



National Defence

Défense nationale

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Quartier général de la Défense nationale
Ottawa (Ontario)
K1A 0K2

**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

**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

Proposal To: National Defence Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods and services listed herein and on any attached sheets at the price(s) set out therefore.

Proposition à : Défense nationale Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens et services énumérés ici et sur toute feuille ci-annexée, au(x) prix indique(s).

**Solicitation Closes –
L'invitation prend fin**

At – à : 14 :00 EDT

On - le : 9 June 2017

Amendment No. – No modif. 002		Page 1 of/de 3
Title/Titre Wideband Recorders/ Enregistreurs à large bande		Solicitation No – N° de l'invitation W8474-187448
Date 6 June 2017		
Address Enquiries to – Adresser toutes questions à Bell, Jodi Jodi.Bell@forces.gc.ca		
Telephone No. – N° de téléphone 613-993-6218	Fax No.– N° de fax	
Destination See herein Voir aux présentes		

Instructions:

Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item.

Instructions: Les taxes municipales ne s'appliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés « rendu droits acquittés », tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.

Delivery required - Livraison exigée	Delivery offered - Livraison proposée
Vendor Name and Address - Raison sociale et adresse du fournisseur	
Name and title of person authorized to sign on behalf of vendor (type or print) - Nom et titre de la personne autorisée à signer au nom du fournisseur (caractère d'imprimerie)	
Name/Nom _____	Title/Titre _____
Signature _____	Date _____

The purpose of amendment 002 to RFP W8474-187448 is to answer questions from potential bidders.

Q1.

For 500 MHz bandwidth, IF of 1 GHz playback, the input I/Q data rate will be 666.6 MSamples/sec complex (I at 666.6 MSamples/sec, Q at 666.6 MSamples/sec). The in-built Digital Up Converter will appropriately upconvert and create a 1 GHz IF signal. Please confirm?

A1.

The analogue output centred on a 1GHz IF will be used as in input to other systems utilizing ADC sampling at 1GSa/s. 1.3GSa/s was deemed as the minimum acceptable sample rate to achieve enough fidelity in the played signal to use with these systems.

Q2.

For compliance with Q1 this must also be 1.33 GSa/s. Moreover, for an IF of 1.0 GHz and 500 MHz bandwidth, the sampling freq must be 1.33 GHz. ($IF = 0.75 * \text{Sampling rate}$). This is also required for the Digital Down Conversion (I/Q data). Please confirm?

A2.

An input sample rate of 1.33GSa/s (no less) for recording is acceptable with the understanding that there is no loss of fidelity for the analogue output.

Q3.

For 160 MHz IF, the sampling will be 640 MHz ($IF = 0.25 * \text{Sampling rate}$). Please confirm that this is acceptable?

A3.

Yes.

Q4.

For 1 GHz IF, the ADC sampling rate will be 1.3 GHz – see Q2.

A4.

Acknowledged for Q2.

Q5. Output digital files in PDW will be done after recording, when data is being transferred. Actual recording will be continuous I/Q RF signal. Please confirm. The PDW digital output will have MIDAS header (to be provided as Client support – section 3 in RFP). Please confirm, the type number of the Platinum header?

A5.

Yes. Platinum header type-1000 for I/Q data and type-6003 for PDW (Difference Time Of Arrival, Pulse Repetition Interval, Pulse Duration, Time of Arrival, Amplitude (dB)...)

Q6.

I'm assuming in this case, playback refers to "digital playback". In this case this will be part of the analysis software. What does retaining frequency and pulse information mean?

A6.

Yes. In conjunction with para 2.2h, when a signal is selected for output, it is normally down sampled to an IF frequency and output to a recorder. In some systems, if the operator does not annotate the original frequency before recording then during playback the center frequency would look like 1GHz without reference to the original frequency. We would like the original centre frequency information to be maintained in the file and used during the creation of the Platinum type 1000 headers.

Q7.

Analysis is performed on recorded data. Please confirm? PDW result is also part of the analysis sw.

A7.

Yes.

Q8.

Clipping of recorded data files will be on files for export to user PC. Please confirm?

A8.

Yes. E.G. Signals were recorded using the 500MHz bandwidth. A specific signal within the recorded bandwidth is to be isolated that has a bandwidth of 40MHz. This signal is "clipped" from the original large file while maintaining all attributes of the signal (e.g. original frequency) in order to reduce the output file size and ease of transferring.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED