



**RETURN BIDS TO:**

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**Bid Receiving - PWGSC / Réception des soumissions  
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**11 Laurier St./ 11 rue, Laurier**  
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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**

**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

<b>Title - Sujet</b> JOINT CBRN GEN. SERVICE RESPIRATOR	
<b>Solicitation No. - N° de l'invitation</b> W8476-155141/C	<b>Amendment No. - N° modif.</b> 017
<b>Client Reference No. - N° de référence du client</b> W8476-155141	<b>Date</b> 2016-09-14
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$PV-867-71135	
<b>File No. - N° de dossier</b> pv896.W8476-155141	<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 2016-10-31</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Daylight Saving Time EDT
<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> Beach, Isabelle	<b>Buyer Id - Id de l'acheteur</b> pv896
<b>Telephone No. - N° de téléphone</b> (613) 867-0709 ( )	<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/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

**PWGSC**  
**Joint CBRN GSR – RFP, Amendment 017**

*This amendment is raised to update the JOINT CBRN GEN. SERVICE RESPIRATOR, Solicitation No. W8476-155141/C, dated 23 June 2016*

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**REFERENCE: Amendment 016, dated 2016-09-13, Question 139:**

Appendix FJ – Test Plan Summary, page F- FJ - 29/58

Canada identified potential conflict (when a failure is identified) between Appendix FJ Test Plan Summary and Annex A, Appendix AA – Systems Requirements Specification.

Appendix FJ – Test Plan Summary has been amended to remove the maximum number of acceptable observed defects in each “Defect severity categorization”. This eliminates the potential conflict (when a failure is identified) between Appendix FJ Test Plan Summary and Annex A, Appendix AA – Systems Requirements Specification. Therefore any failure found will be submitted to Root Cause Failure Analysis and the result evaluated against the requirements listed in Annex A, Appendix AA – System Requirements Specification. Additionally, modifications were also completed from the first sentence of Appendix FJ to end of “Table 1 – Defect tracking scheme” to provide further clarification on the failures and defects criticality matrix.

Further, in Annex F – Bid Evaluation Plan, reference to maximum number of acceptable observed defects have been removed.

Therefore:

**DELETE:**

Appendix FJ – Test Plan Summary, from first sentence to end of Table 1 – Defect tracking scheme.

**INSERT:**

**Bid Evaluation Failures and Defects Criticality Matrix**

A product defect is any characteristic of a product which hinders its usability for the purpose for which it was designed and manufactured. Defective items do not perform in a manner consistent with the product's intrinsic or stated characteristics. A defect at the component, equipment, or sub-system level may lead to a failure.

Failure is the lack of ability of a component, equipment, sub system, or system to perform its intended function as designed. Failure may be the result of one or many defects and is the state or condition of not meeting a desirable or intended objective, and may be viewed as the opposite of success.

**Defect severity categorization**

The following three categories of defects, which may lead to failure to meet an SRS, may be observed during bid evaluation.

- Category I - Critical - A defect which may cause severe injury or death, major property damage, or major materiel damage which will result in mission loss.
- Category II - Marginal - A defect which may cause minor injury, minor property or materiel damage which will result in delay or loss of availability or mission degradation.
- Category III - Minor - A defect not serious enough to cause injury, property or materiel damage, but which will result in unscheduled maintenance or repair.

### Identification and documentation of defects and failures

A Root Cause Failure Analysis, supported by inspections and if required supplemental testing, will identify the cause that led to a failure. It will be used to confirm a defect implied or detected by any other means, in order to differentiate defects from failures that are an intrinsic result of design, manufacturing or handling.

- All confirmed defects will be documented and logged with an incident tracking number, tagged, and the item set aside;
- Where no defect can be confirmed by inspection or other confirmatory means, and the item fails a particular performance requirement, the failure will be assigned against the particular SRS and the unit item will remain under test unless it has to be replaced to continue the test;
- In all cases, a Root Cause Failure Analysis will be performed by PMO to determine the final status of the item under test. The result may impact only the item under test or the whole bid offering;
- All defects that would cause failures, and those that actually cause failures, will be documented and recorded.

Failures and their causes will be recorded using the tracking scheme illustrated below. As the table below is not exhaustive, other defects may be observed during verification that are not on this list, in which case they will be assigned a severity by the project team as they occur, using the categorization scheme, and the same documented process will take place. The list of detection means for defects given below is not intended to be exhaustive but illustrative of the most likely means. Inspection may be performed initially by the wearer/user or by an observer, and if so will be confirmed by the test manager.

**Table 1 – Examples of Failure Mode and Defects**

<b>Id #</b>	<b>Component</b>	<b>Failure mode and Defect</b>	<b>Defect Detection Means (possible)</b>
<b>Category I</b>			
1	Mask	Loss of protective integrity due to material failure of Facepiece/ocular Examples of defects: <ul style="list-style-type: none"><li>- Cracking;</li><li>- Puncture</li><li>- Separation at joints/ seams</li><li>- Deformation of face seal</li></ul>	<ul style="list-style-type: none"><li>- Inspection</li><li>- Fails a seal check</li><li>- Fails a leak test</li></ul>
2	Head Harness	Loss of protective integrity due to breakage or disconnection of the harness in use resulting in the mask no longer tight to face	<ul style="list-style-type: none"><li>- Inspection</li></ul>
3	Exhalation Valve	Loss of protective integrity with permanent failure due to valve stuck permanently closed or permanently open; Wearer unable to breathe if valve stuck permanently closed	<ul style="list-style-type: none"><li>- Inspection</li><li>- Fails a leak test</li><li>- Fails a seal check</li><li>- Fails a protection test</li><li>- Wearer unable to breathe</li></ul>

<b>Id #</b>	<b>Component</b>	<b>Failure mode and Defect</b>	<b>Defect Detection Means (possible)</b>
4	Exhalation Valve	Loss of protective integrity due to intermittent or temporary failure; Wearer has difficulty breathing if valve sticking in closed position.	<ul style="list-style-type: none"> <li>- Fails a leak test</li> <li>- Fails a seal check</li> <li>- Fails a protection test</li> <li>- Wearer has difficulty breathing</li> </ul>
5	Ocular	Uncharacteristic fogging hindering vision sufficient to impact Wearer safety	<ul style="list-style-type: none"> <li>- Inspection during operation/use</li> </ul>
6	Mask Drinking Tube	Loss of protective integrity resulting in outside air entering the mask due to broken tube assembly; this failure may require an additional defect of a second valve in order to manifest itself	<ul style="list-style-type: none"> <li>- Fails a seal check</li> <li>- Fails a leak test</li> </ul>
7	Canteen Connector Accessory	Loss of protective integrity resulting in outside air entering breathing airstream or contamination of drinking water in canteen due to: <ul style="list-style-type: none"> <li>- Damaged or poor seal between the cap and the drinking tube or between the cap and the canteen.</li> </ul>	<ul style="list-style-type: none"> <li>- Inspection</li> <li>- Leak during drinking</li> <li>- Fails a leak test</li> <li>- Fails a protection test</li> </ul>
8	Mask/Canister Interface	Unable to connect canister, user cannot breathe or may breathe unfiltered air, due to: <ul style="list-style-type: none"> <li>- Damaged thread on mask or on canister</li> <li>- Damaged proprietary interface on mask or on canister.</li> </ul>	<ul style="list-style-type: none"> <li>- Inspection during assembly</li> </ul>
9	Mask/Canister Interface	In a single canister system, loss of canister (disconnects/falls-off) after having passed Seal Check and buddy donning process.	<ul style="list-style-type: none"> <li>- Inspection during operation/use</li> </ul>
10	Canister	Loss of protective Integrity due to failure of the integrity of the contents of the canister (e.g. sorbent bed channelling, particulate filter breakage) or of the canister housing	<ul style="list-style-type: none"> <li>- Fails a protection test</li> <li>- Inspection</li> </ul>
11	NATO thread Canister Conversion Kit	Loss of protective integrity due to breakage of conversion kit after installation	<ul style="list-style-type: none"> <li>- Inspection during operation/use</li> </ul>
12	Inhalation Valve	Loss of protective integrity resulting in contamination during canister change due to inhalation valve stuck open (temporary or permanent failure).	<ul style="list-style-type: none"> <li>- Inspection</li> </ul>
13	Nose Cup	CO <sub>2</sub> accumulation or unsafe levels of fogging due to permanent seal deformation or puncture/cracking	<ul style="list-style-type: none"> <li>- Inspection</li> <li>- Wearer symptoms due to high CO<sub>2</sub> levels</li> </ul>
14	Nose Cup vents or valves that connect to eyespace	CO <sub>2</sub> accumulation or unsafe levels of fogging due to valve or vent failure; inability to breathe or breathe properly due to valve failing in closed position.	<ul style="list-style-type: none"> <li>- Inspection</li> <li>- Wearer symptoms due to high CO<sub>2</sub> levels</li> <li>- Wearer unable to breathe or has difficulty breathing</li> </ul>
15	Voice Transmission Unit	Loss of protective integrity resulting in contamination due to a defective voice box.	<ul style="list-style-type: none"> <li>- Fails a seal check</li> <li>- Fails a leak test</li> </ul>
<b>Category II</b>			

<b>Id #</b>	<b>Component</b>	<b>Failure mode and Defect</b>	<b>Defect Detection Means (possible)</b>
16	Voice Transmission Unit	Voice unintelligible	- Inspection during operation/use
17	Drinking tube straw	Unable to hydrate due to a disconnection from mask.	- Inspection
18	Mask Drinking tube with a mask valve	Unable to hydrate due to a Mask hand operated valve broken in closed position.	- Inspection
19	Sweat management system	Loss of protective integrity resulting in contamination because of undue sweat accumulation requiring discharge that causes a seal breach	- Inspection
20	Ocular	Difficulty seeing / deterioration of vision through the ocular due to: <ul style="list-style-type: none"> <li>- Hazing (degradation of ocular material;</li> <li>- Surface damage</li> <li>- Early and rapid abrasion or scratching;</li> <li>- Chemical reaction.</li> </ul>	- Inspection
21	Outsert	Difficulty seeing / deterioration of vision through the ocular due to: <ul style="list-style-type: none"> <li>- Hazing (degradation of ocular material), scratching;</li> <li>- Surface damage</li> <li>- Early and rapid abrasion or scratching;</li> <li>- Chemical reaction.</li> </ul>	- Inspection
22	Vision Correction Sub-System Frame Attachment	Poor vision correction due to insert frame tilting or moving out of position.	- Inspection
23	Outsert Interface	Failure to secure the outsert in place due to outsert attachment points being broken or worn.	- Inspection during operation/use
24	Outsert	Unsafe vision quality with uncharacteristic fogging due to defect in air management between outsert and visor	- Inspection during operation/use
25	Vision Correction Sub-system Frame Attachment	Poor vision correction due to whole frame (insert) dislodging from Facepiece	- Inspection during operation/use
26	Vision Correction Sub-system	Poor vision correction due to one or two lenses dislodging from frame	- Inspection during operation/use
<b>Category III</b>			
27	Canister	Difficulty in breathing or shortness of breath due to clogged Filter with no or minimal use.	- Inspection
28	Mask/Canister Interface	In a Dual Canister system, loss of canister (disconnects/fall-off) after having passed Seal Check and buddy donning process.	- Inspection

<b>Id #</b>	<b>Component</b>	<b>Failure mode and Defect</b>	<b>Defect Detection Means (possible)</b>
29	Seal Check Accessory	While using the accessory, wearer unable to obtain a good seal.	- Fails Seal Check - Inspection
30	Seal Check Accessory	Attachment to hold the Accessory fails permanently	- Inspection
31	NATO thread Canister Conversion Kit	Breaks or fails to function properly at installation	- Inspection - Leak test
32	QNFT Accessory Kit	Breaks or fails to function properly in use	- Inspection - Protection test malfunction
34	Leak Tester Accessory Kit	Breaks or fails to function properly in use	- Inspection - Leak test malfunction
35	Special tool	Breaks or fails to function properly in use	- Inspection

**Annex F – Bid Evaluation Plan, page F - 12/58, paragraph 4.2.1, last sentence**

**DELETE:**

“Further, it provides the maximum number of acceptable observed defects in each category.”

**INSERT:**

Nil

**Annex F – Bid Evaluation Plan, page F - 13/58, paragraph 5.2.1, last sentence**

**DELETE:**

“Further, it provides the maximum number of acceptable observed defects in each category.”

**INSERT:**

Nil

**Annex F – Bid Evaluation Plan, page F - 14/58, paragraph 7.2.1, last sentence**

**DELETE:**

“Further, it provides the maximum number of acceptable observed defects in each category.”

**INSERT:**

Nil