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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

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Title - Sujet HF-DSC/GMDSS SYSTEM	
Solicitation No. - N° de l'invitation F7048-130065/A	**Amendment No. - N° modif.** 005
Client Reference No. - N° de référence du client F7048-130065	**Date** 2014-09-11
GETS Reference No. - N° de référence de SEAG PW-$$QF-103-24561	
File No. - N° de dossier 103qf.F7048-130065	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à 02:00 PM** **on - le 2014-10-07**	**Time Zone** **Fuseau horaire** Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. Specified Herein - Précisé dans les présentes **Plant-Usine:** ☐ **Destination:** ☐ **Other-Autre:** ☑	
Address Enquiries to: - Adresser toutes questions à: Eddy, Kathie	**Buyer Id - Id de l'acheteur** 103qf
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Solicitation Amendment # 005 is issued to:

1) Respond to the questions # 012 to 022 below from industry:

Question # 012

RFP - Annex B - TSOR - paragraph 3.1.6.4.1a). It is mentioned: “The DSC system shall be able to access all six dedicated MF/HF DSC channels in 6 seconds or less”. According to Table 3-1 of the same document, only five HF frequencies are assigned to DSC. Please confirm that this sentence should be modified to read quantity 5 HF DSC in lieu of 6 MF/HF DSC.

Response # 012

While there are 6 DSC channels, CCG only uses the 5 HF channels. Therefore the sentence should be corrected to read “all 5 dedicated HF DSC channels in 2 seconds or less.”

Question # 013

RFP - Annex B - TSOR - paragraph 3.1.5.1.1. It is mentioned: “The detailed requirements are defined in ITU-R M.493-12 and ITU-R M.591-9”. We believe that this should refer to ITU-R M.493-13 as stated in paragraph 3.1.2.2. Please confirm.

Response # 013

RFP - Annex B - TSOR - paragraph 3.1.5.1.1 should read ITU-R M.493-13.

Question # 014

RFP - Annex B - TSOR - paragraph 3.1.7.3. It is mentioned that the system shall be capable of normal operations with one of the 3 stated electrical power capabilities. Is this applicable to all equipment included in the system?

Response # 014

The conditions are a function of the equipment locations as stated below:

a) 120/240 Volt AC, +10%/-15%, 60 Hz, single-phased service including entrance and distribution panels and distribution wiring as required. This is the AC service that is available at the transmitter and receiver sites. It provides the option of either 120 V or 240

V operation for the equipment. It is assumed that receiver racks and comms interface equipment would normally require 120 V power common to North America.

b) 208 Volt AC, +/- 10%, 60 Hz, three-phase, power for the transmitter equipment.

c) 120 Volt AC, +10%/-15%, 60 Hz, single-phase UPS power at the MCTS Centre.

This is intended for powering the equipment racks, file servers, workstations, etc. as found in a typical MCTS centre.

Question # 015

RFP - Annex B - TSOR - paragraph 3.1.7.4a): The current communication lines (dedicated 4-wire lines) between Iqaluit central and its transmitter and receiver sites are specified. However, in paragraph 1.2, it is mentioned that these lines will be converted to UHF links prior to the installation of the new system. **A)** Please specify the UHF link interfaces (IP, serial, type of equipment, etc) that will be available to the new system. **B)** If the available interface is IP, please confirm whether Qos (diffserv) routing will be used to prioritize the different types of signal (Date, voice, etc).

Response # 015

A) RFP - Annex B - TSOR - paragraph 3.1.7.4 is clarified as follows: The UHF link will be 256kbps Synchronous V.35 serial interface. The V.35 is interfaced to a Rad multiplexer where the data is digitized with the audio. There will not be latency delays associated with this equipment as with a satellite link. The Iqaluit Receiver site will be linked at 64kbps and 56kbps for HF DSC and the Iqaluit Transmitter link will be at least 56kbps for HF DSC, but could be more since the UHF link will 256kbps.

B) If IP is used, there are IP cards available for the Kilomax KM2100 that can be utilized, but the bandwidth would be limited to the 56kbps limit for all of the HF DSC portion. This bandwidth would then be dedicated to the HF DSC system and QoS wouldn’t be an issue because it wouldn’t be shared bandwidth.

Question # 016

RFP - Annex B - TSOR - paragraph 3.1.7.4b): Please specify the satelite link interface that will be available by CCG for the new system (IP, serial link, latency?, etc).

Response # 016

The satellite connection to Resolute Bay is 128K Synchronous V.35 serial out of the C-Band satellite modems (Comtech SDM-300A). Latency is typical C-Band geostationary orbit using a dedicated linear transponder circuit. The V.35 is interfaced to a Rad multiplexer where the data and digitized audio will be interfaced to bandwidth on the circuit will be limited to the current bandwidths used. Currently, the individual data and audio interfaced to discrete cards in a Rad KM2100 system. The Rad Kilomux KM2100 will be used to split the 128Kbps synchronous V.35 into 2 streams of V.35, one at 64kbps for the new Rad VMUX that is used for the Communications System and the other 56kbps V.35 synchronous serial circuit to the new HF DSC system. If IP is used, there are IP cards available for the Kilomux KM2100 that can be utilized but the bandwidth would be limited to the 56kbps limit for all of the HF DSC portion. This bandwidth would be dedicated to the HF DSC system and QoS wouldn't be an issue because it wouldn't be shared bandwidth.

Question # 017

RFP - Annex B - TSOR - paragraph 3.2.1.5e): Please define "On-line help".

Response # 017

The term "on-line" is misleading given today's context. The assumption is that there will be some form of "help" function available for the user, such as a desk-top shotcut to the user manual.

Question # 018

RFP - Annex B - TSOR - paragraph 3.2.1.5g): If the software application human interface is designed to be touchscreen, where all operator buttons/features are mainly accessible directly on the screen by the use of fingerprint, is this requirement still applicable?

Response # 018

This requirement is no longer applicable given today's technology as long as the intent specified in Annex B - TSOR - paragraph 3.2.1.5g) is met by on-screen means.

Question # 019

RFP - Annex B - TSOR - paragraph 3.2.4.1b): As the UHF links and HF antennas are provided by CCG, we believe they would also be part of the exception of this requirement (single point of failure). Please confirm.

Response # 019

The reference should read 3.2.4.1.5b). Correct, the UHF links and HF antennas should be part of the exception.

Question # 020

RFP - Annex B - TSOR - paragraph 3.3.1.3.2d): We understand this requirement to be applicable only for equipment that is known to generate heat (such as a transmitter) and could harm personnel if it exceeds the stated temperature. In other words, this requirement is only applicable when one equipment falls under the requirement stated in 3.3.1.3.2c). Please confirm.

Response # 020

Yes, that is the correct assumption.

Question # 021

RFP - Annex B - TSOR - Appendix D, Detailed System Block Diagram: There is a Dictaphone data recorder that is currently used shown on the diagram. Is it required to interface this recorder with the new system? If yes, please specify the interface.

Response # 021

Yes, the interface is 600 ohms balanced audio.

Question # 022

RFP - Annex B - TSOR - paragraph 3.1.5.2 Table 3-1 DSC frequencies and paragraph 3.2.1.1.2 Operator Call Details window (b). The DSC frequencies defined in the RFP are specified in the ITU M.541-9 (annex 5 para 1.) to be used for Distress, Urgency and Safety calls only. Other sets of frequencies (ITU M.541-9 annex 5 para 2.) are foreseen for DSC calls other than distress, urgency and safety (such as routine and test calls). Does CCG intend to transmit DSC routine and test calls on the Distress frequencies as stated in Table 3-1?

Response # 022

The MCTS Centre in Iqaluit currently uses the equipment to make test calls on the DSC frequencies listed in Table 3-1 to verify system operation and propgation conditions. The new system should have the capability to make routine and test calls on the other sets of HF frequencies listed in ITU M.541-9, Annex 5, paragraph 2.2.

All other terms and conditions remain unchanged.