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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**  
THIS DOCUMENT CONTAINS A SECURITY  
REQUIREMENT / DOCUMENT CONTIENT  
DES EXIGENCES RELATIVES À LA SÉCURITÉ

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

**Issuing Office - Bureau de distribution**  
Acquisition Branch, STAMS, ITSPD / Direction  
générale des acquisitions, SGAST, DASIT  
Computer Hardware Division  
Div. de l'équipement informatique  
Place du Portage, Phase III, 4C2  
11 Laurier Street/11, rue Laurier  
Gatineau  
Québec  
K1A 0S5

<b>Title - Sujet</b> HIGH SPEED STREAMING DATA RECORDER	
<b>Solicitation No. - N° de l'invitation</b> W7714-156005/A	<b>Amendment No. - N° modif.</b> 002
<b>Client Reference No. - N° de référence du client</b> W7714-156005	<b>Date</b> 2015-01-23
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$EJ-462-28284	
<b>File No. - N° de dossier</b> 462ej.W7714-156005	<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 2015-02-05</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> Morin, Sylvie	<b>Buyer Id - Id de l'acheteur</b> 462ej
<b>Telephone No. - N° de téléphone</b> (819) 956-1377 ( )	<b>FAX No. - N° de FAX</b> (819) 956-1156
<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> Raison sociale et adresse du fournisseur/de l'entrepreneur	
<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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## SOLICITATION AMENDMENT 002

This solicitation amendment is raised to:

- 1- provide answers to bidders questions in relation to this RFP.
- 2- amend the RFP as detailed in appendix A001.
- 3- extend the solicitation period of the RFP as detailed in appendix A002.

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### Question 3

For a ultra wideband system with multi GPS sampling rate and a 1.2 GHz BW, centred on 800 MHz (as per requirement 5.1.6), a DC coupling requirement requires some clarification. The requirement 5.1.6 translates to an input signal that spans from 200 MHz to 1.4 GHz (1.2 GHz BW, centred on 800 MHz). Thus input DC coupling is meaningless when the minimum input signal frequency is limited to 200 MHz (based on requirement 5.1.6).

We propose that the input DC coupling be changed to a spec for a minimum input signal specification (e.g., 200 MHz based on requirement 5.1.6).

### Answer 3

Requirement 5.1.4 is eliminated. A low end AC frequency response of 200Mhz, based on the implied specification contained in requirement 5.1.6, is sufficient for the intended application.

### Question 4

#### Test Plan – W7714-156005

The test procedure requires us to meet a SINAD (test case 2) specification of better than 49 dB and a SFDR (test case 3) specification of better than 55 dB. Our system easily meets these specifications when using all 12-bits of the A/D's data. We can capture 12-bits of A/D data at 3.2 GS/s to the card's on-board memory, but cannot sustain this data rate off of our A/D card to send to disk.

When operating in the 12-bit mode, the 12-bits of data are packed into a 16-bit word (left justified.) This results in a data rate of 2 bytes x 3.2 GS/s = 6.4 GB/s. Our card cannot continuously stream data to the PCIe interface at this rate. It is limited to ~5.2 GB/s. This is why the 8-bit packing mode (truncating the digitized data to 8-bits) is desirable and commonly used with our real-time recorder. The 12-bit mode is available but is often used with slower sampling rates or with the DDC engaged and an appropriate decimation. Vendor feels confident that they have the fastest recording systems in the world and other vendors will have the same problem or worse.

Can the end user clarify how he intends to use the system so that we can determine what the best way is to run this test?

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**Answer 4**

Digitizer performance will be evaluated using data acquired in 12bit sampling mode (Capturing test data to on-board memory is an acceptable method so long as that data can be extracted for analysis). The data streaming performance will be evaluated using 8bit packing.

**Question 5**

Test Case #1 requires us to sweep a signal across the entire band of interest (from 200 MHz to 1400 MHz) and plot the spectrum. We assume that customer wants to do this since he will be producing an IF out of his RF downconverter at 800 MHz with a 1.2 GHz bandwidth. Without the RF downconverter, we will need to provide an anti-aliasing filter. This is not a simple filter design.

Will the customer be providing this or does he expect the vendor to supply this filter for testing?

**Answer 5**

DRDC will provide the anti-alias filter.

**Question 6****STATEMENT OF REQUIREMENT W7714-156005 Section 5.1.4**

We don't understand why the need for DC coupling for a system that will take an IF input at 800 MHz with a 1.2 GHz bandwidth. This is not standard at all and while we could accommodate this, it will add to the price.

Is the DC coupling really necessary or can you accept AC coupling only?

**Answer 6**

See response to Q3

**Question 7****STATEMENT OF REQUIREMENT W7714-156005 Background Section 2**

SOR lists the Ultra Wideband Digitizer (UWD), Mass Storage Device (MSD) and Control & Display Workstation (CDW) as three separate components. The UWD streams data to the MSD over a fibre optic link and control takes place separately from the CDW.

We have a lot of flexibility with our systems and actually have the UWD, MSD and CDW integrated into a single chassis system. This is less expensive than having 3 separate components, however we do have the ability to separate each component, if necessary.

The most cost effective solution would be to provide a single system with the ability to separate the CDW easily. The control can take place from the single system or remotely via Ethernet and a separate workstation or laptop.

Does your customer require all 3 components to be separated or will he accept a fully integrated solution?

**Answer 7**

The Ultra-Wideband Digitizer(UWD) must be a separate component; this is to preserve the option for it to be located remotely from the rest of the system. For example - at the top of a tower. However, It is acceptable to combine the Mass Storage Device(MSD) and Control and Display Workstation (CDW) into a single chassis.

**Question 8**

Is it possible to extend the closing bid deadline of January 30?

**Answer 8**

Please refer to the appendix A002.

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**Appendix A001**

At Annex A - Statement of Requirement, section 5, requirement 5.1.4 is amended as follows:

Delete: 5.1.4 Each channel of the UWD must allow for user control over the selection of AC or DC input coupling.

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**Appendix A002**

The closing date of the solicitation is amended as follows:

Delete: January 30, 2015 at 2:00 PM EST

Solicitation No. - N° de l'invitation

W7714-156005/A

Amd. No. - N° de la modif.

002

Buyer ID - Id de l'acheteur

462ej

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

W7714-156005

File No. - N° du dossier

462ejW7714-156005

CCC No./N° CCC - FMS No/ N° VME

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Insert: **February 05, 2015 at 2:00 PM EST.**