board Travel Directive (http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/TBM_113/td-dv_e.asp), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees" are applicable.

All travel must have prior authorization of the Technical Authority. All payments are subject to government audit.

6. SUBCONTRACTS: at actual cost without markup**Est.: \$ _____****7. OTHER DIRECT CHARGES:** at actual cost without markup**Est.: \$ _____**

ESTIMATED COST TO A LIMITATION OF EXPENDITURE - \$ _____
FIRM PORTION OF THE WORK (GST/HST extra)

With the exception of the firm rate(s) and price(s), the amounts shown in the various items specified above are estimates only. Minor changes to these estimates will be accepted for billing purposes as the Work proceeds, provided that these changes have the prior approval of the Technical Authority, and provided that the estimated cost does not exceed the aforementioned Limitation of Expenditure.

Part B - Portion of the Work to be performed on an "as and when requested basis" using a Task Authorization (Section 3 of the Statement of Work in Annex A) :

1. LABOUR :

At the following firm all inclusive rates (GST / HST not included, including profit and overhead, including the travel and living fees for the work performed at DRDC Valcartier facility and the work performed in the Quebec City area) as follows :

Proposed Resources	Firm Hourly Rate Proposed Contract Period			
	Date of Award to 31 March 2013	From 2013-04-01 to 2014-03-31	From 2014-04-01 to 2015-03-31	From 2015-04-01 to 2016-03-31
Project Manager :				
1. _____	\$ _____	\$ _____	\$ _____	\$ _____
2. _____	\$ _____	\$ _____	\$ _____	\$ _____

W7701-125216/A

qcl018

W7701-12-5216

QCL-1-34731

Task 3A: Theoretical studies of imaging-related atmospheric optics 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____
Task 3B: Processing and analysis of imaging data relating to atmospheric optics 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____
Task 3C: "Development, implementation and testing of image processing algorithms" and Task 3D: "Evaluation, validation and comparison of image processing algorithms" 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____
Task 3E: "Design and development of experiments in atmospheric optics" and Task 3F: "Conducting experimental work in atmospheric optics" 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____
Task 3G: Processing and analysis of ground data acquired during experiments 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____

Task 3H: Development and maintenance of measuring systems for the acquisition of ground-truth data				
1. _____	\$ _____	\$ _____	\$ _____	\$ _____
2. _____	\$ _____	\$ _____	\$ _____	\$ _____
3. _____	\$ _____	\$ _____	\$ _____	\$ _____
4. _____	\$ _____	\$ _____	\$ _____	\$ _____
Task 3I: Participate with the Technical Authority in international exchange programs				
1. _____	\$ _____	\$ _____	\$ _____	\$ _____
2. _____	\$ _____	\$ _____	\$ _____	\$ _____
3. _____	\$ _____	\$ _____	\$ _____	\$ _____
4. _____	\$ _____	\$ _____	\$ _____	\$ _____

2. **EQUIPMENT:** at laid down cost without markup

3. **RENTALS:** at actual cost without markup

4. **MATERIALS AND SUPPLIES:** at laid down cost without markup

5. **TRAVEL AND LIVING EXPENSES:**

(a) Canada will not accept any travel and living expenses incurred by the Contractor in the performance of the Work, for:

(i) services provided within the Québec City Region (including Defence Research and Development Canada, Valcartier facility), and

(ii) any travel between the Contractor's place of business and the Québec City Region (including Defence Research and Development Canada, Valcartier facility).

(b) For services to be provided outside the Québec City Region, the Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the Treasury Board Travel Directive (http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/TBM_113/td-dv_e.asp), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

(c) Canada will not accept any travel and living expenses incurred by the Contractor as a consequence of any relocation of personnel required to satisfy the terms of this Contract.

(d) All travel must have prior authorization of the Technical Authority. All payments are subject to government audit.

6. **SUBCONTRACTS:** at actual cost without markup

Solicitation No. - N° de l'invitation

W7701-125216/A

Amd. No. - N° de la modif.

File No. - N° du dossier

QCL-1-34731

Buyer ID - Id de l'acheteur

qcl018

Client Ref. No. - N° de réf. du client

W7701-12-5216

CCC No./N° CCC - FMS No/ N° VME

7. OTHER DIRECT CHARGES: at actual cost without markup

**Estimated Cost to a Limitation of Expenditure-
Portion of the Work to be performed on an "as and
when requested basis" using a Task Authorization :**

**\$750,000.00
(GST/HST extra)**

ANNEX C

CONTRACTOR DISCLOSURE OF FOREGROUND INFORMATION

Please see reference applicable in your contract to look into **Article 1 - Interpretation of 2040 General Conditions** to obtain the complete definition of the term Foreground Information and thus to help you to determine the information which must be revealed. <http://sacc.pwgsc.gc.ca/sacc/query-e.jsp>.

The Contractor shall respond to the following questions:

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)

Solicitation No. - N° de l'invitation

W7701-125216/A

Amd. No. - N° de la modif.

File No. - N° du dossier

QCL-1-34731

Buyer ID - Id de l'acheteur

qcl018

Client Ref. No. - N° de réf. du client

W7701-12-5216

CCC No./N° CCC - FMS No/ N° VME

ANNEX D

SECURITY REQUIREMENTS CHECK LIST

The Security Requirements Check List (SRCL) attached is to be inserted at this point and forms part of this document

Solicitation No. - N° de l'invitation

W7701-125216/A

Amd. No. - N° de la modif.

File No. - N° du dossier

QCL-1-34731

Buyer ID - Id de l'acheteur

qcl018

Client Ref. No. - N° de réf. du client

W7701-12-5216

CCC No./N° CCC - FMS No/ N° VME

ANNEX E

DND 626, TASK AUTHORIZATION FORM

The DND 626, Task Authorization Form, attached is to be inserted at this point and forms part of this document

ATTACHMENT 1

FINANCIAL BID PRESENTATION SHEET

Part A - For the firm portion of the Work (Section 2 of the Statement of Work in Annex A) :

1. **LABOUR:** LABOUR: at firm all-inclusive rates, GST/HST extra, F.O.B. Destination (for goods), in accordance with the following:

BIDDERS ARE REQUESTED TO QUOTE ONE RATE PER PROPOSED RESOURCE, PER PERIOD.

If the ressource works for a subcontractor, bidders must also provide the name of the subcontractor.

Proposed Resources	Firm Hourly Rate Proposed Contract Period				Extended Total per Resource
	Date of Award to 31 March 2013	Total Est. Hours	1 April 2013to Delivery Date	Total Est. Hours	
Task A: Estimation of the level of performance required for the atmospheric correction of thermal hyperspectral images for airborne sensors					
1	\$		\$		\$
2	\$		\$		\$
3	\$		\$		\$
Task B: Studies on atmospheric correction under difficult conditions					
1	\$		\$		\$
2	\$		\$		\$
3	\$		\$		\$
Task C: Simulation of the polarization characteristics of the radiation emitted by a target in thermal hyperspectral imaging					
1	\$		\$		\$
2	\$		\$		\$
3	\$		\$		\$

TOTAL ESTIMATED LABOUR: \$_____

Items 2. through 7. shall be completed if the Bidder's rates in 1. above do not include the following:

2. **EQUIPMENT:** at laid down cost without markup

Description

Price

TOTAL ESTIMATED EQUIPMENT: \$ _____

3. RENTALS: at actual cost without markup

Description

Price

TOTAL ESTIMATED RENTALS: \$ _____

4. MATERIALS AND SUPPLIES: at laid down cost without markup

Description

Price

TOTAL ESTIMATED MATERIALS AND SUPPLIES: \$ _____

5. SUBCONTRACTS: at actual cost without markup

Support for the proposed subcontractor's price is required in the same details as that required for the Bidder's price. The estimated price for subcontracts should include all direct charges and travel & living expenses which would be to the account of the subcontractor.

TOTAL ESTIMATED SUBCONTRACTS: \$ _____

6. TRAVEL & LIVING: at actual cost without markup but not to exceed the limits of the Treasury Board Travel Directive. With respect to the TB Travel Directive, only the meal, private vehicle and incidental allowances specified in Appendices B, C and D of the TB Travel Directive <http://www.tbs-sct.gc.ca/hr-rh/gtla-vgcl/> and the other provisions of the directive referring to "travellers" rather than those referring to "employees", are applicable. *Details are to be provided on a separate sheet.*

TOTAL ESTIMATED TRAVEL & LIVING: \$ _____

7. OTHER DIRECT CHARGES: at actual cost without markup

TOTAL ESTIMATED OTHER DIRECT CHARGES: \$ _____

**ESTIMATED COST TO A LIMITATION OF
EXPENDITURE - FIRM PORTION OF THE WORK :** \$ _____ (GST/HST extra)

Part B - Portion of the Work to be performed on an "as and when requested basis" using a Task Authorization (Section 3 of the Statement of Work in Annex A) :

1. **LABOUR :** At the following firm all inclusive rates (GST / HST not included, including profit and overhead, including the travel and living fees for the work performed at DRDC Valcartier facility and the work performed in the Quebec City area) as follows :

BIDDERS ARE REQUESTED TO QUOTE ONE RATE PER PROPOSED RESOURCE, PER PERIOD.

If the resource works for a subcontractor, bidders must also provide the name of the subcontractor.

Proposed Resources	Firm Hourly Rate Proposed Contract Period			
	Date of Award to 31 March 2013	From 2013-04-01 to 2014-03-31	From 2014-04-01 to 2015-03-31	From 2015-04-01 to 2016-03-31
Project Manager : 1. _____ 2. _____	\$ _____ \$ _____	\$ _____ \$ _____	\$ _____ \$ _____	\$ _____ \$ _____
Task 3A: Theoretical studies of imaging-related atmospheric optics 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____
Task 3B: Processing and analysis of imaging data relating to atmospheric optics 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____

Task 3C: "Development, implementation and testing of image processing algorithms" and Task 3D: "Evaluation, validation and comparison of image processing algorithms" 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____
Task 3E: "Design and development of experiments in atmospheric optics" and Task 3F: "Conducting experimental work in atmospheric optics" 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____
Task 3G: Processing and analysis of ground data acquired during experiments 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____
Task 3H: Development and maintenance of measuring systems for the acquisition of ground-truth data 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____
Task 3I: Participate with the Technical Authority in international exchange programs 1. _____ 2. _____ 3. _____ 4. _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____	\$ _____ \$ _____ \$ _____ \$ _____

2. **EQUIPMENT:** at laid down cost without markup

3. **RENTALS:** at actual cost without markup

4. MATERIALS AND SUPPLIES: at laid down cost without markup**5. TRAVEL AND LIVING EXPENSES:**

- (a) Canada will not accept any travel and living expenses incurred by the Contractor in the performance of the Work, for:
- (i) services provided within the Québec City Region (including Defence Research and Development Canada, Valcartier facility), and
 - (ii) any travel between the Contractor's place of business and the Québec City Region (including Defence Research and Development Canada, Valcartier facility).
- (b) For services to be provided outside the Québec City Region, the Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the Treasury Board Travel Directive (http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/TBM_113/td-dv_e.asp), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".
- (c) Canada will not accept any travel and living expenses incurred by the Contractor as a consequence of any relocation of personnel required to satisfy the terms of this Contract.
- (d) All travel must have prior authorization of the Technical Authority. All payments are subject to government audit.

6. SUBCONTRACTS: at actual cost without markup**7. OTHER DIRECT CHARGES:** at actual cost without markup

**Estimated Cost to a Limitation of Expenditure-
Portion of the Work to be performed on an "as and
when requested basis" using a Task Authorization :**

**\$750,000.00
(GST/HST extra)**

ATTACHMENT 2**MANDATORY AND POINT RATED TECHNICAL CRITERIA****1. Mandatory Technical Criteria**

At bid closing time, the Bidder must comply with the following mandatory technical criteria and provide the necessary documentation to support compliance. Any bid which fails to meet the following mandatory technical criteria will be declared non-responsive. Each criterion should be addressed separately.

Note : Listing experience without providing any supporting data to describe where and how such experience was obtained will result in the experience not being included for evaluation

	MANDATORY TECHNICAL CRITERIA
1	The bidder must propose at least one project manager.
2	The Bidder must propose the number of resources indicated in Criterion 2 for each of the 12 tasks. The same resource can be proposed for more than one tasks.

2. Point Rated Technical Criteria

Section 1 criteria will be scored as follows:

Each item evaluated of the section 1 criteria will be scored out of 10 points, according to the table in the "Proposal Evaluation Guidelines" attached at the end of this appendix, and then weighted as a function of the maximum scores indicated in the table below.

Section 2, 3 and 4 criteria will be scored according to the description accompanying each of the criteria listed in the table below. Submissions must obtain the minimum number of points required as indicated in the table below.

N.B.: Listing experience without providing any supporting data to describe where and how such experience was obtained will result in the experience not being included for evaluation.

EVALUATION CRITERIA	MAX.	MIN.
1. TECHNICAL PROPOSAL	100	60
1.1 Demonstration of the understanding of the context, scope and objectives of the firm portion of the work (tasks A to C of the Statement of Work) Demonstrated understanding of the context, scope and objectives should be complete and not limited to the description in the Statement of Work and Work Plan. The bidder should use its own words to provide a convincing demonstration of its clear understanding of the context, scope and objectives of the firm portion of the work.	25	15
1.2 Demonstration of the understanding of the context, scope and objectives of the tasks carried out on an "as and when requested basis" through task authorizations (tasks 3a to 3i of the Statement of Work) Demonstrated understanding of the context, scope and objectives should be complete and not limited to the description in the Statement of Work and Work Plan. The bidder should use its own words to provide a demonstration of its clear understanding of the context, scope and objectives of the tasks carried out on an "as and when requested basis" through task authorizations.	25	15
1.3 Strategy and proposed methodology for the firm portion of the work (tasks A to C of the Statement of Work) The bidder should clearly present its proposed technical approach and methodology for the firm part of the work. The bidder should also submit a work plan. The technical approach, methodology and work plan should be coherent, relevant to the implementation of the project, complete and realistic. Innovation will also be evaluated. The proposal should include a work plan, a risk assessment and an estimate of the time required to perform the work.	25	15

<p>1.4 Strategy and proposed methodology for the tasks carried out on "an as and when requested basis" through task authorizations (tasks 3a to 3i of the Statement of Work)</p> <p>The bidder should clearly present its proposed technical approach and methodology for the tasks carried out on "an as and when requested basis" through task authorizations. The technical approach and the methodology should be supported by providing a list of similar projects completed by the bidder. The technical approach and methodology should also be coherent, relevant to the implementation of the project, complete and realistic.</p>	25	15
--	----	----

EVALUATION CRITERIA	MAX.	MIN.
<p>2. QUALIFICATIONS OF THE PROPOSED RESOURCES (EDUCATION AND EXPERIENCE)</p>	257	106
<p>For each field of activity, the bidder should indicate the names of the resources proposed, and their résumés should be included with the proposal. The same resource may be proposed for more than one field of activity.</p> <p>The contractor must propose a minimum number of resources for each task. The minimum number of resources required is indicated for each task. For each task, the proposed resource will be evaluated individually according to the points allocation as described below. The total point score for each task will be calculated by taking the sum of the individual scores divided by the number of resources proposed. The training and experience of the individuals will be evaluated. Minimum levels of training will be required for certain tasks.</p> <p><u>Points allocation for each criterion listed in section 2</u></p> <p>0 points: Resources with 0 to 6 months' experience 1 point: Resources with 7 to 12 months' experience 3 points: Resources with 13 to 24 months' experience 4 points: Resources with more than 24 months' experience.</p> <p>0 points: Resources with a Bachelor's degree in a relevant discipline 1 point: Resources with a Master's degree in a relevant discipline 3 points: Resources with a PhD in a relevant discipline</p> <p>For each task, the points awarded for the training of the two or three best resources will be totalled, based on the minimum number of resources required for the task.</p> <p>The number of months of experience corresponds to the number of months that the proposed resource has worked on projects relevant to the rated criteria. Please note that concurrent experience will be considered only once.</p> <p>The bidder should describe each project as follows:</p> <ul style="list-style-type: none"> - title 		

<ul style="list-style-type: none"> - client name, including the name and telephone number of a client contact person who can confirm the information; - start and end dates; - brief description; - relevant involvement and responsibility of the proposed resources within the project - number of months that the proposed resources worked on the project. 		
<p>Experience and training relating to task A: Estimate of the level of performance required for atmospheric correction of thermal hyperspectral images for airborne sensors</p> <p>Resources required for task A: A minimum of two resources must be proposed for this task.</p> <p>Criteria for task A</p> <p>Experience Atmospheric correction is an intermediate stage in the processing of hyperspectral images. It is useful in permitting the use of images in a context of detection and identification of materials comprising the observed surface. The performance of this processing will depend on the quality of the data. Data quality depends on sensor capabilities, atmospheric conditions and the attitude of the sensors in which the data are acquired. The level of performance required depends on the detection capability.</p> <ol style="list-style-type: none"> 1. Experience in the study of the propagation of infrared light between 8 and 12 microns in the atmosphere 2. Experience in the use of Modtran 3. Experience in the atmospheric correction of hyperspectral images in the thermal infrared band 4. Experience in the processing of hyperspectral images 5. Experience in spectral detection in imaging 6. Experience in estimating the performance of detection systems <p>Training A Master's degree is the minimum level of training required by the resources assigned to carry out this task. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field of study that would be useful in carrying out the task.</p>	<p>24</p> <p>6</p>	<p>12</p> <p>2</p>

<p>Experience and training relating to task B: Studies in atmospheric correction under difficult conditions</p> <p>Resources required for task B: A minimum of two resources must be proposed for this task.</p> <p>Criteria for task B</p> <p>Experience Difficult atmospheric conditions are defined as conditions in which radiation is variable in space and difficult to estimate. These conditions occur under mixed skies, i.e. a mix of clear sky and cloud or during the night.</p> <ol style="list-style-type: none"> 1. Experience in the study of the propagation of infrared light between 8 and 12 microns in the atmosphere 2. Experience in the use of Modtran 3. Experience in the atmospheric correction of hyperspectral images in the thermal infrared band 4. Experience in the processing of hyperspectral images <p>Training A Master's degree is the minimum level of training required by the resources assigned to carry out this task. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field that would be useful in carrying out the task.</p>	<p>16</p> <p>6</p>	<p>8</p> <p>2</p>
---	--------------------	-------------------

<p>Experience and training relating to task C: Simulation of the polarization characteristics of the radiation emitted by a target in thermal hyperspectral imaging</p> <p>Resources required for task C: A minimum of two resources must be proposed for this task.</p> <p>Criteria for task C</p> <p>Experience The materials comprising the surfaces imaged by a sensor tend to reflect incident light in different proportions depending on the polarization; in so doing, they modify the state of polarization of the light. In the thermal infrared band, the surfaces themselves produce a high proportion of the radiation. This radiation will also be polarized depending on the nature and roughness of the surface observed. In order to effectively carry out the task of assessing the impacts of the use of polarization data in atmospheric correction, the resources assigned to this task must have the following experience:</p> <ol style="list-style-type: none"> 1. Experience in the study of the propagation of infrared light between 8 and 12 microns in the atmosphere 2. Experience in the use of Modtran 3. Experience in the atmospheric correction of hyperspectral images in the thermal infrared band 4. Experience in data processing involving polarization 5. Experience in the processing of hyperspectral images <p>Training A Master's degree is the minimum level of training required by the resources assigned to carry out this task. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field that would be useful in carrying out the task.</p>	20	10
	6	2

<p>Experience and training relating to task 3a: Theoretical studies of imaging-related atmospheric optics</p> <p>Resources required for task 3a: A minimum of three resources, engineers or scientists, must be proposed for this task.</p> <p>Criteria for task 3a</p> <p>Experience</p> <ol style="list-style-type: none"> 1. Experience in the study of the propagation of light in the atmosphere 2. Experience in hyperspectral imaging 3. Experience in multispectral imaging 4. Experience in panchromatic imaging 5. Experience in detection and identification in hyperspectral imaging 6. Experience in signal processing or image processing 7. Experience in the effect of atmospheric turbulence on imaging 8. Experience in infrared remote sensing 9. Experience in remote sensing in the wavelength bands between 0.4 and 2.5 microns <p>Training</p> <p>A Master's degree is the minimum level of training required by the resources assigned to carry out this task. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field that would be useful in carrying out the task.</p>	<p>36</p> <p>9</p>	<p>18</p> <p>3</p>
<p>Experience and training relating to task 3b: Processing and analysis of imaging data related to atmospheric optics</p> <p>Resources required for task 3b: A minimum of three resources, engineers or scientists, must be proposed for this task.</p> <p>Criteria for task 3b</p> <p>Experience</p> <ol style="list-style-type: none"> 1. Experience in processing hyperspectral, multispectral and panchromatic images 2. Experience in signal processing or image processing 3. Experience in the effect of atmospheric turbulence on imaging 4. Experience in infrared remote sensing 5. Experience in remote sensing in the wavelength bands between 0.4 and 2.5 microns <p>Training</p> <p>A Master's degree is the minimum level of training required by the resources assigned to carry out this task. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field that would be useful in carrying out the task.</p>	<p>20</p> <p>9</p>	<p>10</p> <p>3</p>

<p>Experience and training relating to tasks 3c and 3d: Development, implementation and testing of image processing algorithms; Evaluation, validation and comparison of image processing algorithms</p> <p>Resources required for tasks 3c and 3d: A minimum of four resources, engineers or scientists, must be proposed for these tasks.</p> <p>Criteria for tasks 3c and 3d</p> <p>Experience</p> <ol style="list-style-type: none"> 1. Experience in the development of image processing algorithms 2. Experience in the implementation of algorithms in one of the following programming environments: ENVI / IDL, Matlab, C/C++ or C# 3. Experience in computer tests 4. Experience in thermal hyperspectral imaging 5. Experience in hyperspectral imaging in the bands between 0.4 and 2.5 microns <p>Training</p> <p>A Bachelor's degree is the minimum level of training required by the resources assigned to carry out this task. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field that would be useful in carrying out the task.</p>	20	10
	9	0

<p>Experience and training relating to tasks 3e and 3f: Design and development of experiments in atmospheric optics; conducting experimental work in atmospheric optics</p>		
<p>Resources required for tasks 3e and 3f: A minimum of three resources must be proposed for these tasks.</p>		
<p>Criteria for tasks 3e and 3f</p>		
<p>Experience</p>	20	10
<ol style="list-style-type: none"> 1. Experience in designing scientific experiments 2. Field experience in remote sensing 3. Experience in the study of the propagation of light in wavelength ranges from ultraviolet to far infrared in the atmosphere 4. Experience in the use of at least three of the following measuring devices: <ol style="list-style-type: none"> a. FTIR spectrometers b. Dispersive spectrometers c. Infrared cameras d. High-speed cameras e. Radiometers f. GPS locators 5. Experience with the MRscan-300. 		
<p>Training</p>		
<p>A Bachelor's degree is the minimum level of training required by the resources assigned to carry out these tasks. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field that would be useful in carrying out the task. A PhD is not required, but a Master's degree in one of the specified fields would be an asset.</p>	3	0

<p>Experience and training relating to task 3g: Processing and analysis of the ground data acquired during experiments</p> <p>Resources required for task 3g: A minimum of three resources must be proposed for this task.</p> <p>Criteria for task 3g</p> <p>Experience</p> <ol style="list-style-type: none"> Experience in the processing of spectrometric data <ol style="list-style-type: none"> From FTIR spectrometers From dispersive spectrometers Experience in image processing <ol style="list-style-type: none"> Hyperspectral images Multispectral images Panchromatic image <p>Training</p> <p>A Bachelor's degree is the minimum level of training required by the resources assigned to carry out this task. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field that would be useful in carrying out the task.</p>	8	4
<p>Experience and training relating to task 3h: Development and maintenance of a measuring system for the acquisition of ground-truth data</p> <p>Resources required for task 3h: A minimum of three resources must be proposed for this task. One or more college graduates can be proposed if at least two university graduates are proposed.</p> <p>Criteria for task 3h</p> <p>Experience</p> <ol style="list-style-type: none"> Experience in programming under the Windows graphical interface and data acquisition systems Experience in electronics Experience in the development of data acquisition systems and the acquisition of data with spectrometers Experience in the acquisition of data with Heytronics radiometers or equivalent Experience in the networking of measuring instruments via Wi-Fi. <p>Training</p> <p>A college diploma is the minimum level of training required by the resources assigned to carry out this task. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field that would be useful in carrying out the task.</p>	16	8

<p>Experience and training relating to task 3i: Participate, with the Scientific Authority, in international exchange programs</p> <p>Resources required for task 3i: Three resources already proposed for tasks 3a to 3e must be proposed for this task.</p> <p>Criteria for task 3i</p> <p>Experience</p> <ol style="list-style-type: none"> 1. Experience in writing scientific reports and documents in English and in French 2. Experience in presenting at conferences and symposia <p>Training</p> <p>A Bachelor's degree is the minimum level of training required by the resources assigned to carry out this task. The fields of study include physics, engineering physics, electrical engineering as well as any other similar field that would be useful in carrying out the task.</p>	<p>8</p> <p>9</p>	<p>4</p> <p>0</p>
--	-------------------	-------------------

Evaluation Criteria	Rating Scale	Max	Min
3. MANAGEMENT - PROJECT MANAGER		15	10
<p>3.1 – Education and experience of the project manager</p> <p>The bidder should clearly demonstrate that the project manager has experience in supervising R&D projects relating to airborne and/or remote panchromatic, multispectral or hyperspectral imaging.</p> <p>The bidder should also clearly demonstrate that the project manager has completed a recognized university-level project management course, where applicable.</p>	<p>10 pts: At least 60 months' experience in supervising R&D projects relating to airborne and/or remote panchromatic, multispectral or hyperspectral imaging.</p> <p>8 pts: 48 months' experience in supervising R&D projects relating to airborne and/or remote panchromatic, multispectral or hyperspectral imaging.</p> <p>6 pts: 36 months' experience in supervising R&D projects relating to airborne and/or remote panchromatic, multispectral or hyperspectral imaging.</p> <p>4 pts: 24 months' experience in supervising R&D projects relating to airborne and/or remote panchromatic, multispectral or hyperspectral imaging.</p> <p>2 pts: Less than 24 months' experience in supervising R&D projects relating to airborne and/or remote panchromatic, multispectral or hyperspectral imaging.</p> <p>0 pts: Any other situation.</p> <p>5 pts: Manager has completed over 12 months of full-time studies in project management.</p> <p>3 pts: Manager has completed 12 months of full-time studies in project management.</p> <p>1 pt: Manager has completed less than 12 months of full-time or part-time studies in project management.</p> <p>0 pts: Manager has not completed any studies in project management.</p>	15	10

Solicitation No. - N° de l'invitation

W7701-125216/A

Client Ref. No. - N° de réf. du client

W7701-12-5216

Amd. No. - N° de la modif.

File No. - N° du dossier

QCL-1-34731

Buyer ID - Id de l'acheteur

qcl018

CCC No./N° CCC - FMS No/ N° VME

EVALUATION CRITERIA	MAX	MIN
4. QUALIFICATIONS OF THE BIDDER	10	0
4.1 Bidder's experience in the field of military R&D in the last 10 years 10 points: The bidder has completed at least five military R&D contracts in the field of optics. 6 points: The bidder has completed two to four military R&D contracts in the field of optics. 2 points: The bidder has completed at least one military R&D contract in the field of optics. 0 points: The bidder has not completed any military R&D contracts in the field of optics.	10	-

PROPOSAL EVALUATION GUIDELINES

NON-RESPONSIVE	INADEQUATE	EXTREMELY WEAK	WEAK	BARELY ACCEPTABLE	ACCEPTABLE	GOOD	VERY GOOD	EXCELLENT
0 point	1 point	2 - 3 points	4 points	5 points	6 points	7 - 8 points	9 points	10 points
<ul style="list-style-type: none"> Did not submit information that could be evaluated 	<ul style="list-style-type: none"> Absolutely inadequate Weaknesses cannot be corrected Lack of qualifications and experience 	<ul style="list-style-type: none"> Slightly or considerably below requirements Generally doubtful that the weaknesses can be corrected General lack of qualifications and experience 	<ul style="list-style-type: none"> Just failed to meet requirements Weaknesses can be corrected Level just below the minimum qualifications and experience Team not quite able to meet requirements 	<ul style="list-style-type: none"> Barely meets minimum requirements Weaknesses can be easily corrected Minimum level of qualifications and experience Team barely meets requirements 	<ul style="list-style-type: none"> Meets minimum requirements No significant weaknesses Has qualifications and experience Team has all the necessary skills and will probably meet requirements 	<ul style="list-style-type: none"> Slightly exceeds minimum requirements No significant weaknesses Has a good level of qualifications and experience Team has all the necessary skills and will very likely meet requirements 	<ul style="list-style-type: none"> Exceeds minimum requirements No apparent weaknesses High level of qualifications and experience Solid team – some members have already worked together 	<ul style="list-style-type: none"> Greatly exceeds requirements No apparent weaknesses Bidder is exceptionally qualified and experienced Exceptional team - the members have already worked effectively together on similar projects Lead manager has directed previous projects directly related to the requirements of this project Exceptional capability; should ensure extremely effective results
	<ul style="list-style-type: none"> Previous projects not related to the requirements of this project Extremely weak; insufficient to meet performance requirements 	<ul style="list-style-type: none"> Generally, the projects are not related to the requirements of this project Capability likely inadequate to meet performance requirements 	<ul style="list-style-type: none"> Previous projects only slightly related to the requirements of this project Slightly below the acceptable capability 	<ul style="list-style-type: none"> Previous projects partially related to the requirements of this project Acceptable minimum capability; should be able to attain results 	<ul style="list-style-type: none"> Previous projects generally related to the requirements of this project Average capability; should be sufficient to attain effective results 	<ul style="list-style-type: none"> Previous projects related to the requirements of this project Above-average capability 	<ul style="list-style-type: none"> Previous projects directly related to the requirements of this project Superior capability; should ensure very effective results 	

ATTACHMENT 3

CERTIFICATIONS PRECEDENT TO CONTRACT AWARD

1. Federal Contractors Program for Employment Equity - Certification

1.1 Federal Contractors Program - \$200,000 or more

1. The Federal Contractors Program (FCP) requires that some suppliers, including a supplier who is a member of a joint venture, bidding for federal government contracts, valued at \$200,000 or more (including all applicable taxes), make a formal commitment to implement employment equity. This is a condition precedent to contract award. If the Bidder, or, if the Bidder is a joint venture and if any member of the joint venture, is subject to the FCP, evidence of its commitment must be provided before the award of the Contract.

Suppliers who have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive government contracts over the threshold for solicitation of bids as set out in the *Government Contracts Regulations*. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

2. If the Bidder does not fall within the exceptions enumerated in 3.(a) or (b) below, or does not have a valid certificate number confirming its adherence to the FCP, the Bidder must fax (819-953-8768) a copy of the signed form LAB 1168, Certificate of Commitment to Implement Employment Equity, to the Labour Branch of HRSDC.
3. The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- (a) () is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- (b) () is not subject to the FCP, being a regulated employer under the *Employment Equity Act*, S.C. 1995, c. 44;
- (c) () is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC (having not bid on requirements of \$200,000 or more), in which case a duly signed certificate of commitment is attached;

(d) () is subject to the FCP, and has a valid certificate number as follows:
 _____ (e.g. has not been declared an ineligible contractor by
 HRSDC.)

Further information on the FCP is available on the HRSDC Web site
 (<http://www.hrsdc.gc.ca/eng/labour/equality/fcp/index.shtml>).

2. Former Public Servant Certification

Contracts with 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 with FPS, bidders must provide the information required below.

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, in the context of the fee abatement formula, 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

Is the Bidder a FPS in receipt of a pension as defined above?

Yes () No ()

If so, the Bidder must provide the following information:

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

Work Force Reduction Program

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of a work force reduction program?

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 reduction 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 the Goods and Services Tax or Harmonized Sales Tax.

Certification

By submitting a bid, the Bidder certifies that the information submitted by the Bidder in response to the above requirements is accurate and complete.

3. Canadian Content Certification

This procurement is limited to Canadian services.

The Bidder certifies that:

- () the service(s) offered is(are) a Canadian service as defined in paragraph 2 of clause A3050T.

3.1 SACC Manual clause A3050T (2010-01-11), Canadian Content Definition

4. 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. 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.

6. Language Capability

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

ATTACHMENT 4

EVALUATION OF PRICE

For evaluation purposes only, the price of the bid will be determined as follows :

1 - Financial Bid

Bidders must submit their financial bid in accordance with the following (in accordance with the **Financial Bid Presentation Sheet in Attachment 1.**) :

- (a) For the firm portion of the Work (Section 2 of the Statement of Work in Annex A) : A Total Cost to a Limitation of Expenditure, which must not exceed the maximum funding specified in Part 2.
- (b) For the portion of the Work to be performed on an "as and when requested basis" using a Task Authorization (Section 3 of the Statement of Work in Annex A) : A firm all-inclusive hourly rate for each resource proposed, for each year of the contract period.

2 - Calculation of bid price

The bid price will be calculated as follows:

$$\begin{array}{r}
 \$150,000.00 \text{ (For the firm portion of the Work)} \\
 + \text{ Price for the portion of the Work to be performed} \\
 \text{using a Task Authorization} \\
 \hline
 \text{Bid price}
 \end{array}$$

The price for the portion of the Work to be performed using a Task Authorization will be evaluated on the basis of the following approximate percentages of use:

- Project Manager : 10%
- Task 3A : 15%
- Task 3B : 18%
- Task 3C and Task 3D : 36%
- Task 3E and Task 3F : 7%
- Task 3G : 6%
- Task 3H : 5%
- Task 3I : 3%

3 - Cost of labour for the TA portion (portion of the Work to be performed using a Task Authorization) :

To establish labour costs, the effort available in terms of hours (see last column in Table 4.1, below) must be determined. The effort available for each resource category will be calculated as follows:

$$\text{Effort available} = \frac{[\text{Total anticipated available funding for TA portion}] \times [\text{Approximate percentage use}]}{[\text{Average hourly rate for the resource category}]}$$

The cost of labour for a given category (for a given bid) is then obtained by multiplying the effort available by the average hourly rate provided for the given category (for a given bid).

Lastly, the cost of labour for Task 6 is calculated by adding the labour costs per category for a given bid.

For example:

- Anticipated funding for the AT portion = \$750,000
- Percentage of use for "Project Manager" = 10%
- If the average hourly rate for bid A = \$60, that for bid B = \$80 and that for bid C = \$150, then the average hourly rate for the resource category = \$96.67.

Therefore,

- Effort available $\$750,000 \times 0.10 / \$96.67 = 775.9$ hours

and

- Labour costs for "Project Manager", bid a
= 775.9 hours x \$60 = \$46,551.72.
- Labour costs for "Project Manager", bid b
= 775.9 hours x \$80 = \$62,068.97.
- Labour costs for "Project Manager", bid c
= 775.9 hours x \$150 = \$116,379.31.

4 - Sample calculations for the price of the three bids

The following table provides examples of calculations for the price of the three bids.

Table 4.1 - Sample calculations for the three bids

Resource category	% of use	Rate A	Price for A	Rate B	Price for B	Rate C	Price for C	Qty
firm portion of the Work	-	-	\$150,000.00	-	\$150,000.00	-	\$150 000.00	-
Project Manager	10%	\$60.00	\$46,551.72	\$80.00	\$62,068.97	\$150.00	\$116,379.31	775.9
Task 3A	15%	\$60.00	\$72,321.43	\$80.00	\$96,428.57	\$140.00	\$168,750.00	1205.4
Task 3B	18%	\$60.00	\$90,000.00	\$80.00	\$120,000.00	\$130.00	\$195,000.00	1500
Task 3C and Task 3D	36%	\$60.00	\$186,923.08	\$80.00	\$249,230.77	\$120.00	\$373,846.15	3115.4
Task 3E and Task 3F	7%	\$60.00	\$37,800.00	\$80.00	\$50,400.00	\$110.00	\$69,300.00	630
Task 3G	6%	\$60.00	\$33,750.00	\$80.00	\$45,000.00	\$100.00	\$56,250.00	562.5
Task 3H	5%	\$60.00	\$29,347.83	\$80.00	\$39,130.43	\$90.00	\$44,021.74	489.1
Task 3I	3%	\$60.00	\$18,409.09	\$80.00	\$24,545.45	\$80.00	\$24,545.45	306.8
TOTAL :			\$665,103.15		\$836,804.20		\$1,198,092.66	

The "percentages of use" listed in the table are provided solely for the purpose of determining the estimated price for each bid. They represent approximate needs, provided in good faith, and should not be considered as a contractual guarantee.

These rates are provided as an example only and must not be interpreted as an indicator of the experience of the labour categories.



Government
of Canada

Gouvernement
du Canada

Contract Number / Numéro du contrat

W7701-125216

Security Classification / Classification de sécurité

SECURITY REQUIREMENTS CHECK LIST (SRCL)

LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE		
1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine		2. Branch or Directorate / Direction générale ou Direction RDDC Valcartier
3. a) Subcontract Number / Numéro du contrat de sous-traitance		3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant
4. Brief Description of Work / Brève description du travail Travaux en optique atmosphérique: Modélisation et études théoriques, conception d'algorithmes de traitement d'images, Conception d'expérimentation de validation des concepts et des algorithmes, Implantation des systèmes expérimentaux, Traitement des données expérimentales, traitement des images.		
5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées?		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
6. Indicate the type of access required / Indiquer le type d'accès requis		
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)		<input type="checkbox"/> No / Non <input checked="" type="checkbox"/> Yes / Oui
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé.		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
6. c) Is this a commercial courier or delivery requirement with no overnight storage? S'agit-il d'un contrat de messagerie ou de livraison commerciale sans entreposage de nuit?		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès		
Canada <input checked="" type="checkbox"/>	NATO / OTAN <input type="checkbox"/>	Foreign / Étranger <input type="checkbox"/>
7. b) Release restrictions / Restrictions relatives à la diffusion		
No release restrictions Aucune restriction relative à la diffusion	All NATO countries Tous les pays de l'OTAN	No release restrictions Aucune restriction relative à la diffusion
Not releasable À ne pas diffuser		
Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays: USA, UK, Au, NZ, <u>Permanent residents included</u>	Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays:	Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays:
7. c) Level of information / Niveau d'information		
PROTECTED A PROTÉGÉ A	NATO UNCLASSIFIED NATO NON CLASSIFIÉ	PROTECTED A PROTÉGÉ A
PROTECTED B PROTÉGÉ B	NATO RESTRICTED NATO DIFFUSION RESTREINTE	PROTECTED B PROTÉGÉ B
PROTECTED C PROTÉGÉ C	NATO CONFIDENTIAL NATO CONFIDENTIEL	PROTECTED C PROTÉGÉ C
CONFIDENTIAL CONFIDENTIEL	NATO SECRET NATO SECRET	CONFIDENTIAL CONFIDENTIEL
SECRET SECRET	COSMIC TOP SECRET COSMIC TRÈS SECRET	SECRET SECRET
TOP SECRET TRÈS SECRET		TOP SECRET TRÈS SECRET
TOP SECRET (SIGINT) TRÈS SECRET (SIGINT)		TOP SECRET (SIGINT) TRÈS SECRET (SIGINT)



Government
of Canada

Gouvernement
du Canada

Contract Number / Numéro du contrat

W77-125216

Security Classification / Classification de sécurité

PART A (continued) / PARTIE A (suite)

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?

Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS?

☒ No ☐ Yes
Non Oui

If Yes, indicate the level of sensitivity:

Dans l'affirmative, indiquer le niveau de sensibilité :

9. Will the supplier require access to extremely sensitive INFOSEC information or assets?

Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate?

☒ No ☐ Yes
Non Oui

Short Title(s) of material / Titre(s) abrégé(s) du matériel :

Document Number / Numéro du document :

PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

☐ RELIABILITY STATUS
COTE DE FIABILITÉ

☐ TOP SECRET - SIGINT
TRÈS SECRET - SIGINT

☐ SITE ACCESS
ACCÈS AUX EMPLACEMENTS

☐ CONFIDENTIAL
CONFIDENTIEL

☐ NATO CONFIDENTIAL
NATO CONFIDENTIEL

☒ SECRET
SECRET

☐ NATO SECRET
NATO SECRET

☐ TOP SECRET
TRÈS SECRET

☐ COSMIC TOP SECRET
COSMIC TRÈS SECRET

Special comments:

Commentaires spéciaux :

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.

REMARQUE : Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?

Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail?

☐ No ☒ Yes
Non Oui

If Yes, will unscreened personnel be escorted?

Dans l'affirmative, le personnel en question sera-t-il escorté?

☐ No ☒ Yes
Non Oui

PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)

INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?

Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS?

☒ No ☐ Yes
Non Oui

11. b) Will the supplier be required to safeguard COMSEC information or assets?

Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC?

☒ No ☐ Yes
Non Oui

PRODUCTION

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?

Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ?

☒ No ☐ Yes
Non Oui

INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?

Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS?

☒ No ☐ Yes
Non Oui

11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?

Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale?

☒ No ☐ Yes
Non Oui



Government
of Canada

Gouvernement
du Canada

Contract Number / Numéro du contrat

W770-125214

Security Classification / Classification de sécurité

PART C - (continued) / PARTIE C - (suite)

For users completing the form manually use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.

Les utilisateurs qui remplissent le formulaire manuellement doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form online (via the Internet), the summary chart is automatically populated by your responses to previous questions.

Dans le cas des utilisateurs qui remplissent le formulaire en ligne (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

SUMMARY CHART / TABLEAU RÉCAPITULATIF

Category Catégorie	PROTECTED PROTÉGÉ			CLASSIFIED CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL	SECRET	TOP SECRET	NATO RESTRICTED	NATO CONFIDENTIAL	NATO SECRET	COSMIC TOP SECRET	PROTECTED PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET
				CONFIDENTIEL		TRÈS SECRET	NATO DIFFUSION RESTREINTE	NATO CONFIDENTIEL		COSMIC COSMIC TRÈS SECRET	A	B	C	CONFIDENTIEL		TRÈS SECRET
Information / Assets Renseignements / Biens Production	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IT Media / Support TI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IT Link / Lien électronique	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?

La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?

☐ No
Non

☐ Yes
Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".

Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?

La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE?

☐ No
Non

☐ Yes
Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).

Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).

DND 626 (01-05)

Instructions for completing DND 626 - Task Authorization

Contract no.

Enter the PWGSC contract number in full.

Task no.

Enter the sequential Task number.

Amendment no.

Enter the amendment number when the original Task is amended to change the scope or the value.

Increase/Decrease

Enter the increase or decrease total dollar amount including taxes.

Previous value

Enter the previous total dollar amount including taxes.

To

Name of the contractor.

Delivery location

Location where the work will be completed, if other than the contractor's location.

Delivery/Completion date

Completion date for the task.

for the Department of National Defence

Signature of the DND person who has delegated **Authority** for signing DND 626 (level of authority based on the dollar value of the task and the equivalent signing authority in the PAM 1.4). **Note:** the person signing in this block ensures that the work is within the scope of the contract, that sufficient funds remain in the contract to cover this task and that the task is affordable within the Project/Unit budget.

Services

Define the requirement briefly (attach the SOW) and identify the cost of the task using the contractor's quote on the level of effort. The Task must use the basis of payment stipulated in the contract. If there are several basis of payment then list here the one(s) that will apply to the task quote (e.g. milestone payments; per diem rates/labour category hourly rates; travel and living rates; firm price/ceiling price, etc.). All the terms and conditions of the contract apply to this Task Authorization and cannot be ignored or amended for this task. Therefore it is not necessary to restate these general contract terms and conditions on the DND 626 Task form.

Cost

The cost of the Task broken out into the individual costed items in **Services**.

GST/HST

The GST/HST cost as appropriate.

Total

The total cost of the task. The contractor may not exceed this amount without the approval of DND indicated on an amended DND 626. The amendment value may not exceed 50% (or the percentage for amendments established in the contract) of the original value of the task authorization. The total cost of a DND 626, including all amendments, may not exceed the funding limit identified in the contract.

Applicable only to PWGSC contracts

This block only applies to those Task Authorization contracts awarded by PWGSC. The contract will include a specified threshold for DND sole approval of the DND 626 and a percentage for DND to approve amendments to the original DND 626. Tasks that will exceed these thresholds must be passed to the PWGSC Contracting Authority for review and signature prior to authorizing the contractor to begin work.

Note:

Work on the task may not commence prior to the date this form is signed by the DA Authority - for tasks within the DND threshold; and by both DND and PWGSC for those tasks over the DND threshold.

Instructions pour compléter le formulaire DND 626 - Autorisation des tâches

N° du contrat

Inscrivez le numéro du contrat de TPSGC en entier.

N° de la tâche

Inscrivez le numéro de tâche séquentiel.

N° de la modification

Inscrivez le numéro de modification lorsque la tâche originale est modifiée pour en changer la portée.

Augmentation/Réduction

Inscrivez le montant total de l'augmentation ou de la diminution, y compris les taxes.

Valeur précédente

Inscrivez le montant total précédent, y compris les taxes.

À

Nom de l'entrepreneur.

Expédiez à

Endroit où le travail sera effectué, si celui-ci diffère du lieu d'affaires de l'entrepreneur.

Date de livraison/d'achèvement

Date d'achèvement de la tâche.

pour le ministère de la Défense nationale

Signature du représentant du MDN auquel on a délégué le **pouvoir d'approbation** en ce qui a trait à la signature du formulaire DND 626 (niveau d'autorité basé sur la valeur de la tâche et le signataire autorisé équivalent mentionné dans le MAA 1.4). **Nota :** la personne qui signe cette attache de signature confirme que les travaux respectent la portée du contrat, que suffisamment de fonds sont prévus au contrat pour couvrir cette tâche et que le budget alloué à l'unité ou pour le projet le permet.

Services

Définissez brièvement le besoin (joignez l'ET) et établissez le coût de la tâche à l'aide de la soumission de l'entrepreneur selon le niveau de difficulté de celle-ci. Les modalités de paiement stipulées dans le contrat s'appliquent à la tâche. Si plusieurs d'entre elles sont prévues, énumérez ici celle/celles qui s'appliquera/ront à la soumission pour la tâche à accomplir (p.ex. acompte fondé sur les étapes franchies; taux quotidien ou taux horaire établi selon la catégorie de main-d'œuvre; frais de déplacement et de séjour; prix fixe ou prix plafond; etc.). Toutes les modalités du contrat s'appliquent à cette autorisation de tâche et ne peuvent être négligées ou modifiées quant à la tâche en question. Il n'est donc pas nécessaire de répéter ces modalités générales afférentes au contrat sur le formulaire DND 626.

Prix

Mentionnez le coût de la tâche en le répartissant selon les frais afférents à chaque item mentionné dans la rubrique **Services**.

TPS/TVH

Mentionnez le montant de la TPS/TVH, s'il y a lieu.

Total

Mentionnez le coût total de la tâche. L'entrepreneur ne peut dépasser ce montant sans l'approbation du MDN, formulaire DND 626 modifié à l'appui. Le coût de la modification ne peut pas être supérieur à 50 p. 100 du montant initial prévu dans l'autorisation de tâche (ou au pourcentage prévu dans le contrat pour les modifications). Le coût total spécifié dans le formulaire DND 626, y compris toutes les modifications, ne peut dépasser le plafond de financement mentionné dans le contrat.

Ne s'applique qu'aux contrats de TPSGC

Le présent paragraphe s'applique uniquement aux autorisations de tâche accordées par TPSGC. On inscrira dans le formulaire DND 626 un plafond précis qui ne pourra être approuvé que par le MDN et un pourcentage selon lequel le MDN pourra approuver des modifications au formulaire DND 626 original. Les tâches dont le coût dépasse ces plafonds doivent être soumises à l'autorité contractante de TPSGC pour examen et signature avant qu'on autorise l'entrepreneur à débiter les travaux.

Nota :

Les travaux ne peuvent commencer avant la date de signature de ce formulaire par le responsable du MDN, pour les tâches dont le coût est inférieur au plafond établi par le MDN, et par le MDN et TPSGC pour les tâches dont le coût dépasse le plafond établi par le MDN.