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**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**  
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**Issuing Office - Bureau de distribution**  
Science Procurement Directorate/Direction de  
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11 Laurier St. / 11, rue Laurier  
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Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> MEOSAR Ground Segment Phase 2	
<b>Solicitation No. - N° de l'invitation</b> W8474-177351/A	<b>Amendment No. - N° modif.</b> 004
<b>Client Reference No. - N° de référence du client</b> W8474-177351	<b>Date</b> 2017-02-15
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$ST-005-30676	
<b>File No. - N° de dossier</b> 005st.W8474-177351	<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 2017-03-30</b>	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Byrnes, Ashley	<b>Buyer Id - Id de l'acheteur</b> 005st
<b>Telephone No. - N° de téléphone</b> (873) 469-4453 ( )	<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**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
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<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <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 address the following:

- To respond to questions received during the solicitation period; and
- To revise the solicitation accordingly, as applicable.

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### **Questions and Answers**

Q26: MEOSAR GS system availability requirements: ISS SOW para 6.7.8 and 6.7.11: The availability for the complete MEOSAR GS system and for the Beacon Detection Probability are requested as per requirements §6.7.8 and 6.7.11. These ISS requirements are usually associated to a Service Level Agreement (SLA) subject to a penalty clause in case the requirements are not met. The penalty scheme is described neither in the current SOW nor in the "Standard Acquisition Clauses and Conditions Manual". Can Canada clarify if the resulting contract will include a penalty clause related to the availability requirements? If yes, can it be disclosed within the consultation process so that all bidders can quote ISS accordingly?

A26: The resultant contract will not include a penalty clause.

Q27: Installation of generator and associated aboveground fuel tank (size unknown): MEOSAR DBAC SOW, Appendix C - Goose Bay Site EED Study, Section 1.2 - Site Construction:

- Could you please confirm whether a generator system installation will be required at the Riverbend site?
- Could you please provide an estimated generator and fuel storage tank size?
- Otherwise, could you please confirm if the generator will be dedicated to the MEOSAR site?
- If so, could you indicate how long the system would be expected to run off of backup power? This would allow us to recommend a size.
- Could you please provide a site requirement for the generator and fuel tank storage? Will there be a need to a concrete slab and/or shed for both generator and tank.
- Could you confirm whether the power switching between commercial and generated power will be supplied by CANADA?

A27: The requirement to provide a backup power source at either site is a design decision that the bidder must make taking into consideration the availability requirements found in Table 4 of the ISS SOW. When developing the EED for the Goose Bay site, an assumption was made that a backup generator would be installed, which allowed the development of appropriate mitigation measures. This assumption must not be interpreted to mean that Canada requires a generator in Goose Bay or in Riverbend. If a bidder proposes to include a backup generator in its design, the size of the generator's fuel tank is a design decision that the vendor must make in order to meet the availability requirements found in Table 4 of the ISS SOW while taking into consideration the time required for Canada's personnel to access the site under all weather conditions in order to refill the generator or perform repairs on the commercial electrical service. If a backup generator is installed, Canada expects it to be a permanent installation subject to the relevant local regulations for this type of installation. The provision and installation of power switching devices appropriate for the selected equipment is the responsibility of the bidder.

Q28: Defined Coverage Area: With reference to the DBAC Rated Evaluation Criteria R5 through R9 (6.4.2.6 and 6.4.2.8): Is it Canada's desire to have each MEOLUT individually provide coverage of the Canadian SAR region by specifying a coverage radius in excess of 5000 km (requirement is optimum for > 6,000km)? This requirement excludes currently commissioned MEOLUTs given the facts that the most recent MEOLUT commissioning reports provide at most a 2500 km (USA) to

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3000 km (Turkey) radius for declared coverage areas based upon 6 channel MEOLUTs or up to 3000 km for hybrid 4-tracking and 1 active array (France), and the Russian paper (CSC-57-OPN-Inf-14) that also defines DCA as up to 3000 km for 6-channel MEOLUTs. The requirement includes S-Band satellites with lower receive signal levels (up to 5 dB) and hence affects the overall detection of a beacon which lowers the probability of a location beyond the 3000 km radius and thereby negatively impacts location accuracy.

- A28: In order to clarify the requirement, the mandatory criterion M6 has been amended as follows: "The Bidder must provide simulation examples and results obtained using detection rate, location accuracy thresholds, number of antenna channels, number of local user terminals (LUTs), LUT locations, and number of satellites per MEOSAR constellation available that verify that the MEOLUT's Coverage Areas meet the MEOLUT performance requirements of sections 6.4.2.3 to 6.4.2.10 of the DBAC SOW."
- Q29: Quality Plan: In Part 3 – "Bid Preparation Instructions", paragraph "3.3.1 "Quality Plan Submission – Solicitation" requires that the Bidder must submit a Quality Plan with the bid and that the Quality Plan must be in the same format that will be used after award of contract. In Part 7 – "Resulting Contract Clauses", paragraph 7.13.3.1.1 " Quality Plan" it is stated that "...No later than the initial Kick-Off Meeting (as specified in the Statement of Work at Annex A), the Contractor must submit for acceptance by the Department of National Defence (DND) a Quality Plan..." Part 7.13.1.2 states that "...If the Quality Plan was submitted as part of the bidding process..." We did not see "Quality Plan" in Table 3: List of Data Deliverables. Question – are we expected to provide a Quality Plan, and to what level of detail, with the bid submission as it appears to be a living document to be submitted at the two initial Kick-Off Meetings?
- A29: According to section 3.1.1 of the RFP, which references SACC Manual Clause D5401T (effective date 2007-11-30) Quality Plan - Solicitation, the Bidder must submit a Quality Plan with the bid. This Quality Plan must be prepared according to the latest issue (at contract date) of ISO 10005:2005 "Quality management systems - Guidelines for quality plans." Section 7.13.3.1.2 of the RFP provides the requirements for the Quality Plan. The Quality Plan will be reviewed at the kick-off meeting.
- Q30: FMEA (Failure Mode Effect Analysis): In Table 3: List of Data Deliverables, the draft FMEA is listed as due at CDR. Part 7 – "Resulting Contract Clauses", paragraph 7.1.16 conforms the requirement as does 7.2.2.1.3. In addition Part 7 – "Resulting Contract Clauses", paragraph 7.1.18 refers to the preparation and submission the Availability Analysis document based on the FMEA and that supports the RSPL (recommended spare parts list). Table 7: Consolidated Data Deliverables (item 12) and 7.1.3.10 and 7.1.22 of Annex B, ISS SOW, part 7 "Activities and Deliverables" call for updating of the FMEA. However there are several data items to be submitted as part of the tender bid process that are dependent on the FMEA analysis that is only due at CDR. This impacts the Mean Time Between Failure (MTBF), Mean Time to Repair (MTTR) and the MEOLUT availability as a whole entity can only be finally quantified at CDR. How do you see this in light of the requirement to provide "Channel Availability" DBAC SOW 6.2.1 (R1), the various ISS SOW criteria R12 through R16 as well as the requirement to submit with the proposal a written analysis of the life-cycle management including proof that the system meets the system-level availability requirement? This being in advance of the FMEA CDR submission.
- A30: An FMEA is not required as part of the bid submissions. In order to be awarded the indicated points for criteria R12 to R16, the bidders must state their assumptions with regards to MTBF and MTTR values used in their engineering analysis. For criterion R1, channel availability is the estimated availability for each MEOLUT channel computed by performing a RF link budget analysis. For the purpose of this channel availability analysis, bidders can assume that the equipment used is available 100% of the time.

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Q31: ISS Management Plan (IMP): Annex B, ISS SOW, part 7 "Activities and Deliverables" Table 7: Consolidated Data Deliverables (item 1) paragraphs 7.1.11 and 7.1.12 call for the IMP deliverable at Kick-off meeting. However at Attachment 3 "Supplemental Information" to the bid requires that The Bidder's proposal should include a description of the Bidder's proposed ISS Management Plan (IMP) that includes, at a minimum:

- a traceability matrix that defines how each specific content and performance requirement is addressed;
- a description of the assumptions and constraints that will affect the delivery of the ISS plan;
- a description of the interfaces between Canada and the Bidder that are necessary to meet the requirements of the ISS Statement of Work;
- a description of how the Bidder will meet and manage the security requirements of the resulting Contract in relation to the support and systems and equipment to be supported;
- the risk management processes and Risk register to be used for identifying, capturing, analyzing, assessing, prioritizing, treating, reporting, monitoring and reviewing risks; and
- a description of how the Bidder will ensure that the performance of the work will meet practical health and safety management for work done at the Bidder's facility, or by the Bidder on Canada's premises, in accordance with the Canada Labor Code and provincial standards.

Question – is the IMP, as detailed at Attachment 3, a compulsory requirement for the bid submission and to what level of detail for the bid submission? It appears to be a living document to be submitted at the initial Kick-Off Meeting.

A31: Bidders are not required to provide an ISS Management Plan (ISSMP) with their bid. As per Table 7 of the ISS SOW, the ISSMP must be delivered at the kick-off meeting. However, bidders are encouraged to provide a description of the ISSMP in their bid submission in order to clarify their concept of support for the MEOSAR ground segment system proposed.

Q32: SPECIAL INSTRUCTIONS FOR: REPAIR AND OVERHAUL CONTRACTORS: This document has several embedded documents that are not accessible from the document. Can we have access to the original document with all the embedded files?

A32: Relevant information will be made available in a subsequent amendment.

Q33: Pricing and Hardware Scope: It is clear that the pricing schedules should include hardware spares but should it also take into account, or allow for the cost of spares replenishment and any hardware refresh costs?

A33: The replenishment of spares is not part of the scope of this contract.

Q34: In regards to the subject Solicitation, Part 7 – Resulting Contract Clauses, Section 7.2.1 refers to 2035 (2016-04-04), General Conditions – Higher Complexity – Services, apply to and form part of the Contract. Can you please confirm this should be a reference to Services? It was our understanding that perhaps a more appropriate reference given the nature of the solicitation, would be to 2030 (2016-04-04), General Conditions – Higher Complexity – Goods?

A34: This is a complex requirement for an acquisition involving specialized services; as such, 2035 (2016-04-04), General Conditions – Higher Complexity – Services, apply to and form part of the Contract.

Q35: Mitigation tasks as per the Environmental Effects Determination (EED): MEOSAR DBAC SOW, Section 7.5.1.1.5. and Appendix C to MEOSAR DBAC SOW, Section 1.1: Section 7.5.1.1.5, clearly identifies that mitigation tasks identified in the EEDs are within the scope of the contract. Can you please clarify if other "expectations" in the EEDs are also to be considered to be within the scope of

the contract. As an example, the EED statement below calls for the removal of stumps and roots within the 100m x 100m area:

*1.1. Site Preparation.....the following project activities are expected:*

- *The project site will be cleared of vegetation.*
- *Approximately 100 m x 100 m area (i.e., demarcation boundary) to be cleared; including the removal of stumps/roots. The area to be cleared is required for the MEOLUT building, the receive antennas, and the associated underground utilities.*

Is that a contractual requirement?

A35: No, the assumptions made under section 1.1 of the Goose Bay EED are not contractual requirements.

Q36: Additional shelters: MEOSAR DBAC SOW, Section 7.4.1.1.2.: Could you please clarify that the requirement is to "supply room for storing and safeguarding the delivered parts and installed systems" and that there is no mandatory requirement for that room to be in an additional shelter?

A36: It is not mandatory for the storage room to be in a separate shelter.

Q37: MEOLUT Equipment Availability, Generators scope of work: MEOSAR RFP Appendix B, MEOSAR Ground Segment Technical Evaluation Plan, Mandatory Requirement M11: Given that the contractor is responsible for insuring a 98% uptime, and that a power generator may be necessary, could you please provide us with:

- Expected mean time between power outages per site,
- Expected maximum outage duration per site.

Could you please confirm to us that if a diesel generator is required for any site, is it the contractor who supplies it?

A37: Yes, the bidder must supply the generator if one is required to meet the availability requirements of section 6.7.8 of the ISS SOW. Canada does not have any data on the expected time between power outages at each site. Bidders may be able to obtain relevant data by contacting the local utility companies. The expected maximum outage duration for each site is 72 consecutive hours, inclusive of the time required for local personnel to access the site.

Q38: In the In-Service Support (ISS) Statement of Work (SOW), it states the following: "7.1.3.1. All standalone technical and operational manuals for all equipment, systems, interfaces, and software that are supplied and integrated by the contractor as part of the MEOLUTs, the MEOLUT LOI and ROI, the MEOLUT Network and associated NLPs, and the MEOLUT CAST electronically and hard copies in both of Canada's official languages (first English and then once it is approved, the French version and copy), delivered as part of the MEOSAR DBAC SOW at Annex A;" Is this an error, or do all the documents listed above (7.1.3.1) need to be delivered in English & French? It seems unreasonable for the Bidder to translate all these documents, should the requirement be limited to the DND User and Maintenance Manuals?

A38: The terms "technical and operational manuals" found in section 7.1.3.1 of the ISS SOW refer to maintenance and user manuals as well as any documentation that may be required for the purpose of developing and delivering training to DND personnel. These documents must be provided in both English and French. Engineering drawings, design documentation, and provisioning data do not need to be available in both official languages.

Q39: In the DBAC Statement of Work (SOW), it states the following: "7.5.1.5.4. Installing all networking equipment needed to connect the MEOLUTs to the MEOLUT Network and to the CMCC, and required interfaces to the Search and Rescue Network (SARNET) as defined by the DND and Shared Services Canada (SSC);" Could Crown please specify the exact documents that define the

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required interfaces to the SARNET as defined by the DND and Shared Services Canada for this requirement?

- A39: The design of the SARNET interface at each MEOLUT will be made available to the winning bidder at the kick-off meeting. The existing SARNET infrastructure at both sites is insufficient and will be upgraded prior to the start of the winning bidder's construction activities at each site.
- Q40: Can you please let us know if Canada will be providing the following for each of the Goose Bay MEOLUT Site and the Riverbend MEOLUT Site: existing Environments Assessments, Geotechnical Investigations or Topographic information available?
- Q40: Appendices C and D of the DBAC SOW contain the only environmental assessments that are provided for each site. If required prior to the start of the construction activities at each site, Canada will amend these documents to reflect the actual site plan based on the approved Site Installation Plan (SIP). Canada will not provide any additional geotechnical investigation or topographic information for either site.

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### **Solicitation Revisions**

1. At Attachment 1 – Technical Evaluation Plan, Appendix B – Mandatory Criteria, Design Build and Commission (DBAC) Technical Mandatory criteria M6, Coverage Area for Detection and Location:

**DELETE:**

The Bidder must provide simulation examples and results obtained using detection rate, location accuracy thresholds, number of antenna channels, number of local user terminals (LUTs), LUT locations, and number of satellites per MEOSAR constellation available that verify that the MEOLUTs Coverage Areas in standalone mode meet the MEOLUT performance requirements of sections 6.4.2.3 to 6.4.2.10 of the DBAC SOW for Canada's Area of Responsibility.

**INSERT:**

The Bidder must provide simulation examples and results obtained using detection rate, location accuracy thresholds, number of antenna channels, number of local user terminals (LUTs), LUT locations, and number of satellites per MEOSAR constellation available that verify that the MEOLUTs Coverage Areas meet the MEOLUT performance requirements of sections 6.4.2.3 to 6.4.2.10 of the DBAC SOW.

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ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME