

**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving - PWGSC / Réception des
soumissions - TPSGC**

**11 Laurier St./ 11 rue, Laurier
Place du Portage, Phase III
Core 0A1 / Noyau 0A1
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776**

**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 IR Camera		
Solicitation No. - N° de l'invitation W6369-140068/B	Date 2014-02-04	
Client Reference No. - N° de référence du client W6369-140068		
GETS Reference No. - N° de référence de SEAG PW-\$\$PV-940-64589		
File No. - N° de dossier pv940.W6369-140068	CCC No./N° CCC - FMS No./N° VME	
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2014-03-03		Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
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: Hooper, Marlyn		Buyer Id - Id de l'acheteur pv940
Telephone No. - N° de téléphone (819) 956-2702 ()		FAX No. - N° de FAX (819) 956-3814
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: CAPT Martin Godbout BLDG 91 3701 CARLING AVE OTTAWA, ON K2H 8S2 CANADA		

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

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

Issuing Office - Bureau de distribution

Scientific, Medical and Photographic Division / Division de
l'équipement scientifique, des produits photographiques et
pharmaceutiques
11 Laurier St./ 11 rue, Laurier
6B1, Place du Portage
Gatineau, Québec K1A 0S5

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

THIS CANCELS AND SUPERSEDES THE PREVIOUS NOTICE OF PROPOSED PROCUREMENT (NPP) NO. W6369-140068/A OR PW-\$PV-940-63872 DATED OCTOBER 30, 2013 WAS DUE AT 2:00 PM ON JANUARY2, 2014.

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Solicitation No. - N° de l'invitation

W6369-140068/B

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

pv940

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

File No. - N° du dossier

CCC No./N° CCC - FMS No/ N° VME

W6369-140068

pv940W6369-140068

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PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with this bid solicitation..

2. Requirement

The requirement is detailed under the "Annex A".

2.1 Optional Requirement

The Contractor grants to Canada the irrevocable option to purchase one (1) training session under the same terms and conditions and at the prices stated in the contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

3. Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days 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 Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

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

The 2003 (2013-06-01) 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: ninety (90) days

1.1 SACC Manual Clauses

B1000T

Condition of Material

2007-11-30

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.

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the 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 the province of Ontario, Canada.

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

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

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

Section I:	Technical Bid (one (1) hard copy and one (1) soft copy on CD)
Section II:	Financial Bid (one (1) copy)
Section III:	Certifications (one (1) copy)

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

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

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

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement

(<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

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

1.1 Section I: Technical Bid

The following applies to the Requirement and bidders must provide the following information in the bid where applicable:

1.1.1 Product(s) Offered

The Bidder must indicate the make and model number of the products offered (identify specific components which make up the system):

Name of Manufacturer: _____

Model/Part Number: _____

Literature attached: Yes (____) No (____)

1.1.2 Point of Manufacture/Shipping

The Bidder must state the point of manufacture/shipping of goods:

Location: _____

Postal Code: _____

1.1.3 Delivery

While delivery is requested by April 1, 2014, but no later than May 30, 2014, the best delivery that could be offered by the Bidder is _____.

1.1.4 Contacts

Bidders are requested to provide the following: Information pertaining to Article 5.3 Contractor Representatives under Part 6, Resulting Contract Clauses.

1.2 Section II: Financial Bid

The bidder must quote firm unit prices, DDP (Ottawa, Ontario), the total amount of applicable taxes must be shown separately. Freight charges to destination and all applicable Customs duties and Excise taxes must be included.

A firm unit price must be filled in for the training session option. If the bidder fails to quote a firm unit price for the training option, the bidder will be considered non-compliant and no further consideration will be given.

1.2.1 Exchange Rate Fluctuation

C3011T

Exchange Rate Fluctuation

2010-01-11

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

All proposals submitted must be completed in full and provide all of the information requested in the Request for Proposal (RFP) package to enable a full and complete evaluation. If the requirement is not addressed in the bidder's proposal, the proposal will be considered incomplete or non-responsive and will be rejected. The onus is on the bidder to provide all the information necessary to ensure a complete and accurate assessment.

Factors for Evaluation

1. **PRICING BASIS (MANDATORY):** Prices must be firm, DDP Delivered Duty Paid.
2. **ABILITY TO MEET THE TECHNICAL REQUIREMENT (MANDATORY):**
 - a) **For Items Defined by Specifications:**

The bidder is requested to cross reference the mandatory technical criteria contained herein to their supporting technical documentation.
 - b) **Provision of Supporting Technical Documentation:**

Supporting technical documentation for the stores offered must be provided with the bid at time of bid closing.

Technical brochures or technical data **MUST** be provided to verify compliancy to the technical mandatory specifications.
3. **COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS REQUEST FOR PROPOSAL (MANDATORY)**
4. Please note that the requirements of the Federal Contractors Program for Employment Equity may apply - (see Part 5).

1.1.1 Mandatory Technical Criteria

See Annex B

1.2 Financial Evaluation

The lowest evaluated price will be established using the following criteria:

- a) prices will be evaluated in Canadian Funds including excise taxes, Canadian Customs Duty (if applicable) and applicable taxes excluded. For evaluation purposes, bids received in a foreign currency will be converted to Canadian funds using the appropriate rate of exchange using the rate quoted by the Bank of Canada as being in effect on date of bid closing.
- b) prices will be evaluated on a DDP Ottawa, Ontario
- c) for bid evaluation purposes only, the total bid price will be determined by adding the cost for the firm quantity total with the cost for the training option.

2. Basis of Selection

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

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and related documentation to be awarded a contract. Canada will declare a bid non-responsive if the required certifications and related documentation 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 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, to provide the related documentation or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

1. Mandatory Certifications Required Precedent to Contract Award

1.1 Code of Conduct and Certifications - Related documentation

- 1.1.1 By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions 2003 . The related documentation therein required will assist Canada in confirming that the certifications are true.

2. Additional Certifications Required with the Bid

Bidders must submit the following duly completed certifications with their bid.

2.1 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.hrsdc.gc.ca/eng/labour/index.shtml)" list (<http://www.hrsdc.gc.ca/eng/labour/index.shtml>) available from [Human Resources and Skills Development Canada \(HRSDC\) - Labour's](#) website.

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

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement applicable to this contract.

2. Requirement

2.1 Requirement

The Contractor must provide the items detailed under Annex A.

2.2 Optional Requirement

The Contractor grants to Canada the irrevocable option to purchase one (1) training session under the same terms and conditions and at the prices stated in the contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option within three (3) months after contract award by sending a written notice to the Contractor

2.3 Manuals

One (1) hard copy and one (1) soft copy of the System Users Manuals in English must be supplied two weeks prior to system delivery.

The System Users Manual must contain the information necessary for, but not limited to, an introduction and overview, a system installation guide, system operations including non-uniformity calibration, operational testing of the system and user-level trouble-shooting instructions.

3. Standard Clauses and Conditions

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

3.1 General Conditions

2010A (2013-04-25) General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

4. Term of Contract

4.1 Delivery Date

All the deliverables must be received on or before _____ **(to be filled in only at contract award).**

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Marlyn Hooper
Public Works and Government Services Canada
Acquisitions Branch
Commercial Consumer Products Directorate
11 Laurier Street, 6A2, Phase III
Place du Portage, Gatineau, Quebec, K1A 0S5
Telephone: (819) 956-2702
Facsimile: (819) 956-3814
E-mail address: marlyn.hooper@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 **(to be filled in only at contract award)**

The Technical Authority for the Contract is:

Name: _____
Telephone: (____) _____
Facsimile: (____) _____
E-mail address: _____

The Technical Authority named above 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 DND Procurement Authority (to be filled in only at contract award)

The DND Procurement Authority for the Contract is:

Name: _____
 Telephone: (____) _____
 Facsimile: (____) _____
 E-mail address: _____

The DND Procurement Authority is responsible for the DND contract management and for the authorization of all work against this contract.

5.4 Contractor's Representative (fill in)

The telephone number of the person responsible for:

General enquiries

Name: _____
 Telephone No. _____
 Facsimile No. _____
 E-mail address: _____

Delivery Follow-up

Name: _____
 Telephone No. _____
 Facsimile No. _____
 E-mail address: _____

6. Payment

6.1 Basis of Payment - Firm Price

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices, as specified in Annex A for a cost of \$_____ (to be filled in only at contract award). Customs duties are included and Applicable Taxes are extra.

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

6.2 SACC Manual Clauses

C0100C	Discretionary Audit - Commercial Goods and/or Services	2010-01-11
H1000C	Single Payment	2008-05-12
H1001C	Multiple Payment	2008-05-12

7. Invoicing Instructions

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

8. Certifications

8.1 Compliance

Compliance with the certifications and related documentation provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification, provide the related documentation or if 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.

9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the province of Ontario, Canada.

10. Priority of Documents

If there is a discrepancy between the wordings 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) 2010A (2013-04-25) General Conditions - Goods (Medium Complexity);
- (c) Annex A, Requirement / Basis of Payment;
- (d) Annex B, Mandatory Specifications;
- (e) the Contractor's bid dated (to be filled in at contract award) .

11. SACC Manual clause

B1501C	Electrical Equipment	2006-06-16
A9062C	Canadian Forces Site Regulations	2011-05-16
A9068C	Government Site Regulations	2010-01-11
A2000C	Foreign Nationals (Canadian Contractor)	2006-06-16
A2001C	Foreign Nationals (Foreign Contractor)	2006-06-16

12. Shipping Instructions - Delivery at Destination

1. Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP) Ottawa, Ontario Incoterms 2000 for shipments from a commercial contractor.

2. The Contractor will be responsible for all delivery charges, administration, costs and risk of transport and customs clearance, including the payment of customs duties and taxes.

ANNEX A**REQUIREMENT / BASIS OF PAYMENT**

The Department of National Defence has a requirement for the supply of one (1) Medium Wave Infrared Camera (MWIR) and one (1) Large Wave Infrared Camera (LWIR), with an option for one training session for up to five (5) users.

Each IR camera system must include:

- The IR camera covering the required band of the electromagnetic spectrum.
- A Tri-Field of View lens (TFOV).
- A computer based portable rack mounted high speed data recorder.
- The required cables.
- The required camera data collection operating software.
- A weather resistant shipping container.

The IR camera systems must meet the minimum specifications identified at Annex B:

Item	Description	Qty	Unit of Issue	Firm Unit Price
1	Medium Wave Infrared Camera (MWIR) System, in accordance with the mandatory specifications at Annex B	1	EA	\$
2	Large Wave Infrared Camera (LWIR) System, in accordance with the mandatory specifications at Annex B	1	EA	\$

OPTION

Item	Description	Qty	Unit of Issue	Firm Unit Price
1	Training must be provided for up to five (5) users and must include the following topics: An overview of the system. The applicable technical aspects and setup of the system Operation of each IR camera (including non-uniformity correction and field calibrations), storage system and software. Trouble-shooting at the user level.	1	Session	\$

The bidder must provide a training plan with its proposal.

ANNEX B

MANDATORY SPECIFICATIONS

The Technical Specifications must demonstrate the compliance of the proposed IR camera systems with their associated specifications below.

They must also contain the detailed graphics of both the Modulation Transfer Functions of the two IR cameras with their TFOV lens as well as the Responsivity of their detectors. . If there is an issue preventing the vendor from providing these graphs with the proposal, he shall guarantee that they will be provided at the delivery of the camera systems in both hard and soft copies.

Reference in Contractors Proposal: _____

In addition, they must contain information on the Mean Time Between Failures (MTBF) and average Turn Around Time (TAT) of both IR cameras. The definition of these two terms is as follows:

MTBF: The MTBF is the average time between two system failures that requires the IR camera to be sent back to the Contractor for repair.

TAT: The average TAT is the average time required for the system to be repaired and sent back to its owner.

If there is insufficient data to provide the actual MTBF and TAT numbers, the vendor must provide the theoretical values for these as well as an average of these numbers based on the camera history up to the time of the bid.

Reference in Contractors Proposal: _____

1.0 Technical Specifications for a Medium Wave Infrared Camera (MWIR) System as follows:

- 1.1 Must have up to four (4) user controllable integration time, ranging at least from 10µs to 5s.

Reference in Contractors Proposal: _____

- 1.2 Must have on-demand non-uniformity correction.

Reference in Contractors Proposal: _____

- 1.3 The camera must be cooled by internal type cooling means. (i.e. Stirling type cooling is acceptable)

Reference in Contractors Proposal: _____

- 1.4 Must have a Noise Equivalent Temperature Difference (NETD) value of less than 20 milliKelvin.

Reference in Contractors Proposal: _____

- 1.5 Minimum pixel resolution must be 640x512.

Reference in Contractors Proposal: _____

- 1.6 Minimum spectral range must be 3µm to 5µm.

Reference in Contractors Proposal: _____

- 1.7 Minimum dynamic range must be 14-bit

Reference in Contractors Proposal: _____

- 1.8 Minimum full frame rate must be 125 Hz.

Reference in Contractors Proposal: _____

- 1.9 Must have a Gigabit Ethernet (GigE) and a Camera Link digital data output.

Reference in Contractors Proposal: _____

- 1.10 Must have a live continuous analog video output which is synchronized with the digital data output stream of the GigE or Camera Link connection.

Reference in Contractors Proposal: _____

- 1.11 Video output must be free of any company logo.

Reference in Contractors Proposal: _____

- 1.12 Must have IRIG, Sync In, and Sync Out type connections.

Reference in Contractors Proposal: _____

- 1.13 Must provide qty 2 set of Analog video output cables of at least 50 foot length each.

Reference in Contractors Proposal: _____

- 1.14 Must provide qty 2 set of Command and control cables of at least 50 foot length each.

Reference in Contractors Proposal: _____

- 1.15 Must provide the option of using various IR filters.

Reference in Contractors Proposal: _____

- 1.16 Must be an F/4 MWIR camera.

Reference in Contractors Proposal: _____

- 1.17 Must be fully compatible with the Phoenix Camera F/4 TFOV lens from Teledyne Optimum Optical Systems part # 22396.

Reference in Contractors Proposal: _____

- 1.18 Must be able to operate outdoors, in the following environments:

- 1.18.1 A temperature range of -20°C to +35°C

Reference in Contractors Proposal: _____

- 1.18.2 A non-condensing humidity range of 0 - 95%

Reference in Contractors Proposal: _____

- 1.18.3 Maritime environments that contain sea salt aerosol.

Reference in Contractors Proposal: _____

- 1.19 Must have a computer (PC) based portable rack mounted high speed data recorder that can be networked (Transmission Control Protocol/Internet Protocol - TCP/IP).

Reference in Contractors Proposal: _____

- 1.20 The Video Card and/or proprietary cards of the high speed data recorder must have the ability to be installed in a Commercial Off The Shelf (COTS) computer.

Reference in Contractors Proposal: _____

- 1.21 Must provide the camera data collection operating software. The software must be able to capture, process and analyze the IR collects.

Reference in Contractors Proposal: _____

- 1.22 For business continuity purposes, the camera data collection operating software must be transferrable to DND computers using a Microsoft based Operating System.

Reference in Contractors Proposal: _____

- 1.23 Must come with qty 2 two-man portable weather resistant shipping containers designed to safely ship the MWIR camera with its TFOV lens and the data recorder with the MWIR camera system cabling.

Reference in Contractors Proposal: _____

2.0 Technical Specifications for a Long Wave Infrared Camera (LWIR) System as follows:

- 2.1 Must have up to four (4) user controllable integration time, ranging at least from 0.2µs to 20ms.

Reference in Contractors Proposal: _____

- 2.2 Must have on-demand non-uniformity correction.

Reference in Contractors Proposal: _____

- 2.3 The camera must be cooled by internal type cooling means. (i.e. Stirling type cooling is acceptable)

Reference in Contractors Proposal: _____

- 2.4 Must have a Noise Equivalent Temperature Difference (NETD) value of less than 35 milliKelvin

Reference in Contractors Proposal: _____

- 2.5 Minimum pixel resolution must be 640x512.

Reference in Contractors Proposal: _____

- 2.6 Minimum spectral range must be 8µm to 9.5µm.

Reference in Contractors Proposal: _____

- 2.7 Minimum dynamic range must be 14-bit.

Reference in Contractors Proposal: _____

- 2.8 Minimum full frame rate must be 115 Hz.

Reference in Contractors Proposal: _____

- 2.9 Must have a GigE and a Camera Link digital data output.

Reference in Contractors Proposal: _____

- 2.10 Must have a live continuous analog video output which is synchronized with the digital data output stream of the GigE or Camera Link connection.

Reference in Contractors Proposal: _____

- 2.11 Video output must be free of any company logo.

Reference in Contractors Proposal: _____

- 2.12 Must have IRIG, Sync In, and Sync Out type connections.

Reference in Contractors Proposal: _____

- 2.13 Must provide qty 2 set of Analog video output cables of at least 50 foot length each.

Reference in Contractors Proposal: _____

- 2.14 Must provide qty 2 set of command and control cables of at least 50 foot length each.

Reference in Contractors Proposal: _____

- 2.15 Must provide the option of using various IR filters.

Reference in Contractors Proposal: _____

- 2.16 Must be an F/2 camera.

Reference in Contractors Proposal: _____

- 2.17 The TFOV lens must have the same F/# as the camera.

Reference in Contractors Proposal: _____

- 2.18 The TFOV lens must use one of the following combination of focal lengths and pixel pitch:

- 2.18.1 60 mm, 180 mm and 500 mm if pixel pitch of proposed LWIR camera is 25 µm, provided that proposed MWIR camera's pixel pitch is 25 µm; or

Reference in Contractors Proposal: _____

- 2.18.2 40mm, 120mm and 320 mm if pixel pitch of proposed LWIR camera is 15 or 16 µm, provided that proposed MWIR camera's pixel pitch is 25 µm; or.

Reference in Contractors Proposal: _____

- 2.18.3 60 mm, 180 mm and 500mm if pixel pitch of proposed LWIR camera is 15 or 16 μm , provided that proposed MWIR camera's pixel pitch is 15 or 16 μm .

Reference in Contractors Proposal: _____

- 2.19 Must be able to operate outdoors, in the following environments:

- 2.19.1 A temperature range of -20°C to +35°C.

Reference in Contractors Proposal: _____

- 2.19.2 A non-condensing humidity range of 0 - 95% or better.

Reference in Contractors Proposal: _____

- 2.19.3 Maritime environments that contain sea salt aerosol.

Reference in Contractors Proposal: _____

- 2.20 Must have a computer (PC) based portable rack mounted high speed data recorder that can be networked (TCP/IP).

Reference in Contractors Proposal: _____

- 2.21 The Video Card and/or proprietary cards of the high speed data recorder must have the ability to be installed in a Commercial Off The Shelf (COTS) computer.

Reference in Contractors Proposal: _____

- 2.22 Must provide the camera data collection operating software. The software must be able to capture, process and analyze the IR collects.

Reference in Contractors Proposal: _____

- 2.23 For business continuity purposes, the camera data collection operating software must be transferrable to DND computers using a Microsoft based Operating System.

Reference in Contractors Proposal: _____

- 2.24 Must come with 2 two-man portable weather resistant shipping containers designed to safely ship the LWIR camera with its TFOV lens and the data recorder with the LWIR camera system cabling.

Reference in Contractors Proposal: _____

Solicitation No. - N° de l'invitation

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Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

pv940

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

File No. - N° du dossier

CCC No./N° CCC - FMS No/ N° VME

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ANNEX C

COMPLETE LIST OF AFFILIATES (As per Standard Instructions, Clauses and Conditions Part 2)

Name

Position

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____