

**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

**SOLICITATION AMENDMENT**  
**MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**  
**Raison sociale et adresse du**  
**fournisseur/de l'entrepreneur**

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

|   |  |
|---|--|
| <b>Title - Sujet</b><br>IR Camera   |  |
| <b>Solicitation No. - N° de l'invitation</b><br>W6369-140068/A  | <b>Amendment No. - N° modif.</b><br>002      |
| <b>Client Reference No. - N° de référence du client</b><br>W6369-140068   | <b>Date</b><br>2013-12-18                    |
| <b>GETS Reference No. - N° de référence de SEAG</b><br>PW-\$\$PV-940-63872  |  |
| <b>File No. - N° de dossier</b><br>pv940.W6369-140068   | <b>CCC No./N° CCC - FMS No./N° VME</b>       |
| <b>Solicitation Closes - L'invitation prend fin</b><br><b>at - à 02:00 PM</b><br><b>on - le 2014-01-02</b>  |  |
| <b>Time Zone</b><br>Fuseau horaire<br>Eastern Standard Time<br>EST  |  |
| <b>F.O.B. - F.A.B.</b> Specified Herein - Précisé dans les présentes<br><b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input checked="" type="checkbox"/> |  |
| <b>Address Enquiries to: - Adresser toutes questions à:</b><br>Hooper, Marlyn   | <b>Buyer Id - Id de l'acheteur</b><br>pv940  |
| <b>Telephone No. - N° de téléphone</b><br>(819) 956-2702 ( )  | <b>FAX No. - N° de FAX</b><br>(819) 956-3814 |
| <b>Destination - of Goods, Services, and Construction:</b><br><b>Destination - des biens, services et construction:</b>   |  |

**Instructions: See Herein**

**Instructions: Voir aux présentes**

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

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This amendment is raised to publish the questions and answers received as of December 16, 2013 and to extend to closing date to January 2, 2014.

## Page 1

### Delete

Solicitation Closes December 23, 2013

### Replace by

Solicitation Closes January 2, 2014

### Questions & Answers

Q.1 I would like to know if it is acceptable to the crown to only respond to either one of the requirement described in annex B. In Section 1.0 for the MWIR system or in Section 2.0 for the LWIR system as those are distinct camera systems

A.1 No because we want commonality in the cameras for ease of use and operation. Furthermore, we do not want to be using multiple software since we will have to get our CF made processing software amended to do additional processing of the data.

Q.2 Live continuous analog video output. - would customer accept other video outputs HDMI or any other one?

A.2 Live continuous analog video is required as an input for the automated tracker we have. If we have a different video format, we will have to modify the tracker and it will drive the costs up. Therefore, analog video is a firm requirement.

Q.3 We like to receive optical interface data from the customer for the lens they want to use.

A.3 we have not found any documentation that stipulates we own the IP rights to the controlling software of the MWIR lens. Therefore, we cannot provide to a third party.

Q.4 Based on the answer provided to question #5, I understand that there is flexibility with regards to the exact focal lengths of the LWIR Tri-FOV lens. It appears that the true requirement is to have suitable field-of-views, and since the camera pixel pitch is not a fixed requirement, it becomes unclear what the actual field-of-view requirements really are. Can you specify, for each of the three lens zoom positions, what is the acceptable minimum and maximum horizontal field-of-view in degrees? With this information, we will have a clear understanding of what lens options are acceptable.

- a. For example, would a 40/120/225 mm lens be acceptable in the LWIR, with a pixel pitch of 16 microns (giving a horizontal FOV of 15/4.9/2.6 degrees)?
- b. Or would a 60/180/380 mm lens be acceptable in the LWIR, again with a pixel pitch of 16 microns (giving a horizontal FOV of 9.8/3.3/1.5 degrees)?

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- A.4 Even though the pixel pitch of the MWIR camera had not been identified as a fixed requirement they can determine the right combinaison of pixel pitch and TFOV focal lengths for the LWIR camera system by calculating the FOV of the MWIR camera using the pixel pitch of the MWIR camera they would be proposing with the CFEWC MWIR TFOV focal lengths.
- Q.5 Also based on the answer provided to question #5, I understand that having matched FOV for both cameras is more important than the actual focal length values. Consequently, would it be possible to offer two Tri-FOV lenses, one MW and one LW, with matched FOVs, and not re-use the customer furnished MWIR Tri-FOV lens? What would be the acceptable minimum and maximum horizontal field-of-view in degrees, if such solution is acceptable.
- A.5 No. Compatibility with current MWIR TFOV lens is key in keeping the costs down.
- Q.6 You require a GigE and a Cameralink output. Is it acceptable to offer only a Cameralink output, with a Cameralink/GigE external converter, which can be used when the customer wants to use GigE instead of Cameralink?
- A.6 Yes
- Q.7 If #3 above is not acceptable, is it acceptable to have two Cameralink outputs, with a Cameralink/GigE external converter connected to one of the two Cameralink outputs? This solution offers the required GigE and Cameralink data outputs, and the GigE is available through an external converter.
- A.7 N/A given answer to Q.3
- Q.8 Do the GigE and Cameralink outputs need to output data simultaneously, or one at the time is acceptable?
- A.8 One at the time is acceptable
- Q.9 What is your estimated contract award date? You require a delivery no later than March 31st 2014, but the contract award date is unknown. This makes it impossible to know how long the selected contractor will have to build the cameras, procure the lens and test the cameras.
- A.9 I cannot answer this completely since I do not know at what date the contract will be awarded. The requirement for a 31st March delivery is a firm requirement.
- Q.10 Based on the changes announced with amendment #1, it changes key elements for our proposal. Can we have an extension to the close date of the solicitation? We would like to have an extension to January 17th to have enough time to prepare a compliant proposal that includes all the required information.

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- A.10 No. The change in the requirement was made to accommodate a 31st March delivery by allowing the bidders to use commercially available components instead of building a LWIR TFOV lens and then not meeting the 31st March deadline.
- Q.11 Would a 40/120/225 mm lens be acceptable in the LWIR, with a pixel pitch of 16 microns (giving a horizontal FOV of 15/4.9/2.6 degrees)?
- A.11 No
- Q.12 Would a 60/180/380 mm lens be acceptable in the LWIR, again with a pixel pitch of 16 microns (giving a horizontal FOV of 9.8/3.3/1.5 degrees)?
- A.12 No
- Q.13 In order to offer a lower cost solution, would it be possible to offer the two following affordable COTS Tri-FOV lenses (one MW and one LW, with matched FOVs), and not re-use the customer furnished MWIR Tri-FOV lens?
- 37.5/112.5/211 mm MW Tri-FOV lens with a pixel pitch of 15 microns (giving a horizontal FOV of 15/4.9/2.6 degrees)
  - 40/120/225 mm LW Tri-FOV lens with a pixel pitch of 16 microns (giving the same horizontal FOV of 15/4.9/2.6 degrees)
- A.13 No
- Q.14 Can you provide a basic dimensional sketch of your existing TFOV MWIR lens including any baseplate or other hardware (to determine size of shipping cases required)
- A.14 NO. Not required, client has original shipping container for existing TFOV MWIR lens. (Note: This answer intended for the TFOV LWIR lens.)
- Q.15 The specification indicates that all hardware is to be packaged in these shipping containers. Does that include the "rack-mounted" items? For example, we would normally expect all your rack mounted computer hardware would travel permanently in a shipping container specifically made for the purpose. Our assumption was to supply : 1 shipping container for camera and TFOV lens, and a 2nd shipping container for miscellaneous cables only as the data recording system would be completely rack mounted. Please advise if this is correct.
- A.15 The "rack-mounted" items would travel permanently in a shipping container specifically made for that purpose.

Solicitation No. - N° de l'invitation

W6369-140068/A

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

W6369-140068

Amd. No. - N° de la modif.

002

File No. - N° du dossier

pv940W6369-140068

Buyer ID - Id de l'acheteur

pv940

CCC No./N° CCC - FMS No/ N° VME

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Q.16 Do you want the lens to ship in a different case from the camera or the same case? Or leave it to our discretion?

A.16 Yes. Regarding having separate shipping containers for the lens, camera and miscellaneous cables.(Note: below)

" Yes 1st shipping container for the camera.

" Yes 2nd shipping container for the TFOV lens.

" Yes 3rd shipping container for the miscellaneous cables.

All other terms and conditions remain unchanged