



**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 0B2 / Noyau 0B2**

**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**

Defence Communications Division. (QD)

11 Laurier St./11, rue Laurier

Place du Portage, Phase III, 8C2

Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> Radio Receiver	
<b>Solicitation No. - N° de l'invitation</b> W7714-186599/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> W7714-186599	<b>Date</b> 2018-06-19
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$QD-041-26853	
<b>File No. - N° de dossier</b> 041qd.W7714-186599	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-06-28</b>	<b>Time Zone</b> Fuseau horaire Eastern Daylight Saving Time EDT
<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> Williams, Laura	<b>Buyer Id - Id de l'acheteur</b> 041qd
<b>Telephone No. - N° de téléphone</b> (873) 469-3174 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<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>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<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/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

## **A. Questions from potential Bidders:**

Question 1: Delivery: Section 6.4.1 (pg 11 of 17 in the main solicitation) states that the delivery date is on or before Feb 1, 2019. The Annex B SOW calls for FAT / equipment delivery after 7 months (see question 2 below regarding the 7 months). Combining these two requirement implies that contract award is at the end of June 2018. The closing date of the RFP is June 28th. Based on this the Feb 1, 2019 timeline is unrealistic. We request that the delivery date be tied to the statement of work and not independently set.

Response 1: Please see Section B of this Amendment.

Question 2: Deliverable schedule (section 6 in Annex B). The delivery schedule of 7 months after contract award is extremely aggressive. Also, there is no time allotted between Factory Acceptance and Equipment Delivery. We suggest the following modified schedule:

Factory Acceptance: 8 months

Application Delivery: 8 months

Equipment Delivery (including spares, training etc.): 8.5 months

Extended warranty can be suitably modified

Response 2: Please see Section B of this Amendment.

Question 3: Regarding the Option A (1024 channel): Suggest that the 7-month be changed to 9 months (based on the fact that more units are involved).

Response 3: Please see Section B of this Amendment.

Question 4: For the Option A (1024 channel), is it correct to assume that if this Option is exercised by the government, then a system comprising of 1024 channels (plus spares) will be delivered (not upgrading the 256 channels to 1024 channels by adding 768 additional channels). For further clarification, if the government exercises this option, then the government intends to acquire 256 + 1024 channel capability (plus 12.5% spares).

Response 4: Yes, the 1024 channel option is in addition to the 256 channel acquisition.

Question 5: Annex B (SOW) Section 5.5.3.2 Training - Two trainings are called for. Is the 16-hour expected to be a total over the two instances or is it 16 hours each (total 32 hours).

Response 5: Training is 16 hours total.

Question 6: Appendix B (SOR) Section 1.1.5 Time & Frequency Standard

The requirement calls for the system to derive the time & frequency reference information from external GFE sources. Are these defined yet? Is it a GFE GPS source? Is it proper to assume that the frequency reference is a 10 MHz signal? Later in the requirements the ADC sampling rate is specified at 100 MHz? Is the vendor expected to create the 100 MHz sampling clock based on the 10 MHz reference being supplied by the government?

Response 6: The Crown will provide a global positioning system disciplined 100 megahertz signal, a pulse-per-second signal, and a RS232 interface to a Crown global positioning system receiver.

Question 7: Appendix B Section 1.3.4 Mode 4. We acknowledge that the recorder in Mode 4 is GFE. Based on the full BW, the data rate (256 channel x 100 MHz sampling, 2-bytes precision) is 51.2 GBytes/sec. Assuming that 4-channels are carried on a single 10Gbe fiber (4-channel data rate is 800 MBytes/sec), a minimum of 64 fibers are required. Does the government intend to supply 64 single mode fibers? Or in other words does the government consider 64 to be a “reasonable number of fibers”?

Response 7: 64 fibers is reasonable.

Question 8: Section 2.4.7 Time stamping

For our system, the recorder consists of a computer with a clock. The time stamping consists of logging the computer time. The user can sync the server time with an external time server. Based on our reading of the spec our understanding is that this implementation meets the requirement. Could you please confirm.

Response 8: The system will not have an internet connection. The system must derive time from the Crown global positioning system receiver.

Question 9: Is there any requirement to provide a GPS unit as part of the system? Or will this be GFE? If the GPS is GFE, is the vendor expected to communicate with it?

Response 9: The Crown will provide a global positioning system receiver and the Contractor will communicate with it via a RS232 interface.

Question 10: Section 3.1.2 Equipment Depth

The section mandates that all signal processing equipment electronics must have the same depth. Does this also apply for the recorders? For clarification, the recorders are usually 25.5 to 26”. The analog front-end, digitizers boxes can be smaller than this. Is it OK if all the front-end equipment (includes digitizers, HF front-ends, clock generator and distributors etc.) are the same depth but the recorders are deeper.

Response 10: Requirement 3.1.2 is revised to state that all equipment of size 1 or 2 rack units must have the same depth.

Question 11: Section 3.1.3 Jack location

For compactness, it may be preferable for the analog signals (i.e., from the antenna) and the clock signals enter the unit from the front and the digitized data exits from the rear (and connects easily to the rear of the recorder with fiber). Government can provide a patch panel in the rack to make a connection to the antenna and then distribute the signals to the signal processing boxes. Is this acceptable? We can certainly meet the rear panel requirement. However, we request this waiver as the cost will be reduced.

Response 11: No, the external analog signals from the antennas must enter at the rear of the receiver in order to avoid blocking access to front panel switches and lights. It is permissible to have short jumpers at the front of the receiver for internal analog signals between the front ends and the analog-digital converters.

Question 12: Section 3.1.6 Equipment height

We are assuming that the 2m height is the cumulative height of the equipment being supplied by the vendor.

Response 12: Yes.

## B. Amendment to RFP:

1. At Section 6.4.1:

**Delete:** All the deliverables must be received on or before February 1, 2019

**Insert:** All the deliverables must be received as stated in Annex B Statement of Work.

2. At Annex B, Section 6, The Deliverables Table is amended as follows:

**Delete:**

No.	Deliverable, with Statement of Work (SOW) or Statement of Requirement (SOR) reference	Delivery timeline after Contract award
6.6	Factory Acceptance (SOW 5.4.1) Acceptance test procedure (SOW 5.4.2) Acceptance test traceability analysis (SOW 5.4.3) Acceptance test dry run (SOW 5.4.4) Acceptance test readiness review (SOW 5.4.5) Final system design document (SOW 5.4.6) Physical configuration audit (SOW 5.4.8) Functional configuration audit (SOW 5.3.5) Hierarchical equipment list (SOW 5.3.6) Equipment specifications	7 months
6.7	Equipment Deliveries  (SOR 1.1.1 to 1.1.3) Signal processing equipment (SOR 1.1.4) Recorder (SOR 1.1.6) Operator console	7 months
6.8	Application Delivery  (SOR 1.4) Configuration application (SOR 1.5) Monitoring application (SOR 1.6) Quick Look application	7 months 7 months 7 months
6.9	256 Channel Packaging and Delivery  (SOR 4.1) Equipment racks (SOR 4.2) Shipping containers	7 months 7 months
6.10	Logistics Support  (SOW 5.5.1.1) Functional component spares (SOW 5.5.1.2) Replacement hard drives (SOW 5.5.1.3) Cable interconnect spares (SOW 5.5.2.1) User manuals (SOW 5.5.3.1) Technical Support (SOW 5.5.3.2) Equipment and Application Training (SOW 5.5.3.3) Extended 2 year Warranty	7 months 7 months 7 months 7 months 7-31 months 6-10 months 7-31 months

6.11	Contract Option A  (SOW 5.6) 1024 Channel High Frequency Signal Processing and Data Recorder System	7 months after Option A is exercised
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**Insert:**

No.	Deliverable, with Statement of Work (SOW) or Statement of Requirement (SOR) reference	Delivery timeline after Contract award
6.6	Factory Acceptance  (SOW 5.4.1) Acceptance test procedure (SOW 5.4.2) Acceptance test traceability analysis (SOW 5.4.3) Acceptance test dry run (SOW 5.4.4) Acceptance test readiness review (SOW 5.4.5) Final system design document (SOW 5.4.6) Physical configuration audit (SOW 5.4.8) Functional configuration audit (SOW 5.3.5) Hierarchical equipment list (SOW 5.3.6) Equipment specifications	7-8 months
6.7	Equipment Deliveries  (SOR 1.1.1 to 1.1.3) Signal processing equipment (SOR 1.1.4) Recorder (SOR 1.1.6) Operator console	7-8 months
6.8	Application Delivery  (SOR 1.4) Configuration application (SOR 1.5) Monitoring application (SOR 1.6) Quick Look application	7-8 months 7-8 months 7-8 months
6.9	256 Channel Packaging and Delivery  (SOR 4.1) Equipment racks (SOR 4.2) Shipping containers	7-8 months 7-8 months
6.10	Logistics Support  (SOW 5.5.1.1) Functional component spares (SOW 5.5.1.2) Replacement hard drives (SOW 5.5.1.3) Cable interconnect spares (SOW 5.5.2.1) User manuals (SOW 5.5.3.1) Technical Support (SOW 5.5.3.2) Equipment and Application Training (SOW 5.5.3.3) Extended 2 year Warranty	7-8 months 7-8 months 7-8 months 7-8 months 7-31 months 6-10 months 7-31 months
6.11	Contract Option A	

	(SOW 5.6) 1024 Channel High Frequency Signal Processing and Data Recorder System	8 months after Option A is exercised
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