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 0A1 / Noyau 0A1
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
Scientific, Medical and Photographic Division / Division de l'équipement scientifique, des produits photographiques et pharmaceutiques
11 Laurier St./ 11 rue, Laurier
6B1, Place du Portage
Gatineau, Québec K1A 0S5

Title - Sujet UPG. KIT - CARBORNE RADIAT. DETECT.	
Solicitation No. - N° de l'invitation 47064-146982/A	**Amendment No. - N° modif.** 003
Client Reference No. - N° de référence du client 1000316982	**Date** 2013-11-27
GETS Reference No. - N° de référence de SEAG PW-$$PV-924-63711	
File No. - N° de dossier pv924.47064-146982	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-12-10	**Time Zone** **Fuseau horaire** Eastern Standard Time EST
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☑ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Caron, Anne	**Buyer Id - Id de l'acheteur** pv924
Telephone No. - N° de téléphone (819) 956-3874 ( )	**FAX No. - N° de FAX** (819) 956-3814
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**

Canada

Solicitation Amendment No. 3

This solicitation amendment is raised to post Questions and Answers and to amend solicitation:

QUESTIONS AND ANSWERS:

Question 1: Ref 1:42 English / French language requirement: Can English only manuals be supplied with the submission with French ones being supplied at a later date?
Answer 1: DID 001 indicated that Manuals are to be submitted with Technical Bid in both French and English . Solicitation will be amended to change the Manual delivery date. They are only required with the equipment delivery and not with the technical bids. (*See Amendment below)*

Question 2: Ref 1.1.3 Pre-Award Testing: The DVT requires that an upgrade kit as outlined in Annex A be supplied for evaluation. However, the upgrade kit as defined consists of ancillary equipment that is independent of the radiation detection system and it would not be practical for a vendor to supply this instrumentation (items 1.2, 1.5 thru 1.8) prior to any award. Please clarify.
Answer 2: DVT will (*See Amendment below)*

Question 3: Ref Annex C, item 2 Energy resolution: For the 4 x 4 x 16 NaI crystal, the standard energy resolution from Saint Gobain is 8.3%. Energy resolution (FWHM) of 8% for Cs-137 is possible and typical values are in high seven percentage. The value of 2% is not achievable for NaI using standard definition of energy resolution and not a legitimate value that a manufacturer of NaI crystals would publish. The 2% can be artificially derived by mathematical processing but is not the true energy resolution. Please clarify. See also note 1 below.
Answer 3: Correct, this item was written before we decided that we would specify the detector type as NaI. Item 2 refers to the true energy resolution. However, this is a rated requirement therefore everyone will be rated equially.

Question 4: Ref Annex A Sec 23 Dose rate This section refers to a value expressed as Sv/h. Please clarify the units.
Answer 4: The correct unit is micro Sieverts per hour. (*See Amendment below)*

Question 5: Ref Annex A section 1 Equipment In the final paragraph of section 1, a cabinet is commented upon but it is not clear if the supply of a cabinet is a requirement or it already exists. Similarly, there is an extensive list of ancillary equipment to be supplied as indicated in items 1.2 thru 1.8 that is to be fitted into the cabinet. However it is unclear if these items are to be supplied loose or integrated into the cabinet by the vendor or CBSA. Please clarify.
Answer 5: The term used is enclosure, not cabinet, and it must be supplied by the bidder. The ancillary equipment detailed in section 1.2, 1.3, 1.6, 1.7 and 1.8 must be fitted into the enclosure (1.4 and 1.5 are excluded).

Question 6: Refer Annex A item 11 and item 21 Please clarify the two different performance values (item 11: 10 minutes) and (item 21: 2 minutes).
Answer 6: Item 11 refers to start up time in extreme weather conditions (allowing for stabilization) and Item 21 refers to start-up under normal conditions.

Question 7: Ref Annex C section 3 Single Radionuclide Identification the scoring system is unclear. That is, the number of isotopes and the number of points do not correlate. Please clarify.
Answer 7: Your score for the number of isotopes will be calculated as a percentage and converted to a point total out of 25.

Question 8: Note 1 We observed a number of references that pertain to the handheld standard (ANSI 42.34) and not the transportable or mobile standard (ANSI 42.43). Please clarify. For example Annex E DID002 and Annex E DID 003
Answer 8: Correction: Annex E DID 002 should reference ANSI 42.43 not 42.34. Correction: Annex E DID 003 under Description: To provide information relating to the training curriculum for the procured RIID should be changed to: To provide information relating to the training curriculum for the procured CRDS. (*See Amendment below)*

Question 9: Clarification of test procedure.
Can we assume compliance to the ANSI N42.43 is appropriate standard?

Ref: Annex B page 26 and Annex C page 28

In the RFP performance requirement section B6 - Single Radionuclide Identification and Annex C are referring to ANSI N42.43

Annex C.

3 – Single Radionuclide Identification	Identify radionuclides within the time specified by the manufacturer (maximum of 2 min). As per ANSI N42.43, the result should be presented for each radionuclide as the number of correct identifications out of ten at a gamma-ray dose rate of 5 µSv/h.	A) Unshielded B) Behind 5mm steel

Note that the ANSI spec is specifying 5 µR/h (0.05 ìGy/h) at 1 m as the reference radiation field and not 5 µSv/h.

The shielding requirements in ANSI N42.43 are different than the one stated in the RFP. ANSI N42.43 are specifying the shielding requirements in section 6.14.3.1 and 6.14.3.2.
Answer 9: ANSI N42.43 is the appropriate standard, although bidders are only required to test and report on the requirements stated in the RFP. The information contained in the RDP supersedes the standard. Note that the ANSI spec is specifying 5 µSv/h - This was a typo, exposure rate should be 5 µR/h as specified by the standard (*See Amendment below)*

Question 10: Can we assume compliance to the ANSI N42.43 is appropriate standard?

Excerpts From the ANSI N42.43 spec ;

6.14.2.3 Test method—unshielded SNM
Repeat the test described in 6.14.2.2 using HEU, RGPu, and/or WGPu.

6.14.3 Identification of shielded radionuclides

6.14.3 .1 Requirements based on shielding related to shipping containers
The manufacturer shall provide a list of shielded radionuclides that the monitor can identify. For this standard, the source is surrounded by 3 cm of steel on all sides.
The list shall contain the following radionuclides, as a minimum:

133Ba,
137Cs, and

60Co

NOTE—3 cm steel is based on possible shipping container configurations and attenuation of gamma-ray emissions
from each radionuclide.

6.14.3.2 Requirements based on medical treatments

The manufacturer shall provide a list of radionuclides that the monitor can identify when monitoring people with medical treatments. For this standard, the source is surrounded by 7.62 cm of polymethyl methacrylate (PMMA). The list shall contain the following radionuclides, as a minimum:

67Ga,
99mTc,
131I, and
201Tl

Answer 10:
SNM tests are not required for the RFP.
3 cm of steel should be used as specified by the standard. (*See Amendment below)*
7.62 cm of PMMA should be used for these medical isotopes as specified in the standard. (*See Amendment below)*

AMEND SOLICITATION AS FOLLOWS:

Heather on pages 32 to 37 and 63 to 77:
Solicitation No.- N° de l'invitation 47064-146977/A replace with 47064/146982/A
Client Ref No. - N° de réf. du client 1000316977 replace by 1000316982
File No. - N° du dossier Pv92447064-146977 replace by pv92447064-146982

DELETE:

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION
1.1.3 Pre-Award Testing - Data Validation Test (DVT)
Following the bid evaluations, the two (2) Bidders with the Highest Combined Rating of Technical Merit and Price will advance to Pre-Award Testing - Data Validation Test (DVT) on a system of the type proposed for purchase in order to validate performance claims and system compliance with the requirements. The upgrade kits must be supplied to CBSA's location (Ottawa, Ontario) for independent verification and testing (period of 30 days) within ten (10) business days of notification.

Test results from the DVT will be used to confirm compliance with mandatory specifications and point allocation based on the Point Rated Technical Criteria Matrix. Pre-award testing will be performed only once and failure to demonstrate compliance with the mandatory specifications will result in the Bidder's proposal being declared non-responsive.

If results of the Pre-Award Testing - Data Validation Test (DVT) change the bidders combined rating and if both bidders combined rating drop below the 3rd ranked bidder, then that bidder will advance to Pre-Award Testing - Data Validation Test (DVT).

ANNEX "A" - STATEMENT REQUIREMENTS
23. Gamma Dose Rate Indication

The relative intrinsic error in the response of the upgrade kit to the reference dose rate from ^{137}Cs must not exceed ±30% for dose rates from 1 ìSv/h to the manufacturer-stated maximum response of the instrument.

ANNEX "B" – MANDATORY SPECIFICATIONS

B6 - Single Radionuclide Identification	Identify radionuclides within the time specified by the manufacturer (maximum of 2 min). The manufacturer must provide radionuclide-specific test results (for radionuclides indicated with an asterisk, test results should be provided if possible). · Unshielded: - Must be able to identify ^{40}K, ^{57}Co, ^{60}Co, ^{133}Ba, ^{137}Cs, ^{192}Ir, ^{226}Ra, ^{232}Th, ^{241}Am, ^{67}Ga; - Should be able to identify ^{99m}Tc, ^{125}I, ^{131}I, ^{201}Tl, ^{233}U*, ^{235}U*, ^{238}U*, Pu* [Reactor grade plutonium (> 6% ^{240}Pu)]. · Behind 5 mm steel shielding: - Should be able to identify ^{40}K*, ^{57}Co, ^{60}Co, ^{67}Ga, ^{99m}Tc, ^{125}I*, ^{131}I, ^{133}Ba, ^{137}Cs, ^{192}Ir, ^{201}Tl, ^{226}Ra*, ^{232}Th, ^{233}U*, ^{235}U*, ^{238}U*, Pu* [Reactor grade plutonium (>6% ^{240}Pu)], ^{241}Am. ***This requirement will be further evaluated on a point based system according to Point Rated Technical Criteria - Annex "C".***	***DID 002*** - Detector performance testing report

ANNEX C

3 - Single Radionuclide Identification	Identify radionuclides within the time specified by the manufacturer (maximum of 2 min). As per ANSI N42.43, the result should be presented for each radionuclide as the number of correct identifications out of ten at a gamma-ray dose rate of 5 µSv/h.	Unshielded ^{40}K ___ / 10 ^{57}Co ___ / 10 ^{60}Co ___ / 10 ^{133}Ba ___ / 10 ^{137}Cs ___ / 10 ^{192}Ir ___ / 10 ^{226}Ra ___ / 10 ^{232}Th ___ / 10 ^{241}Am ___ / 10 ^{67}Ga ___ / 10 Behind 5 mm steel shielding ^{57}Co ___ / 10 ^{60}Co ___ / 10 ^{67}Ga ___ / 10 ^{99m}Tc ___ / 10 ^{131}I ___ / 10 ^{133}Ba ___ / 10 ^{137}Cs ___ / 10 ^{192}Ir ___ / 10 ^{201}Tl ___ / 10 ^{232}Th ___ / 10 ^{241}Am ___ / 10	8	25	0.1 points per correct identification out of ten IDs, according to ANSI test procedures (max 1 point per isotope)Min. points: 8 (i.e. 8/10 correct IDs for 10 mandatory radioisotopes); max points: 25 (10/10 for all listed isotopes)

ANNEX "E" – DATA ITEM DESCRIPTION SHEETS (DID)

TITLE	**Manuals**
DID NUMBER	**DID 001**
DESCRIPTION / PURPOSE	To provide Operator's and Technical manuals.
SUBMISSION DATE	Submission with Technical Bid
INSTRUCTIONS – Format	Both French and English versions of the Operator's Manual must be supplied in electronic form (searchable .pdf format) to the CBSA's Ottawa-based Detection Technology Section (DTS). Hard copies of the Operator's Manuals (in both French and English) must be included with each upgrade kit delivered. These must use standard terminology, be logically sectioned and all figures and tables must be properly referenced.
INSTRUCTIONS – Content	The supplied documents must include the following information as a minimum: • Manufacturer's name and contact information; • Operating instructions and restrictions; • Troubleshooting guide; • Power supply requirements; • Communication protocols used and data formats; • Complete list of detector specifications.

TITLE	**Detector Performance Testing Report**
DID NUMBER	**DID 002**
DESCRIPTION / PURPOSE	To validate the Bidder's claims regarding the upgrade kit's performance, and to enable CBSA to complete the Evaluation Matrix of the Technical Bid Evaluation.
SUBMISSION DATE	Submission with Technical Bid
INSTRUCTIONS – Format	The Bidder must provide a Detector Performance Report. This report must be formatted accordingly: • Title page (with DID No, Title, Author, Date) • Table of Contents • Page numbers • Figure and Table numbers Hard copies of all documents must be provided and soft copies (searchable PDF format) are requested at the time of submission.
INSTRUCTIONS – Content	The following information, at a minimum, must be provided in the Detector Performance Report. The report should be sectioned accordingly: **A. Testing Report** The Bidder must conduct, and report on, a formal upgrade kit performance test done with a upgrade kit of the same model proposed for purchase by the Government of Canada. Results of previous tests may be used if they comply with the requirements below. The testing will be done according to the procedures defined in the ANSI 42.34 standard (2006), and must clearly evaluate the following aspects: ·Power Requirements Radiological testing performance

	• Single radionuclide identification (shielded and unshielded) • Simultaneous radionuclide identification • Neutron indication in the presence of photons • Over-range characteristics for identification • Determination of full-energy-peak efficiency • Determination of FWHM **B. Additional Information** The Bidder may submit any additional technical information they deem to be pertinent, such as (but not limited to) additional test results, third party reports, or scientific publications related to the proposed instrument.

TITLE	**Operator Training**
DID NUMBER	**DID 003**
DESCRIPTION / PURPOSE	To provide information relating to the training curriculum for the procured RIID.
SUBMISSION DATE	Submission of Operator's Training Outline – within 30 days following contract award
INSTRUCTIONS - Format	
INSTRUCTIONS- Content	Operator Training must be comprehensive and must include (but not be limited to) detailed instructions on: **A. Radiation and safety** • basic principles of radiation safety **B. Upgrade kit Operations** • setup of the equipment • conducting searches and identifying isotopes • troubleshooting common problems All Training Materials, including but not limited to manuals and presentations, must be provided to CBSA in both French and English for review prior to course delivery. Training Materials must be provided with course delivery.

REPLACE BY:

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1.1.3 Pre-Award Testing - Data Validation Test (DVT)

Following the bid evaluations, the two (2) Bidders with the Highest Combined Rating of Technical Merit and Price will advance to Pre-Award Testing - Data Validation Test (DVT) on a system of the type proposed for purchase in order to validate performance claims and system compliance with the requirements. The Bidder must conduct the Data Validation Test at a mutually agreed upon date/time/location (system must be made available within 15 days after notification of compliant bid), only one DVT will be performed per compliant system; CBSA personnel must be able to observe and direct the testing.

Test results from the DVT will be used to confirm compliance with mandatory specifications and point allocation based on the Point Rated Technical Criteria Matrix. Pre-award testing will be performed only once and failure to demonstrate compliance with the mandatory specifications will result in the Bidder's proposal being declared non-responsive.

If results of the Pre-Award Testing - Data Validation Test (DVT) change the bidders combined rating and if both bidders combined rating drop below the 3rd ranked bidder, then that bidder will advance to Pre-Award Testing - Data Validation Test (DVT).

CBSA will be responsible for all travel and living expenses for CBSA and PWGSC personnel attending the Testing. The Bidder will be responsible for all costs to furnish test equipment, test fixtures, radiation survey instruments required to demonstrate systems compliance. The Bidder will be responsible for all travel and living expenses for its personnel attending/performing the Testing.

ANNEX "A" - STATEMENT REQUIREMENTS

23. Gamma Dose Rate Indication

The relative intrinsic error in the response of the upgrade kit to the reference dose rate from ^{137}Cs must not exceed ±30% for dose rates from 1 μSv/h to the manufacturer-stated maximum response of the instrument.

ANNEX "B" – MANDATORY SPECIFICATIONS

B6 - Single Radionuclide Identification	Identify radionuclides within the time specified by the manufacturer (maximum of 2 min). The manufacturer must provide radionuclide-specific test results (for radionuclides indicated with an asterisk, test results should be provided if possible). · Unshielded: - Must be able to identify ^{40}K, ^{57}Co, ^{60}Co, ^{133}Ba, ^{137}Cs, ^{192}Ir, ^{226}Ra, ^{232}Th, ^{241}Am, ^{67}Ga; - Should be able to identify ^{99m}Tc, ^{131}I, ^{201}Tl, ^{235}U*, ^{238}U*, Pu* [Reactor grade plutonium (> 6% ^{240}Pu)]. · Behind 3 cm steel shielding: - Should be able to identify ^{40}K*, ^{57}Co, ^{60}Co, ^{133}Ba, ^{137}Cs, ^{192}Ir, ^{226}Ra*, ^{232}Th, ^{235}U*, ^{238}U*, Pu* [Reactor grade plutonium (>6% ^{240}Pu)], ^{241}Am. · Behind 7.62 cm of polymethyl methacrylate (PMMA):	***DID 002*** - Detector performance testing report

	- Should be able to identify ^{67}Ga, ^{99m}Tc, ^{131}I, ^{201}Tl. ***This requirement will be further evaluated on a point based system according to Point Rated Technical Criteria - Annex "C".***	

ANNEX C

3 - Single Radionuclide Identification	Identify radionuclides within the time specified by the manufacturer (maximum of 2 min). As per ANSI N42.43, the result should be presented for each radionuclide as the number of correct identifications out of ten at a gamma-ray dose rate of 5 µR/h.	Unshielded ^{40}K ___ / 10 ^{57}Co ___ / 10 ^{60}Co ___ / 10 ^{133}Ba ___ / 10 ^{137}Cs ___ / 10 ^{192}Ir ___ / 10 ^{226}Ra ___ / 10 ^{232}Th ___ / 10 ^{241}Am ___ / 10 ^{67}Ga ___ / 10 Behind 3 cm steel shielding ^{57}Co ___ / 10 ^{60}Co ___ / 10 ^{133}Ba ___ / 10 ^{137}Cs ___ / 10 ^{192}Ir ___ / 10 ^{232}Th ___ / 10 ^{241}Am ___ / 10 Behind 7.62 cm of polymethyl methacrylate (PMMA) ^{67}Ga ___ / 10 ^{99m}Tc ___ / 10 ^{131}I ___ / 10 ^{201}Tl ___ / 10	8	25	0.1 points per correct identification out of ten IDs, according to ANSI test procedures (max 1 point per isotope)Min. points: 8 (i.e. 8/10 correct IDs for 10 mandatory radioisotopes); max points: 25 (10/10 for all listed isotopes)

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SUBMISSION DATE	Submission with Equipment
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INSTRUCTIONS – Content	The supplied documents must include the following information as a minimum: • Manufacturer's name and contact information; • Operating instructions and restrictions; • Troubleshooting guide; • Power supply requirements; • Communication protocols used and data formats; • Complete list of detector specifications.

TITLE	**Detector Performance Testing Report**
DID NUMBER	**DID 002**
DESCRIPTION / PURPOSE	To validate the Bidder's claims regarding the upgrade kit's performance, and to enable CBSA to complete the Evaluation Matrix of the Technical Bid Evaluation.
SUBMISSION DATE	Submission with Technical Bid
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	• Single radionuclide identification (shielded and unshielded) • Simultaneous radionuclide identification • Neutron indication in the presence of photons • Over-range characteristics for identification • Determination of full-energy-peak efficiency • Determination of FWHM **B. Additional Information** The Bidder may submit any additional technical information they deem to be pertinent, such as (but not limited to) additional test results, third party reports, or scientific publications related to the proposed instrument.

TITLE	**Operator Training**
DID NUMBER	**DID 003**
DESCRIPTION / PURPOSE	To provide information relating to the training curriculum for the procured CRDS.
SUBMISSION DATE	Submission of Operator's Training Outline – within 30 days following contract award
INSTRUCTIONS - Format	
INSTRUCTIONS- Content	Operator Training must be comprehensive and must include (but not be limited to) detailed instructions on: **A. Radiation and safety** • basic principles of radiation safety **B. Upgrade kit Operations** • setup of the equipment • conducting searches and identifying isotopes • troubleshooting common problems All Training Materials, including but not limited to manuals and presentations, must be provided to CBSA in both French and English for review prior to course delivery. Training Materials must be provided with course delivery.

All other terms and conditions remain the same