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**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**  
THIS DOCUMENT CONTAINS A SECURITY  
REQUIREMENT

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**Issuing Office - Bureau de distribution**  
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<b>Title - Sujet</b> Mercury Global Anchor Stations	
<b>Solicitation No. - N° de l'invitation</b> W8474-14MG25/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> W8474-14MG25	<b>Date</b> 2013-09-03
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$ST-006-26331	
<b>File No. - N° de dossier</b> 006st.W8474-14MG25	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2013-10-02</b>	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Thorsley, Mark	<b>Buyer Id - Id de l'acheteur</b> 006st
<b>Telephone No. - N° de téléphone</b> (819) 956-1772 ( )	<b>FAX No. - N° de FAX</b> (819) 997-2229
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

Instructions: See Herein

Instructions: Voir aux présentes

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<b>Signature</b>	<b>Date</b>

The following questions and answers were outstanding information from the Industry Consultation process which ended with the issuance of the W8474-14MG25/A solicitation. Any identified changes to the solicitation documents were incorporated in the initial versions released under W8474-14MG25/A

Q1 DAB SOW 5.2.1 Telecom Shelter Facility

Please indicate Canada's intent with respect to the "optional" requirements in section 5.2.1 (including all of 5.2.1.1 and 5.2.1.2) as per the below:

Q1a The title of this section addresses just the shelter, but the requirements in 5.2.1.2 include the entire site (i.e. civils-solution). 5.2.1.2.b identifies the shelter as part of the civils-solution. Was the shelter intended to be part of the Civils-solution, or were these intended to be two distinct SOW items?

R1a Despite the section title, the Telecom Shelter is a component of the complete civils solution.

Q1b Is it your intent that the Telecom Shelter Solution and Civils-Solution be:

- A single optional item?
- Each separate optional items?
- Only one or the other of them an optional item?

R1b The Telecom Shelter and civils are a single optional item that is exercised on a per site basis. On contract award this will allow the civils solutions to be tailored to each site. For the purposes of this RFP bidders should bid a complete civils solution for each site.

Q1c Is it your intent that bidders must quote these items as options, to be exercised at DND's option? Or was it your intent that it should be optional for bidders to quote?

R1c These items should be quoted as options to be exercised by DND.

Q1d Is the value of this optional work included in the DAB ceiling price?

R1d The optional work is not included in the DAB ceiling price. The costs are however factored in the DAB financial evaluation.

Q1e How will this optional work be evaluated relative to the rest of the bid evaluation plan? E.g. How do the evaluation criteria (e.g. schedule) apply to this work, if at all?

R1e The costs associated with the Telecom Shelter options form part of the financial evaluation.

Q1f If exercised, will the value of this work increase the IRB requirement?

R1f Yes

Q1g How will this scope affect the ISS scope if Canada does or does not exercise the option?

R1g Both the supply and support are options

Q1h Given the potentially significant uncertainty associated with the unique characteristics of each site, do you anticipate that this option might be contracted on a cost-plus basis?

R1h The associated costs are to be on a firm, fixed price per site as per the RFP

- Q2 ISS SOW; BEP App 5, Sec 2.6 Surge - The ISS SOW makes reference to contractor obligations to provide surge support, but nowhere does it quantify the contractor obligation. Likewise, the evaluation criteria assess the Operations Support Plan, but do not have quantitative criteria for the contractor's capacity. Please provide a quantitative expectation for the contractor's surge capacity. Can you describe how it might differ for the 8/5 positions versus the 24/7 positions?
- R2 The following text was added to the ISS SOW in response this question.
- 1.4.5.2 The Contractor must provide qualified personnel to operate and maintain the MGAS in a surge capacity, beyond the normal 8 hour, 5 day a week, and up to a peek of 24 hours, 7 days a week, for a period not to exceed 21 consecutive calendar days on 48 hours notice of requirement by DND.
- Q3 DAB, App 2 (Spec), Para 2.2.1.1 and 2.2.1.2 - Satellite Accessibility - Please specify the minimum elevation angle for a satellite to be considered "viewable" and "visible" from an anchor site location for these two requirements.
- R3 Access to WGS satellites viewable (or visible) from an Anchor Site is mandatory for elevation angles of 9 degrees or higher.
- Q4 DAB, App 2 (Spec), Para 2.2.1.2 - Satellite Accessibility - Please confirm that the intent is that there must be sufficient Anchor Stations at each Anchor Site to simultaneously anchor all WGS satellites visible from the Anchor Site.
- R4 There must be an equivalent number of Anchor Stations at each Anchor Site to simultaneously anchor all WGS satellites visible from that Anchor Site (i.e., for Regions 1, 5, and 6 as depicted in the Candian Regional View figure of the DAB SOW and which assumes an elevation angle of 9 degrees or higher).
- Q5 DAB, App 2 (Spec), Para 2.2.1.3 - Satellite Accessibility - The qualification of 10.0° or higher implies that simultaneous X and Ka-band access to the satellite in footnote 12 (at 9.8°) is not a mandatory requirement. We observe that the satellite at 175°E is also below 10° relative to the Esquimalt site. Please confirm that it is your intent that it is not mandatory to provide simultaneous X and Ka-band access to those satellites.
- R5 Access to WGS satellites viewable (or visible) from an Anchor site is mandatory for elevation angles of 9 degrees or higher. Simultaneous X- and Ka-band access via each Anchor Station at an Anchor site is Mandatory. Specification for contractual G/T or for G/T evaluation is mandatory for 10 degrees elevation reference. Applicable sections in the DAB section will be reviewed and revised if necessary to ensure clarity.
- Q6 BEP, App 4, Sec 4.2.1.6; Table A4.1 - Risk Assessment Weightings - Section 4.2.1.6 states that Table A4.1 provides the weightings for the risks in the pair-wise comparisons. However, Table A4.1 is silent on that weighting. Please provide the weightings for the pair?wise comparisons.
- R6 The following sentence was removed from the Evaluation Plan : "The weighting for these risks are presented in Table A4.1". Readers are simply told to: "See Table A4.1.", since the Risk Assessment points are outlined in this Table.

It should be noted that there are no weightings assigned to the risk analysis, only points.

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- Q7 It would be helpful in link budget calculations to have the coverage numbers for the satellite locations on the space segment. Will the government provide this information for the user sites, such as the saturated flux density (SFD) as is typically available for commercial satellites and used for uplink power calculations?
- R7 WGS satellite-specific information approved for dissemination are as included in the DAB SOW. Saturated Flux Density (SFD) has not been provided in a native form; however, terminal class types, and a clear-sky link margin target are included as foundations for any link budget calculations. Also, uplink EIRP capability is assumed to an inclusion of the Anchor Station terminal certification process.
- Q8 Section 5.2.3.1 in the DAB SOW discusses the Ethernet switches and RS-503 MUXs (GFE) for baseband interface layout in the Telecom Shelter at the anchor site. Will the government provide the amount of rack space needed to house this GFE? Additionally, will the government provide the power requirements for this GFE? This will be needed for HVAC and power requirement computations in the bid.
- R8 Responses to these questions will be handled following the formal Site Surveys of the Anchor Sites.
- Q9 Will the contractor supplied RS-530 switches be allowed to extract synchronization from the data streams received from GFE RS-530 switches / multiplexers, as is common practice in legacy TDM networks? If no to the question above, will the government be providing a network clock source for the Telecom shelter at each site?
- R9 Yes
- Q10 With respect to the Telecom Shelter Requirements and all the related equipment that will be housed in it, will it require: a) a fire protection system? b) a physical security and access control system? c) a video monitoring system? Will any HVAC, fire protection, physical security, video monitoring and/or emergency power systems require remote control capability? What level of physical security, if any, will be provided by DND at each site?
- R10 Responses to these questions will be handled following the formal Site Surveys of the Anchor Sites.
- Q11 With respect to the Anchor Station Requirement Specifications, section 2.3.5.8 states that "The NMS solution must include security management features, e.g., to control access, manage level of protections, and data security." As the NMS control of the MGAS is a critical part of CF SATCOM capability, has an NMS Statement of Sensitivity and Threat and Risk Assessment (TRA) been done? What strength of mechanism to protect is needed? For example, is high grade encryption needed for NMS data in transit or at rest? Is TEMPEST required?
- R11 Crypto and other network security devices will be handled on the DND side of a demarcation point as part of GFE. Assume that the contractor will be provided acces to two DND network demarcation points. One is black encrypted data network. And one network used for monitoring and control of the Satcom capability. All data functions for the Anchor Station will hook into one. All management and control function will hook into the other network. There are three requirements for network security from a contractor perspective.
- a. Physical isolation of the network for control of Anchor station capabiltiy from the network for data service provided by the Anchor Station.

b. Configuration of certain security features on the Switches/MUX's that are part of the Anchor Station. (ie. VLANs, monitor ports, switchport security, etc.) as directed from the results a TRA process.

c. Computer & network hardware provided should adhere to current best practices for IT Security (deployment of patches, minimization of unecessary services etc.).

Q12 DAB SOW Section 5.1 - Site Information - Please provide additional detail on the following GFE items for each Anchor Site:

- site map
- site geotechnical surveys
- infrastructure (buildings, roads)
- utilities (power, water)
- RF surveys
- environmental surveys
- site security

R12 Site Information details listed will be provided following the formal Site Surveys of the Anchor Sites.

Q13 In the July 10 release of the Draft DAB SOW, Table 3-4, shows a Medium antenna size for the Ground 1 Tactical terminal in the Major Domestic, Major Expeditionary, and Force Development operations. Table 3-4 also shows a Small antenna size for the Ground 1 Tactical terminal for the Theatre Activation operation. However, Table 3-5 shows only a single antenna size for the Ground 1 Tactical terminal. Please clarify.

R13 Table 3-5 is included with details required for link budget analyses, as well as serve as the basis for the Baseline Resource Allocation (BRA) analysis by ARSTRAT. In order to allow a manageable BRA analysis, not every terminal configuration from Table 3-4 is used. Therefore, the contrast between the two tables reflects what the Anchor Station must support (i.e., Table 3-4), versus a subset on which we have asked the bidder to consider for their own link analysis and the BRA scenario (i.e., Table 3-5).

Q14 At pg. 30 5.2.4.2

Current Text: In Figure 5.2: "20 x ViaSat EBEM (w/Ethernet)"

Proposed text: In Figure 5.2: "20 x Interoperable with ViaSat EBEM (w/Ethernet)"

The DMD2050E is interoperable with the Viasat MD-1336 modems for all modulation and FEC supported by the MD-1366, using either serial and Ethernet interfaces (please note that the converse is not true, the MD-1366 does not support many of the turbo FEC modes supported in the DMD2050 that the Canadian DnD currently uses). This includes 165A interoperability with the L-3 BAMS modems, and NMT interoperability with the Raytheon shipboard modems as defined in Table 3-5, at data rates defined in Table 3-4.

Requiring System Integrators to provide the required interoperability, but not mandating a specific modem, gives the flexibility to utilize DMD205E modems in place of MD-1366 modems for most or all of the requirement in this paragraph, and in paragraph 2.3.2.2 of Appendix 2. This increased-commonality approach could provide benefits to the Canadian DnD in a number of key areas, including reducing procurement costs, and streamlining training and logistical support. It would also enable the Canadian DnD to enjoy the greater performance and enhanced backwards compatibility and interoperability features of the DMD2050E for a greater number of modems within the anchor stations

The proposed change would still meet all of the functional requirements, while enabling the Canadian DnD to evaluate potential benefits of increased Anchor Station modem commonality in proposals it receives from Prime Contractors.

- R14 Noted. The requirement is to allow a solution with EBEM (as per specific CF user needs); or, alternately, a solution that is interoperable with EBEM. Please note that, as stated in the DAB SOW, "The initial MGAS Modem Solution will not be finalized until CDR". The following revision was made:

"The set of modems accessible by each Anchor Station at the Anchor Site must include twenty (20) that are ViaSat EBEM (w/Ethernet) modems; or modems that are interoperable with the ViaSat EBEM (w/Ethernet) modems in terms of functionality, features, operation and performance.

- Q15 At page 56 Appendix 2 2.3.2.2

Current text: [M] The Anchor Stations at and Anchor Site must include twenty (20) ViaSat EBEM (w/Ethernet) modems.

Proposed text: [M] The Anchor Stations at and Anchor Site must include twenty (20) modems that are interoperable with ViaSat EBEM (w/Ethernet) modems.

Comment: Change to be consistent with Question #14 above

- R15 Noted. The requirement is to allow a solution with EBEM (as per specific CF user needs); or, alternately, a solution that is interoperable with EBEM. Please note that, as stated in the DAB SOW, "The initial MGAS Modem Solution will not be finalized until CDR". The following revision is being made:

"The set of modems accessible by each Anchor Station at the Anchor Site must include twenty (20) that are ViaSat EBEM (w/Ethernet) modems; or modems that are interoperable with the ViaSat EBEM (w/Ethernet) modems in terms of functionality, features, operation and performance.

- Q16 The Mercury Global Draft RFP has called out specified modems to be delivered with the anchor stations. Two of the modems are manufactured by a company that also manufactures anchor station antennas. In our opinion, this may provide a competitive advantage for that company. Is it possible for DND to change the RFP to make the modems GFE to eliminate this unfair advantage?
- R16 The modems will not be changed to GFE for the RFP. However, one of the modem requirements (JIPM) has been eliminated and the DVB modem requirement will be revised. An amendment will be issued shortly."