

**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**

Bid Receiving
PWGSC
33 City Centre Drive
Suite 480C
Mississauga
Ontario
L5B 2N5
Bid Fax: (905) 615-2095

**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
Public Works and Government Services Canada
Ontario Region
33 City Centre Drive
Suite 480
Mississauga
Ontario
L5B 2N5

| | |
|---|---|
| Title - Sujet Dual Polarization Upgrade Package | |
| Solicitation No. - N° de l'invitation K3D33-141001/A | Amendment No. - N° modif. 007 |
| Client Reference No. - N° de référence du client K3D33-141001 | Date 2014-11-20 |
| GETS Reference No. - N° de référence de SEAG PW-\$TOR-031-6670 | |
| File No. - N° de dossier TOR-4-37057 (031) | CCC No./N° CCC - FMS No./N° VME |
| Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2014-11-27 | Time Zone Fuseau horaire Eastern Daylight Saving Time EDT |
| F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/> | |
| Address Enquiries to: - Adresser toutes questions à: Schmidt, Jeff | Buyer Id - Id de l'acheteur tor031 |
| Telephone No. - N° de téléphone (905) 615-2058 () | FAX No. - N° de FAX (905) 615-2060 |
| Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: | |

Instructions: See Herein

Instructions: Voir aux présentes

| | |
|---|--|
| Delivery Required - Livraison exigée | Delivery Offered - Livraison proposée |
| Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur | |
| Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur | |
| Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie) | |
| Signature | Date |

Solicitation No. - N° de l'invitation

K3D33-141001/A

Amd. No. - N° de la modif.

007

Buyer ID - Id de l'acheteur

tor031

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

K3D33-141001

File No. - N° du dossier

TOR-4-37057

CCC No./N° CCC - FMS No/ N° VME

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AMENDMENT 007 HAS BEEN ISSUED TO ANSWER BIDDER QUESTIONS AND EXTEND THE SOLICITATION CLOSING DATE.

At Page 1, Solicitation Closes

Delete: 2014-11-24

Insert: 2014-11-27

For information purposes only: Environment Canada (EC) is currently working on an additional requirement for their C Band Test Radar system. A Request for Information (RFI) No. K3D33-140005/A was issued on May 13, 2014 and closed on June 12, 2014. A subsequent industry day was held on September 18, 2014 to engage the international radar community.

The IRIS/RDA software and other devices mentioned below are provided as Government Furnished Equipment (GFE). The software and devices are the existing install base of products for the EC radar system. Given the other replacement projects that are ongoing at this moment (referred above), EC is trying to maintain its existing install base and are not in a position to replace major components. EC believes there is enough flexibility for the potential bidders to work with the GFE equipment and be able to submit a proposal.

At Annex C, Evaluation, Requirement 1.2.9, GFE provided IRIS/RDA software must be used to acquire and process data, directly control the radar and perform diagnostic and radar calibrations and cannot be modified by a third party.

- Q1.** The requirement states that no modification to the software can be performed. However, all hardware components are controlled through this software. If any new sensor/diagnostic feature is added within the radar system, no vendor besides Vaisala will be able to add any new feature.
- R1.** No bidder can modify software to add new features, including Vaisala. This ensures that any bidder will be using standard IRIS/RDA software for backward compatibility and future upgrade purposes. This requirement includes all bidders (including Vaisala). Only software versions that are officially released and currently available on the Vaisala public site can be used. The current software version is 8.13.4. EC can choose to use earlier versions if required. The existing software provides enough flexibility for third parties to add and control new sensors or diagnostic features using existing utilities without changing the IRIS/RDA software.
- Q2.** The requirement eliminates any effort towards the implementation of any novel and innovative calibration processes currently available through Baron or others by restricting the upgrade process to only be accomplished through Vaisala proprietary software. This ultimately hinders Environment Canada radar network to provide optimal performance.
- R2.** Environment Canada is aware of this fact. A new calibration process is out of scope of this project and not required. This RFP specifies what calibration process is required.

At Annex C, Evaluation, Requirement 1.2.12, The Bidder must not add additional signal processors.

- Q3.** This requirement effectively negates the use of any other signal processor besides an RVP902 which is a Vaisala proprietary processor.
- R3.** The requirement includes the installation of one (1) GFE supplied signal processor. Environment Canada does not require the supply and installation of a bidder supplied signal processor. The

RVP902 is being used as a replacement for the RVP8 and therefore, must be used for equipment compatibility with the rest of the network, training purposes and compatibility with downstream processing systems. Even though Environment Canada has supplied the RVP902 as GFE, the goal is to have industry provide their expertise to update and install the current radar sites as described in the solicitation.

- Q4.** Several processors exist in the weather radar industry which meets the same specifications as an RVP902. However, every vendor is forced to use the RVP902 due to this requirement.
- R4.** The RVP902 must be used for equipment compatibility with the rest of the network, training purposes and compatibility with downstream processing systems. This requirement is not to completely update Environment Canada's radar network system rather its intended goal is to provide the installation of EC's GFE hardware onto existing radars to enable Dual-Polarization data to be collected.

At Annex C, Evaluation, Requirement 1.2.13, RVP901 (IFDR) has 20 miscellaneous TTL I/O lines, 20 differential Line pairs and 6 analog inputs. Only those I/O lines must be used for any status, monitoring or control purposes inside the enclosure box

- Q5.** This requirement forces the use of an RVP901 to interface between the signal processor and the various hardware components. This component is also proprietary to Vaisala and if any vendor decides to use a component that the RVP901 has not interfaced in the past to, they will be dependent on Vaisala providing that interface.
- R5.** The RVP901 provides general purposes I/O lines that can be programmed via available utilities to perform specific functionality. I/O lines can be used as command or status lines via bitex utility or control logic equations. There is no restriction in existing Vaisala software for how those pins can be utilized and what kind of equipment it can interface as long as stated voltage and current levels aren't exceeded. Using RVP901 interface is no different than using I/O 62 panel that any contractor has experience working with. Environment Canada is successfully using I/O 62 panels to interface to equipment today.
- Q6.** This essentially puts every vendor at the mercy of Vaisala and this in turn leads to the price quote from every other vendor higher since NRE costs need to be paid to Vaisala for any modification. Every vendor is hence dependent on Vaisala to pass the acceptance tests which begs the question whether Vaisala being a competitor of every other vendor would provide optimal quality of work.
- R6.** No modification to existing code is allowed. Bidders must use COTS version. No bidder, including Vaisala can modify the code. The winning bidder will be provided with GFE equipment and software by Environment Canada and there is no requirement to deal directly with Vaisala.

At Annex C, Evaluation, Requirements

1.2.15, Stable Local Oscillator (STALO) must be controlled by the RVP901 (IFDR) using digital control interface (tuning);

1.5.2, RVP901 (IFDR) must use 10 MHz external reference clock to phase lock the RVP901 (IFDR) sampling in each channel to the Stable Local Oscillator (STALO).

1.6.5, STALO must have monitoring capabilities that identify internal error conditions and is available for external electronic monitoring. External monitoring must be utilized using RVP901 (IFDR) I/O pins.

Q7. No vendor can implement the Stalo control interface besides Vaisala through the RVP901 since the code that interfaces with the Stalo is proprietary to Vaisala. Also, vendors have been warned through Requirement 1.2.9 that no modification can be made to the IRIS/RDA code (However, Vaisala being the owner of that code is hence not bound by that requirement). If the vendor identifies a Stalo with better performance characteristics than the one that can be controlled currently by the RVP901, the vendor is yet again dependent on Vaisala in being able to implement the new interface for controlling the Stalo.

R7. Environment Canada is aware of commercially available STALO's that satisfy all mandatory specifications. Therefore, there is no restriction for any bidder to obtain such a device to use in its design. Vaisala documentation specifies which STALO can be used with their equipment. As mentioned before, no bidder, including Vaisala, is allowed to alter software and only currently released software versions can be used.

All bidders can source STALO's that are currently listed as compatible in the Vaisala documentation, that are known to be compatible. There is no option to provide any STALO other than one that is already compatible with the RVP900 system. All bidders must use a STALO already known to work with 8.13.4 code.

No bidder is allowed to modify IRIS/RDA code. All bidders are under the exact same restrictions to only use currently released code and any hardware that it is compatible with.