

**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  
Bid Fax: (819) 997-9776**

## Request For a Standing Offer Demande d'offre à commandes

## National Master Standing Offer (NMSO)

Offre à commandes principale et nationale (OCPN)

Canada, as represented by the Minister of Public Works and Government Services Canada, hereby requests a Standing Offer on behalf of the Identified Users herein.

Le Canada, représenté par le ministre des Travaux Publics et Services Gouvernementaux Canada, autorise par la présente, une offre à commandes au nom des utilisateurs identifiés énumérés ci-après.

## Comments - Commentaires

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

**Issuing Office - Bureau de distribution**

Clothing and Textiles Division / Division des vêtements et des textiles

11 Laurier St./ 11, rue Laurier  
6A2, Place du Portage  
Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> Sous-vêtements de protection chimiq	
<b>Solicitation No. - N° de l'invitation</b> W6399-15GD56/B	<b>Date</b> 2016-01-21
<b>Client Reference No. - N° de référence du client</b> W6399-15GD56	<b>GETS Ref. No. - N° de réf. de SEAG</b> PW-\$\$PR-705-68892
<b>File No. - N° de dossier</b> pr705.W6399-15GD56	<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 2016-03-03</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Standard Time EST
<b>Delivery Required - Livraison exigée</b> See Herein	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Williams, Laura	<b>Buyer Id - Id de l'acheteur</b> pr705
<b>Telephone No. - N° de téléphone</b> (873)469-3174 ( )	<b>FAX No. - N° de FAX</b> (819)956-5454
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>  SEE HEREIN	
<b>Security - Sécurité</b> This request for a Standing Offer does not include provisions for security. Cette Demande d'offre à commandes ne comprend pas des dispositions en matière de sécurité.	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<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 (type or print)</b>	
<b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

This bid solicitation cancels and supersedes previous bid solicitation number W6399-15GD56/A dated January 20, 2016 with a closing of March 3, 2016 at 2:00pm.

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## **PART 1 - GENERAL INFORMATION**

### **1.1 Introduction**

The Request for Standing Offers (RFSO) is divided into seven parts plus attachments and annexes, as follows:

- |        |   |
|--------|---|
| Part 1 | General Information: provides a general description of the requirement;   |
| Part 2 | Offeror Instructions: provides the instructions applicable to the clauses and conditions of the RFSO;   |
| Part 3 | Offer Preparation Instructions: provides Offerors with instructions on how to prepare their offer to address the evaluation criteria specified;   |
| Part 4 | Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria which must be addressed in the offer, and the basis of selection;   |
| Part 5 | Certifications: includes the certifications to be provided;   |
| Part 6 | Security, Financial and Insurance Requirements: includes specific requirements that must be addressed by Offerors; and  |
| Part 7 | 7A, Standing Offer, and 7B, Resulting Contract Clauses:<br><br>7A, includes the Standing Offer containing the offer from the Offeror and the applicable clauses and conditions;<br><br>7B, includes the clauses and conditions which will apply to any contract resulting from a call-up made pursuant to the Standing Offer. |

The Annexes include the Requirement, Statement of Work, Performance and Technical Specifications, Evaluation Plan for Phase I and II and the Template for Quarterly Reports.

### **1.2 Summary**

DND has a requirement for a low-profile next to skin coverall that can be worn under a Canadian Armed Forces (CAF) issued uniform or civilian attire and is capable of providing temporary protection against Chemical, Biological and Radiological/Nuclear (CBRN) threat contaminants. This garment will be referred to as the Chemical Protective Undergarment (CPU).

The Standing Offer will be valid for twelve (12) months from issuance with the option to extend for four (4) additional one (1) year periods.

The requirement is subject to a preference for Canadian goods and/or services.

### **1.3 Debriefings**

Offerors may request a debriefing on the results of the request for standing offers process. Offerors should make the request to the Standing Offer Authority within 15 working days of receipt of the results of the request for standing offers process. The debriefing may be in writing, by telephone or in person.

## PART 2 - OFFEROR INSTRUCTIONS

### 2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the Request for Standing Offers (RFSO) by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Offerors who submit an offer agree to be bound by the instructions, clauses and conditions of the RFSO and accept the clauses and conditions of the Standing Offer and resulting contract(s).

The 2006 (2015/07/03) - Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the RFSO.

Subsection 5.4 of 2006, Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days  
Insert: 365 days

### 2.2 Submission of Offers

Offers must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the Request for Standing Offers.

### 2.3. Enquiries - Request for Standing Offers

All enquiries must be submitted in writing to the Standing Offer Authority no later than seven (7) calendar days before the Request for Standing Offers (RFSO) closing date. Enquiries received after that time may not be answered.

Offerors should reference as accurately as possible the numbered item of the RFSO to which the enquiry relates. Care should be taken by Offerors to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that Offerors do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Offerors. Enquiries not submitted in a form that can be distributed to all Offerors may not be answered by Canada.

### 2.4. Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Offerors may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their offer, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Offerors.

### 2.5 Specifications and Standards

#### 2.5.1 United States Military Specifications and Standards

The Offeror is responsible for obtaining copies of all United States (US) military specifications and standards which may be applicable to the requirement. These specifications and standards are available commercially, or may be obtained by visiting the US Department of Defense Website, at the following

address: [http://assistdocs.com/search/search\\_basic.cfm](http://assistdocs.com/search/search_basic.cfm)

## 2.5.2 Canadian General Standards Board (CGSB) - Standards

A copy of the CGSB Standards referred to in the offer solicitation is available and may be purchased from:

Canadian General Standards Board

Place du Portage III, 6B1

11 Laurier Street

Gatineau, Québec

Telephone: (819) 956-0425 or 1-800-665-CGSB (Canada only)

Fax: (819) 956-5740

E-mail: [ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca)

CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

## PART 3 - OFFER PREPARATION INSTRUCTIONS

### 3.1. Offer Preparation Instructions

Canada requests that Offerors provide their offer in separately bound sections as follows:

- Section I: Technical Offer (3 hard copies)
- Section II: Financial Offer (1 hard copy)
- Section III: Certifications (1 hard copy)
- Section IV: Additional Information (1 hard copy)

Prices must appear in the financial offer only. No prices must be indicated in any other section of the offer.

Canada requests that Offerors follow the format instructions described below in the preparation of their offer.

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to that of the Request for Standing Offers.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Offerors should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.
- 3) Green Initiatives (for PWGSC information only)  
Offerors are requested to provide details of their policies and practices in relation to the following initiatives:
  - environmentally responsible manufacturing;
  - environmentally responsible waste disposal;
  - waste reduction;
  - packaging;

- re-use strategies;
- recycling.

### **Section I: Technical Offer**

In their technical offer, offerors should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work (reference Part 4, Evaluation Procedures).

### **Section II: Financial Offer**

Offerors must submit their financial offer in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

### **Section III: Certifications**

Offerors must submit the certifications required under Part 5.

### **Section IV: Additional Information**

#### **3.1.1 Origin of Work**

For each line item, bidders must identify the name(s) of the country or countries where the apparel goods are cut (or knit to shape) and sewn, regardless of whether the work is to be performed by the Bidder or one of its subcontractor(s).

The following information must be provided for each location where any of the goods are cut (or knit to shape) or sewn:

Line Item number \_\_\_\_\_

Country: \_\_\_\_\_

(Bidders must add additional lines if there is more than one manufacturer or one country per line item.)

Bidders must immediately inform Canada in writing of any and all changes affecting the information provided under this clause during the entire bid validity period.

## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

### **4.1 Evaluation Procedures**

#### **4.1 Evaluation Procedures**

(a) Offers will be assessed in accordance with the entire requirement of the Request for Standing Offers including the technical and financial evaluation criteria.

(b) An evaluation team composed of representatives of Canada will evaluate the offers.

(c) The evaluation will be conducted in phases

Phase I: Mandatory Criteria Screening

Phase II: Science and Technology Assessment and Proof of Concept Trial

Phase III: Costing and best value determination

#### **4.1.1 Technical Evaluation**

##### **4.1.1.1 Mandatory Technical Criteria**

##### **Phase I: Mandatory Criteria Screening**

The evaluation will be paper based in accordance with Annex D.

## **Phase II: Proof of Concept Field Trial (Contract) and Determination of Technical Merit Score**

### **Science and Technology Assessment**

A paper Science and Technology (S&T) assessment of the Chemical Protective Undergarments will be conducted by the project team, supported by Defence Research and Development Canada (DRDC) scientific subject matter experts. Required documents for the S&T Assessment are specified in the SOW (Annex B) with the assessment criteria detailed in Annex E.

### **Proof of Concept Trial**

Following the S&T assessment, the delivered Chemical Protective Undergarments will be used to conduct a Proof of Concept (PoC) trial to determine the performance rating for each garment. The details of the PoC Trial are given at Annex E, Appendix 1. The Chemical Protective Undergarments will be used in both an Operational/Tactical role and a Chemical Biological Radiological Nuclear (CBRN) Support role. The trials are task-based and are focused on the operator's ability to effectively conduct these tasks in a simulated operational environment. In order to be compliant, the Chemical Protective Undergarment must achieve a minimum score of 80% overall.

If selected for Phase II, Offerors will be awarded a trial contract and must deliver the following within four (4) weeks of Contract Award:

- (a) Quantity fourteen (14) CPU's including a hood, socks (pair) and gloves (pair), in sizes to be issued at time of Contract Award (see note);
- (b) Optional training in accordance with section 2.1 of Annex B;
- (c) Quantity one (1) sizing chart for the CPU, in English, in electronic format (PDF);
- (d) Quantity one (1) CPU operator manual, in English, in electronic format (PDF);
- (e) Technical data for each component of the CPU (in MS Excel format) as follows:
  - i. Item Name;
  - ii. NCage;
  - iii. Manufacturer Part Number (MPN);
  - iv. Volume;
  - v. Weight; and
  - vi. Shelf Life (if applicable).

Note: Measurements of prospective trial participants will be provided to the Contractor. It is possible that not all prospective trial participants will be available on the day of trialing, in which every effort will be made to find replacement participants of similar size to ensure proper fit of supplied CPUs.

## **4.1.2 Financial Evaluation**

### **Mandatory Financial Criteria**

- a. The Offeror must submit firm unit price in Canadian dollars, applicable taxes excluded, DDP (Ontario) Incoterms 2000, transportation costs included, all applicable Customs Duties and Excise taxes included.
- b. The Offeror must submit firm unit pricing for all items. The Offeror is requested to quote firm unit pricing at no more than two decimal points.

## **4.2 Basis of Selection**

An offer must comply with all requirements of the RFSO and meet all mandatory technical and financial evaluation criteria to be declared responsive.



To determine the most suitable contending system within the competitive bidding process, the Contracting Authority will follow a "combined rating of technical merit and price" selection process, defined below:

### **Phase III: Costing and Best Value Determination**

Once the Technical Merit Score has been determined for each offer they will be combined with the price in such a way to ensure best value. Best value balances the importance of the technical value of an offer with the cost of that technical solution, and is determined using the "highest combined rating of technical merit and price" Offeror selection method.

### **Price Score**

The offer price is the sum of all costs associated with the procurement of the CPU for all years, assuming all options are exercised. The lowest price of the compliant offers becomes the standard by which the remainder of the offers are evaluated. Each offer is evaluated by taking the lowest offer price and dividing it by the price of the offer being evaluated, then multiplying this ratio by 100 in order to get a score out of 100, as follows:

$$\text{Price Score} = 100 \times (\text{Lowest Offer Price} / \text{Current Offer Price})$$

The lowest price of the compliant offers will have a Price Score of 100, and the remainder of the compliant offers will have price score between 0-100 based on how much they differ from the lowest price.

### **Best Value Determination**

Each compliant offer's Technical Merit and Price Scores are combined to obtain a Total Score, with the highest overall score representing the offer with the best value to DND. The assigned weighting factors (70% Technical and 30% Price) represents the importance that DND has placed on the functionality and compatibility of the CPU. The formula to calculate the total score for each compliant offer proposal is as follows:

$$\text{Total Score} = (70\% \times \text{Technical Merit Score}) + (30\% \times \text{Price Score})$$

The offer that receives the highest total score will be recommended for award of the Standing Offer.

## **PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION**

Offerors must provide the required certifications and additional information to be issued a standing offer.

The certifications provided by Offerors to Canada are subject to verification by Canada at all times. Canada will declare an offer non-responsive, will have the right to set-aside a standing offer, or will declare a contractor in default if any certification made by the Offeror is found to be untrue whether made knowingly or unknowingly during the offer evaluation period, during the Standing Offer period, or during the contract period.

The Standing Offer Authority will have the right to ask for additional information to verify the Offeror's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Standing Offer Authority will render the offer non-responsive, result in the setting aside of the Standing Offer or constitute a default under the Contract.

### **5.1 Certifications Required with the Offer**

Offerors must submit the following duly completed certifications as part of their offer.

### 5.1.1 Declaration of Convicted Offences

As applicable, pursuant to subsection Declaration of Convicted Offences of section 01 of the Standard Instructions, the Offeror must provide with its offer, a completed Declaration Form (<http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html>), to be given further consideration in the procurement process.

### 5.2 Certifications Precedent to the Issuance of a Standing Offer and Additional Information

The certifications and additional information listed below should be submitted with the offer, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Standing Offer Authority will inform the Offeror of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the offer non-responsive.

#### 5.2.1 Integrity Provisions – List of Names

Offerors who are incorporated, including those submitting offers as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Offeror.

Offerors submitting offers as sole proprietorship, as well as those submitting offers as a joint venture, must provide the name of the owner(s).

Offerors submitting offers as societies, firms or partnerships do not need to provide lists of names.

#### 5.2.2 Federal Contractors Program for Employment Equity - Standing Offer Certification

By submitting an offer, the Offeror certifies that the Offeror, and any of the Offeror's members if the Offeror is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from Employment and Social Development Canada-Labour's website.

Canada will have the right to declare an offer non-responsive, or to set-aside a Standing Offer, if the Offeror, or any member of the Offeror if the Offeror is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of issuing of a Standing Offer or during the period of the Standing Offer.

## PART 6 - SECURITY, FINANCIAL AND INSURANCE REQUIREMENTS

### 6.1 Financial Capability

SACC Manual clause M9033T (2011/05/16) Financial Capability

### 6.2 Insurance Requirements

The Offeror is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Standing Offer and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Offeror is at its own expense and for its own benefit and protection. It does not release the Offeror from or reduce its liability under the Standing Offer.

## **PART 7 - STANDING OFFER AND RESULTING CONTRACT CLAUSES**

### **A. STANDING OFFER**

#### **7.1 Offer**

**7.1.1** The Offeror offers to fulfill the requirement in accordance with the Statement of Work at Annex "A" to "G".

#### **7.2 Security Requirements**

**7.2.1** There is no security requirement applicable to this Standing Offer.

#### **7.3 Standard Clauses and Conditions**

All clauses and conditions identified in the Standing Offer and resulting contract(s) by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

##### **7.3.1 General Conditions**

2005 (2015/07/03) General Conditions - Standing Offers - Goods or Services, apply to and form part of the Standing Offer.

##### **7.3.2 Standing Offers Reporting**

The Offeror must compile and maintain records on its provision of goods, services or both to the federal government under contracts resulting from the Standing Offer. This data must include all purchases ordered, including purchases paid for by a Government of Canada Acquisition Card.

The Offeror must provide an electronic version of this data in accordance with the reporting requirements detailed in Annex "G". If some data is not available, the reason must be indicated. If no goods or services are provided during a given period, the Offeror must still provide a "nil" report.

The data must be submitted on a quarterly basis to the Standing Offer Authority.

The quarterly reporting periods are defined as follows:

1st quarter: April 1, to June 30;  
2nd quarter: July 1 to September 30;  
3rd quarter: October 1 to December 31;  
4th quarter: January 1 to March 31.

The data must be submitted to the Standing Offer Authority no later than 15 calendar days after the end of the reporting period.

#### **7.4 Term of Standing Offer**

##### **7.4.1 Period of the Standing Offer**

The period for making call-ups against the Standing Offer is within 12 months from issuance of Standing Offer.

#### **7.4.2 Extension of Standing Offer**

If the Standing Offer is authorized for use beyond the initial period, the Offeror offers to extend its offer for an additional 4 one year periods, under the same conditions and at the rates or prices specified in the Standing Offer, or at the rates or prices calculated in accordance with the formula specified in the Standing Offer.

The Offeror will be advised of the decision to authorize the use of the Standing Offer for an extended period by the Standing Offer Authority 60 days before the expiry date of the Standing Offer. A revision to the Standing Offer will be issued by the Standing Offer Authority.

### **7.5. Authorities**

#### **7.5.1 Standing Offer Authority**

The Standing Offer Authority is:

Laura Williams  
Public Works and Government Services Canada  
Acquisitions Branch  
Commercial and Consumer Products Directorate (CCPD)  
Clothing & Textiles Division  
Place du Portage, Phase III, 6A2  
11 Laurier Street  
Gatineau, Quebec K1A 0S5

Telephone : 873-469-3174      Facsimile: 819-956-5454  
E-mail address: [laura.williams@tpsgc-pwgsc.gc.ca](mailto:laura.williams@tpsgc-pwgsc.gc.ca)

The Standing Offer Authority is responsible for the establishment of the Standing Offer, its administration and its revision, if applicable. Upon the making of a call-up, as Standing offer authority, he is responsible for any contractual issues relating to individual call-ups made against the Standing Offer by any Identified User.

#### **7.5.2 Project Authority**

The Project Authority for the Standing Offer is:

(to be indicated in Standing Offer)

The Project Authority is the representative of the department or agency for whom the Work will be carried out pursuant to a call-up under the Standing Offer and is responsible for all the technical content of the Work under the resulting Contract.

#### **7.5.3 Technical Authority**

The Technical Authority for the Standing Offer is:

(to be indicated in Standing Offer)

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Standing Offer and is responsible for all matters concerning the technical content of the Work under the Standing Offer. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work.

Changes to the scope of the Work can only be made through a Standing Offer Revision issued by the Standing Offer Authority.

#### 7.5.4 Offeror's Representative

The person responsible for:

##### General enquiries

Name: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Facsimile Number: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

##### Delivery follow-up

Name: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Facsimile Number: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

#### 7.6 Identified Users

The Identified User authorized to make call-ups against the Standing Offer is: DLP 6 Personnel.

#### 7.7 Call-up Procedures

Authorized users will use firm unit prices to determine the cost of the call-up and include GST or HST and contact the Offeror to determine delivery times and then complete and sign the call-up document before sending it to the Offeror.

#### 7.8 Call-up Instrument

The Work will be authorized or confirmed by the Identified Users using form PWGSC-TPSGC 942, "Call-up Against a Standing Offer".

#### 7.9 Limitation of Call-ups

Individual call-ups against the Standing Offer must not exceed \$400,000.00 (Applicable Taxes included).

#### 7.10 Financial Limitation

The total cost to Canada resulting from call-ups against the Standing Offer must not exceed the sum of \$ to be indicated in Standing Offer (Applicable Taxes excluded) unless otherwise authorized in writing by the Standing Offer Authority. The Offeror must not perform any work or services or supply any articles in response to call-ups which would cause the total cost to Canada to exceed the said sum, unless an increase is so authorized.

The Offeror must notify the Standing Offer Authority as to the adequacy of this sum when 75 percent of this amount has been committed, or 3 months before the expiry date of the Standing Offer, whichever comes first. However, if at any time, the Offeror considers that the said sum may be exceeded, the Offeror must promptly notify the Standing Offer Authority.

#### 7.11 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- a) the call up against the Standing Offer, including any annexes;
- b) the articles of the Standing Offer;
- c) the general conditions 2005 (2015/07/03), General Conditions - Standing Offers - Goods or Services;

- d) the general conditions 2030 (2015/07/03), General Conditions – Higher Complexity - Goods
- e) Annex "A" - Requirement;
- f) Annex "B" – Statement of Work (Phase I);
- g) Annex "C" – Operational Performance and Technical Requirements;
- h) Annex "D" – Bid Evaluation (Phase I);
- i) Annex "E" – Assessments and Trials;
- j) Annex "F" – Statement of Work (Standing Offer);
- k) the Offeror's offer dated \_\_\_\_\_ .

## 7.12 Certifications

### 7.12.1 Compliance

The continuous compliance with the certifications provided by the Offeror with its offer and the ongoing cooperation in providing additional information are conditions of issuance of the Standing Offer (SO). Certifications are subject to verification by Canada during the entire period of the SO and of any resulting contract that would continue beyond the period of the SO. If the Offeror does not comply with any certification, fails to provide the additional information, or if it is determined that any certification made by the Offeror in its offer is untrue, whether made knowingly or unknowingly, Canada has the right to terminate any resulting contract for default and set aside the Standing Offer.

### 7.13 Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

### 7.14 Plant Closing

The Offeror's plant closing for Christmas and Summer holidays are as follows. During this time there will be no shipments.

Summer Holiday	FROM _____	TO _____
Christmas Holiday	FROM _____	TO _____

### 7.15 Plant Location

Items will be manufactured at: \_\_\_\_\_

### 7.16 Origin of Work - Disclosure of Information

- For each line item, the Offeror must specify the name(s) of all countries where the apparel goods are cut (or knit to shape) or sewn, regardless of whether the work is to be performed by the Offeror or one of its subcontractor(s).
- The Offeror agrees that Canada may publicly disclose the information provided with respect the countries of origin.
- The Offeror must immediately inform Canada in writing of any and all changes affecting the information provided under this clause during the entire contract period.

## 7.17 Specifications and Standards

### 7.17.1 United States Military Specifications and Standards

The Offeror is responsible for obtaining copies of all United States (US) military specifications and standards which may be applicable to the requirement. These specifications and standards are available commercially, or may be obtained by visiting the US Department of Defense Website, at the following address: [http://assistdocs.com/search/search\\_basic.cfm](http://assistdocs.com/search/search_basic.cfm)

### **7.17.2 Canadian General Standards Board (CGSB) - Standards**

A copy of the CGSB Standards referred to in the Standing Offer is available and may be purchased from:

Canadian General Standards Board  
Place du Portage III, 6B1  
11 Laurier Street  
Gatineau, Québec  
Telephone: (819) 956-0425 or 1-800-665-CGSB (Canada only)  
Fax: (819) 956-5740  
E-mail: [ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca)  
CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

## **B. RESULTING CONTRACT CLAUSES**

The following clauses and conditions apply to and form part of any contract resulting from a call-up against the Standing Offer.

### **7.1 Requirement**

The Contractor must provide the items detailed in the call-up against the Standing Offer

### **7.2 Standard Clauses and Conditions**

#### **7.2.1 General Conditions**

2030 (2015/07/03), General Conditions – Higher Complexity – Goods, apply to and form part of the Contract.

### **7.3 Term of Contract**

#### **7.3.1 Delivery Date**

Delivery must be made within \_\_\_\_ calendar days from receipt of a call-up against the Standing Offer.

### **7.4 Payment**

#### **7.4.1 Basis of Payment**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices, as specified in Annex A. Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Standing Offer Authority before their incorporation into the Work.

#### **7.4.2 SACC Manual Clauses**

H1001C	2008-05-12	Multiple Payments
C2000C	2007-11-30	Taxes - Foreign-based Contractor
C2611C	2007-11-30	Customs Duties - Contractor Importer
C2605C	2008-05-12	Canadian Customs Duties and Sales Tax - Foreign-based Contractor
C2610C	2007-11-30	Customs Duties - DND - Importer
C5201C	2008-05-12	Prepaid Transportation Costs

## 7.5 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
  - (a) The original and one (1) copy must be forwarded to the following address for certification and payment

National Defence Headquarters  
MGen George R. Pearkes Building  
101 Colonel By Drive  
Ottawa, ON K1A 0K2  
Attention: DLP 6-2-4

- (b) One (1) copy must be forwarded to the consignee.

## 7.6 SACC Manual Clauses

A9006C	2012-07-16	Defence Contract
C2800C	2013-01-28	Priority Rating
C2801C	2014-11-27	Priority Rating - Canadian-based Contractors
D5545C	2010-08-16	ISO 9001:2008 - Quality Management Systems - Requirements (QAC C)
D6010C	2007-11-30	Palletization

## 7.7 Procedures for Design change/Deviations

The Contractor must follow these procedures for any proposed design change/deviation to contract specifications.

The Contractor must complete Part 1 of the Design Change/Deviation form DND 672 and forward one (1) copy to the Technical Authority and one (1) copy to the Standing Offer Authority.

The Contractor will be authorized to proceed upon receipt of the design change/deviation form signed by the Standing Offer Authority. A contract amendment will be issued to incorporate the design change/deviation in the Contract.

## 7.8 Subcontractors

The following subcontractor(s) will be utilized in the performance of the contract.

Name of Company: \_\_\_\_\_  
Location: \_\_\_\_\_  
Value of subcontract: \$ \_\_\_\_\_  
Nature of subcontracting work performed: \_\_\_\_\_

Subcontractors, other than those listed above, may not be utilized without the written permission of Canada.

## 7.9 Overshipment

Overshipment will not be accepted unless prior approval is obtained from the Contracting Authority.

## 7.10 Materials: Contractor Total Supply

The Contractor will be responsible for obtaining all materials required in the manufacture of the items specified. The delivery stated for the items allows the necessary time to obtain such materials.



## **7.11 Delivery**

### **7.11.1 Shipping Instructions - Delivery at Destination**

1. Goods must be consigned to the destination specified in the call-up document and delivered:

DDP Delivered Duty Paid (DDP) (within 250 kms of the NCR) Incoterms 2000 for shipments from a commercial contractor.

## **ANNEX "A" REQUIREMENT**

### **1. TECHNICAL REQUIREMENT**

The Contractor is required to provide Canada for the Department of National Defence with A Chemical Protective Undergarment (CPU) in accordance with Annex C Operational Performance and Technical Requirements.

### **2. ADDRESSES**

Trial Contract :  
CJIRU  
48 Portage Avenue  
8 Wing Trenton  
PO Box 1000 Stn Forces  
Astra, ON K0K 3W0  
Attn: Receipts

Standing Offer:  
Goods to be delivered to the Department of National Defence to locations within 250 kilometers of the National Capital Region. The delivery locations will be provided at time of call-up.

### **3. DELIVERABLES**

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, Applicable Taxes extra
1	Chemical Protective Undergarment Jacket and Chemical Protective Undergarment Pant	2430	Each	\$ _____
OR				
1	Chemical Protective Undergarment Coverall	2430	Each	\$ _____
AND				
2	Chemical Protective Undergarment Hood (Integrated or separate)	2430	Each	\$ _____
3	Chemical Protective Undergarment Gloves (Pair – left and right hand)	2430	Pair	\$ _____
4	Chemical Protective Undergarment Socks (Pair)	2430	Pair	\$ _____

#### EXTENSION 1

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, Applicable Taxes extra
<b>5</b>	Chemical Protective Undergarment Jacket and Chemical Protective Undergarment Pant	480	Each	\$ _____
<b>OR</b>				
<b>5</b>	Chemical Protective Undergarment Coverall	480	Each	\$ _____
<b>AND</b>				
<b>6</b>	Chemical Protective Undergarment Hood (Integrated or separate)	960	Each	\$ _____
<b>7</b>	Chemical Protective Undergarment Gloves (Pair – left and right hand)	960	Pair	\$ _____
<b>8</b>	Chemical Protective Undergarment Socks (Pair)	960	Pair	\$ _____

#### EXTENSION 2

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, Applicable Taxes extra
<b>9</b>	Chemical Protective Undergarment Jacket and Chemical Protective Undergarment Pant	480	Each	\$ _____
<b>OR</b>				
<b>9</b>	Chemical Protective Undergarment Coverall	480	Each	\$ _____
<b>AND</b>				
<b>10</b>	Chemical Protective Undergarment Hood (Integrated or separate)	960	Each	\$ _____
<b>11</b>	Chemical Protective Undergarment Gloves (Pair – left and right hand)	960	Pair	\$ _____
<b>12</b>	Chemical Protective Undergarment Socks (Pair)	960	Pair	\$ _____

### EXTENSION 3

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, Applicable Taxes extra
13	Chemical Protective Undergarment Jacket and Chemical Protective Undergarment Pant	480	Each	\$ _____
<b>OR</b>				
13	Chemical Protective Undergarment Coverall	480	Each	\$ _____
<b>AND</b>				
14	Chemical Protective Undergarment Hood (Integrated or separate)	960	Each	\$ _____
15	Chemical Protective Undergarment Gloves (Pair – left and right hand)	960	Pair	\$ _____
16	Chemical Protective Undergarment Socks (Pair)	960	Pair	\$ _____

### EXTENSION 4

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, Applicable Taxes extra
17	Chemical Protective Undergarment Jacket and Chemical Protective Undergarment Pant	480	Each	\$ _____
<b>OR</b>				
17	Chemical Protective Undergarment Coverall	480	Each	\$ _____
<b>AND</b>				
18	Chemical Protective Undergarment Hood (Integrated or separate)	960	Each	\$ _____
19	Chemical Protective Undergarment Gloves (Pair – left and right hand)	960	Pair	\$ _____
20	Chemical Protective Undergarment Socks (Pair)	960	Pair	\$ _____

Solicitation No. - N° de l'invitation  
W6399-15GD56/B  
Client Ref. No. - N° de réf. du client  
W6399-15GD56

Amd. No. - N° de la modif.  
File No. - N° du dossier  
pr705.W6399-15GD56

Buyer ID - Id de l'acheteur  
pr705  
CCC No./N° CCC - FMS No./N° VME

## ANNEX "G"

### QUARTERLY REPORT TEMPLATE

Standing Offer Number: \_\_\_\_\_

Reporting Period (start date to end date): \_\_\_\_\_

Date	Call-up #	Description of Item	Quantity	Total Billing
TOTAL				\$

**NIL REPORT:** We have not done any business with the federal government for this period \_\_\_\_.

**Prepared by:**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Telephone no.: \_\_\_\_\_

**STATEMENT OF WORK (PHASE I)  
FOR THE  
CHEMICAL PROTECTIVE UNDERGARMENT**

**1.0 SCOPE**

**1.1 Purpose**

The purpose of this statement of work is to describe the requirements for the delivery of Chemical Protective Undergarments to the Department of National Defence.

**1.2 Background**

DND has a requirement for a low-profile next to skin coverall that can be worn under a Canadian Armed Forces (CAF) issued uniform or civilian attire, and is capable of providing temporary protection against Chemical, Biological and Radiological/Nuclear (CBRN) threat contaminants. This garment will be referred to as the Chemical Protective Undergarment (CPU).

**2.0 DELIVERABLES**

The Contractor must deliver the following within four (4) weeks of Contract Award:

- (a) Quantity fourteen (14) CPU's, including a hood, socks (pair) and gloves (pair), in sizes to be issued at time of Contract Award (see note).
- (b) Optional training in accordance with Section 2.1;
- (c) Quantity one (1) sizing chart for the CPU, in English, in electronic format (PDF);
- (d) Quantity one (1) CPU operator manual, in English, in electronic format (PDF); and
- (e) Technical data for each component of the CPU (in MS Excel format) as follows:
  - i. Item Name;
  - ii. NCage;
  - iii. Manufacturer Part Number (MPN);
  - iv. Volume;
  - v. Weight; and
  - vi. Shelf Life (if applicable).

*Note: Measurements of prospective trial participants will be provided to the Contractor. It is possible that not all prospective trial participants will be available on the day of trialing, in which every effort will be made to find replacement participants of similar size to ensure proper fit of supplied CPUs.*

**2.1 Training**

The Contractor may provide training, at the Contractor's expense, on the Chemical Protective Undergarment as follows:

- (a) Training to be conducted at a DND facility within fifty (50) km of the National Capital Region, on dates arranged with the TA;
- (b) Provide one (1) train-the-trainer training serial for up to ten (10) personnel;
- (c) Each training serial is to include (as a minimum):

- i. Preparation and use;
  - ii. Safety precautions;
  - iii. Care and cleaning;
  - iv. Storage;
  - v. Safety inspection; and
  - vi. Custom sizing;
- (d) Provide each candidate with a copy of training materials in both hard copy and electronic format (MS Word, MS PowerPoint or PDF).

### **3.0 REQUIREMENTS**

#### **3.1 Quality Assurance Program**

The Contractor must:

- (a) Establish, implement, document and maintain a quality system that ensures conformance to contractual requirements and meets the objectives of the ISO 9001 or equivalent quality system model during performance of this contract; and
- (b) Conduct Quality Conformance Inspections and Tests during manufacture in accordance with the Contractor's standard acceptance test plan.

### **4.0 DND ASSESSMENTS**

DND will conduct a Science and Technology assessment and a Proof of Concept Trial on the CPU in accordance with Annex D.

## **OPERATIONAL PERFORMANCE AND TECHNICAL REQUIREMENTS FOR THE CHEMICAL PROTECTIVE UNDERGARMENT**

### **1.0 SCOPE**

#### **1.1 Scope**

This specification defines the performance and technical requirements for the Chemical Protective Undergarment (CPU).

### **2.0 GENERAL**

#### **2.1 Applicable Documents**

The following documents form part of this specification to the extent specified and are supportive of the specification when referenced; all other document references are to be considered supplemental information only. In the event of a conflict between the documents referenced and the contents of the specification, then the contents of the specification shall take precedence.

- AEP 38, Operational Requirements, Technical Specifications and Evaluation Criteria for NBD Protective Clothing ([www.nato.int](http://www.nato.int))
- DCIEM Report 98-CR-15 Anthropometric Survey of the Land Forces ([pubs.rddc-drdc.gc.ca](http://pubs.rddc-drdc.gc.ca))
- MIL-STD-810F - Test Method Standard for Environmental Engineering Considerations and Laboratory Tests ([www.everyspec.com](http://www.everyspec.com))
- NFPA 1994 (2012) - Standard on Protective Ensembles for First Responders to CBRN Terrorism Incidents ([www.nfpa.com](http://www.nfpa.com))
- MIL-C-29462 (1992) - Cloth, Laminated, Polyester, Tricot Knit, Activated Carbon Sphere, Chemical Protective ([www.everyspec.com](http://www.everyspec.com))

#### **2.2 Definitions**

5th Percentile Female	Defined as 154.6 cm (5 ft) tall and weighing 52.8 kg (116 lb) in accordance with DCIEM Report 98-CR-15
95th Percentile Male	Defined as 186.2 cm (6 ft 1 in) tall and weighing 103 kg (227 lb) in accordance with DCIEM Report 98-CR-15
No-melt, no-drip materials	Fabrics that will not ignite or fuse to the skin when exposed to flame, and will self-extinguish when the ignition source is removed.

#### **2.3 Acronyms**

APR	Air Purifying Respirator
CPU	Chemical Protective Undergarment
CBRN	Chemical Biological Radioactive Nuclear
DCIEM	Defence and Civil Institute of Environmental Medicine
FR	Fire Resistant
NFPA	National Fire Protection Association



### **3.0 REQUIREMENTS**

#### **3.1 Garments**

The performance and technical requirements for the Chemical Protective Undergarment (CPU) are detailed in the following sections. The CPU must consist of the following:

- (a) Chemical Protective Undergarment Jacket and Chemical Protective Undergarment Pant;

OR

- (b) Chemical Protective Undergarment Coverall;

AND

- (c) Chemical Protective Undergarment Hood (Integrated or separate);
- (d) Chemical Protective Undergarment Gloves (Pair - Left and Right Hand); and
- (e) Chemical Protective Undergarment Socks (Pair).

#### **3.2 Environmental**

The CPU must be capable of operating (not experience loss of protective capability or material property changes of more than 10% ) under the climatic conditions A1 to A3, B1 to B3 and C1 and C2, as described in MIL-STD-810F including:

- (a) Temperature: -40°C to +49°C;
- (b) Humidity: Up to 100%;
- (c) Precipitation including rain, snow, hail and freezing rain;
- (d) Desert sand;
- (e) Salt and fresh water spray; and
- (f) Fog and salt fog.

#### **3.3 Coverage and Compatibility**

The CPU must:

- (a) When worn with all components (jacket/pant or coverall, hood, gloves and socks) cover the entire body with the exception of the facial area covered by the respirator;
- (b) Be designed to be worn next-to-skin under standard military or civilian clothing and boots for a period of at least twenty-four (24) hours without causing any undue discomfort or pain to the wearer;
- (c) Have removable gloves and socks that integrate with the suit (i.e., provide a tight seal) and can be easily donned/doffed to permit rapid transition from the ready state to a protected state;

- (d) Have an attached or detachable hood (or an option for both if available). If detachable, the hood must integrate with the suit (i.e., provide a tight seal) and can be easily donned/doffed to permit rapid transition from the ready state to a protected state. If the hood is attached, it must be compatible with inner-ear, wired communications devices via Velcro slit to run wires through, or like novel solution;
- (e) Be compatible, through hood options or configurations, with the following Air Purifying Respirators (APR) as a minimum:
  - i. Scott Safety General Service Respirator (dual and single port); and
  - ii. Avon FM53 Respirator (dual and single port);
- (f) Not, in any way, impede weapons handling, hand-to-hand combat, standing, running, climbing, crawling, jumping and swimming movements; and
- (g) Not, in any way, impede fine motor skills including operation of detection and sampling equipment.

### 3.4 Material

The CPU material must:

- (a) Be light-weight and odour resistant;
- (b) Be resistant to toxic chemical substances in both liquid and vapour forms, including traditional chemical warfare agents (e.g., Sarin, Sulfur Mustard, VX) and commercially available toxic industrial chemicals;
- (c) Meet the Class 3 liquid and vapour protection standards for Chemical Biological Radioactive Nuclear (CBRN) ensembles in accordance with NFPA 1994 (or equivalent);
- (d) Provide at least six (6) hours of liquid protection (open cell) and vapour protection (saturated cell) based on the permeation/penetration protocol in AEP38, section 1.2 (i) and (ii) using Distilled Sulfur Mustard (HD);
- (d) Hood and glove material must be no-melt no-drip; and
- (e) Be sourced and supplied by the manufacturer;

### 3.5 Sizing

The CPU must be available in a range of sizes (S, M, L, XL, etc.) that, cumulatively, accommodates the range of sizes from the 5th percentile female to the 95th percentile male as defined in DCIEM Report 98-CR-15. The intent is to have available the entire OEM catalogue of sizes that are available for each individual garment. Size dimensions are a general guide and the actual dimensions may vary between manufacturers; however, the products delivered should be available throughout the size ranges and dimensions listed below for each garment. Smaller and larger sizes are also to be included in accordance with the availability for each garment from the OEM. Coverall styles must also cover the same range of sizes.

Table 1: Jackets

Size	Length
Small(S)	Short
	Regular
	Long

	Extra-Long
Medium(M)	Short
	Regular
	Long
	Extra-Long
Large (L)	Short
	Regular
	Long
	Extra-Long
Extra-Large (XL)	Short
	Regular
	Long
	Extra-Long
Extra-Extra-Large (XXL)	Short
	Regular
	Long
	Extra-Long

Table 2: Pants

Size [cm(in)]	Inseam
68.6 (28)	Short
	Regular
	Long
73.5 (30)	Short
	Regular
	Long
78.4 (32)	Short
	Regular
	Long
83.3 (34)	Short
	Regular
	Long
88.2 (36)	Short
	Regular
	Long
93.1 (38)	Short
	Regular
	Long
98.0 (40)	Short
	Regular
	Long

### 3.6 Similarity of Manufacture

The CPU, based on the details within this specification, must be of the same make, colour, materials and design.

### 3.7 Durability

The CPU must provide durability as follows:

- (a) Machine washing using commercially available detergents does not result in fading or loss of protection of the material (minimum five (5) washes);
- (b) Seams remain intact and buttons do not become detached under normal wearing conditions;
- (c) Material does not fray or tear under normal usage; and
- (d) Includes an attached label with the following information (minimum):
  - i. Manufacturer part number;
  - ii. Date of manufacture;
  - iii. Size; and
  - iv. Washing instructions;

### 3.8 Colour

The CPU (all components) must have a matte outer finish with no fluorescent or reflective features in a black, grey, tan or skin-tone colour.

### 3.9 Accessories

Each CPU must include a storage bag to contain all of the components of the system when not in use. The storage bag must have an outer label that permits the user to annotate the following information:

- (a) Name;
- (b) Date of issue; and
- (c) Operational/Training use.

**EVALUATION PLAN (PHASE I)  
FOR THE  
CHEMICAL PROTECTIVE UNDERGARMENT**

**1.0 GENERAL**

**1.1 Purpose**

This document outlines the bid evaluation process for the Chemical Protective Undergarment (CPU). All requirements are mandatory.

**1.2 Instructions**

Bidders will be assessed in accordance with the criteria detailed in this document. Mandatory requirements are identified by the word "must". All mandatory requirements must be met.

**1.3 Documentation**

The Bidder must provide the following documentation:

- (a) A completed Compliance Matrix including proof of compliance as specified in Table 1;
- (b) Documentation provided with the bid as proof of compliance may include any or all of the following:
  - i. A system brochure that details the components of the CPU;
  - ii. The Operator's Manual;
  - iii. Test report package proving product compliance with Level 3 protection for Chemical Biological Radioactive Nuclear (CBRN) ensemble in accordance with NFPA 1994, or higher standard; and
  - iv. Any additional documentation that provides product information.

**1.4 Test Results**

Where Test Results are required as part of the Proof of Compliance, they must:

- (a) Be for the model offered; or
- (b) Be for a previous model which the model offered is based upon, and include a detailed explanation why the results are valid for the model offered.

**1.5 Evaluation Methodology**

The evaluation will be based upon on the supplied information only. All mandatory criteria in Table 1 must be met or the bid submission will be deemed non-compliant. Failure to provide sufficient detail in the bid submission to evaluate the proposal against the mandatory criteria will also deem the bid non-compliant. All compliant bids will receive a Contract (Annex B) and be included in the Science and Technology assessment phase (Annex E).

1.6 Mandatory Requirements

Table 1: Compliance Matrix

Item #	Requirement	Proof of Compliance	Compliant (Y/N)
1	<u>Experience</u> The Bidder must be an established company (or authorized reseller of) within the Chemical, Biological, Radiological, and Nuclear (CBRN) Detection, Identification, Mitigation (DIM) and protection equipment sectors for a minimum of five (5) years. Experience is not limited to chemical protective equipment research, development and manufacturing, but must demonstrate knowledge of the regulations, and the successful navigation of the complexities of bringing a CBRN DIM and protection product to the market and sustaining it over the lifespan of that product.	The Bidder must provide written confirmation that they have manufactured (or are an authorized reseller of a manufacturer) that has developed, sold and supported products in the CBRN DIM and protection sector for a minimum of five (5) years.	
2	<u>Certification</u> The Bidder must be ISO 9001 certified or the Bidder's product must be manufactured by an ISO 9001 certified producer in the case of an authorized reseller.	The Bidder must provide written confirmation that they and their product's producer (in the case of an authorized reseller) are ISO 9001 certified by a third party certification organization.	
3	<u>Supply Chain</u> The Bidder must be able to deliver a minimum of 200 Chemical Protective Undergarments per month.	The Bidder must provide written attestation, or a production ramp-up plan, that reasonably demonstrates they will be capable of delivering 200 Chemical Protective Undergarments per month.	
5	Annex C - Performance and Technical Specifications.	The Bidder must provide: (1) 3 <sup>rd</sup> party test results from an ISO 17025 accredited laboratory in North America or Europe, that confirm the CPU meets Class 3 liquid and vapour protection standard for Chemical Biological Radioactive Nuclear (CBRN) ensembles in accordance with NFPA 1994 (or equivalent);  AND  (2) Written confirmation that the Chemical Protective Undergarment being offered is capable of meeting	

Item #	Requirement	Proof of Compliance	Compliant (Y/N)
		<p>all other mandatory criteria of the Performance and Technical Specifications detailed in Annex C.</p> <p>DND will confirm the fit, form and function of the CPU ensembles and the penetration/permeation protection of the CPU material during the Science and Technology Assessment and Proof of Concept Trial (Annex E).</p>	

**DEPARTMENT OF NATIONAL DEFENCE (DND)  
ASSESSMENTS AND TRIALS  
FOR THE  
CHEMICAL PROTECTIVE UNDERGARMENT**

**1.0 GENERAL**

**1.1 Purpose**

This document outlines the Science and Technology assessment and the Proof of Concept trials to be conducted by DND for the Chemical Protective Undergarment (CPU).

**1.2 Contractor Participation**

The information provided in this Annex is for information purposes only. The assessments and trials will be conducted by DND without any support required from the Contractors that supply the CPU to be evaluated. The Contractors will not be permitted to witness any portion of the tests and evaluations. The Contractors may be provided the results of the Proof of Concept trial for their specific CPU only.

**2.0 EVALUATION**

**2.1 Compliance Verification**

Prior to conducting further assessment and trials, the CPU from each bidder will be subjected to a compliance verification against the technical requirements detailed in Annex C. If the CPU from a Bidder does not meet the technical requirements, the details of the compliance verification will be recorded and the bid will be deemed non-compliant and given no further consideration.

**2.2 Science and Technology Assessment**

The CPUs will be evaluated against the requirements in Appendix 1 to determine if the mandatory requirements are met. The CPU must meet all requirements to be found compliant. Evaluations will be conducted at the accredited laboratories at Defence Research and Development Canada (DRDC) Research Centre Suffield using established procedures, protocols and test equipment. The specific procedures are not provided as part of the RFP and the results of the assessments may be provided to the Contractors for their specific equipment only.

**2.3 Proof of Concept Trial**

The CPU will undergo a multi-part "Proof of Concept" trial to test the CPU for fit and function. Conduct of the trials will be based on a random order between the various CPUs. The trials will be conducted by two functionally different groups of participants, those that have a Tactical/Operational focus and a second group with a CBRN Specialist role. The Proof of Concept trial plan is detailed in Appendix 2 and includes activity groups as follows:

- (a) Activity 1 – Fit Sizing – This trial is to determine the adaptability of the CPU to various body types, providing a level of comfort to the user while retaining basic protective and functional capabilities;
- (b) Activity 2 – Strenuous Activity - This trial is to determine the comfort and durability of the CPU while conducting various operational type tasks;
- (c) Activity 3 – Weapon and Equipment Compatibility - This trial is to assess the compatibility of the CPU with equipment and weapons utilized in operationally focused tasks;



- (d) Activity 4 - Close Quarter Battle (CQB) Skills: The participant will complete the CQB drills in accordance with standard drill protocols; and
- (e) Activity 5 – Sampling – This trial is to assess the effect of the CPU on fine motor skills when handling sampling and detection equipment.

### 2.3.1 Evaluation Process

To determine the most suitable contending CPU within the competitive bidding process, the Contracting Authority (CA) will follow a "combined rating of technical merit and price" selection process. Technical merit and price scoring are detailed in the following sections.

#### 2.3.1.1 Technical Merit Scoring

The objective of assigning a Technical Merit Score is to evaluate the “value added” over and above meeting the mandatory Science and Technology assessment. The “value added” through performance measurement is not considered mandatory, but is deemed to have additional value to the overall comfort/usability of the item. Each of the Activities described above include various tasks to be performed by the participants. Upon completion of each Activity, each participant will complete a questionnaire that rates the CPU in various categories as detailed in Table 1. Score breakdown for the individual tests is provided in Appendix 2.

Table 1: Performance Measurement

Test	Category	Score
<b>1</b>	<b>Activity 1 – Fit Sizing</b>	
1A	Fit Sizing (Pre-Washed)	___ out of 5
1B	Fit Sizing (Post-Washed)	___ out of 5
<b>2</b>	<b>Activity 2 – Operational Task Effectiveness</b>	
2A	Strenuous Running	___ out of 5
2B	Agility Run	___ out of 5
2C	Insertion and Extraction	___ out of 5
2D	Forced Entry	___ out of 15
N/A	Overall	___ out of 5
<b>3</b>	<b>Activity 3 – Weapon and Equipment Compatibility</b>	
3	Weapon and Equipment Compatibility	___ out of 20
<b>4</b>	<b>Activity 4 - Close Quarter Battle (CQB) Skills</b>	
4	CQB	___ out of 20
<b>5</b>	<b>Activity 5 – Sampling</b>	
5	Sampling	___ out of 20
	<b>TOTAL</b>	<b>___ out of 105</b>

The total Performance Score is the sum of the average score for all participants for the CPU across all of the Activities and Tests. A minimum score of eighty-four (84) out of a possible one hundred and five (105) available points (80%), representing an evaluated assessment of "Reasonably Acceptable", must be achieved for a bid to be deemed compliant.

#### Technical Merit Score

For each test as listed in Table 1: Performance Measurement, the final score will be determined by taking all of the results from that test, and then calculating the average (arithmetic mean). The average of all participants for that test will be the final score for that test item. The Technical Merit Score (out of 100)

is the Performance Score of the CPU being evaluated divided by the Highest Performance Score achieved, then multiplying this ratio by 100 in order to get a score out of 100, as follows:

$$\text{Technical Merit Score} = 100 \times (\text{Performance Score} / \text{Highest Performance Score})$$

The CPU receiving the highest Performance Score will get a Technical Merit Score of 100, and the remaining systems will have a Technical Merit Score that is a fraction of 100 based upon the total Performance Score for that CPU in comparison to the highest Performance Score.

#### 2.3.1.2 Price Score

The Price Score is determined for each CPU, which is used in conjunction with the Technical Merit Score to determine the proposal that provides the best performance for price to DND. The Proposal Price is determined by summing the whole contract cost including the entire forecasted demand overall years. The lowest priced CPU becomes the standard by which the remaining CPUs are evaluated. Each CPU is evaluated by taking the lowest CPU price and dividing it by the price of the CPU being evaluated, then multiplying this ratio by 100 in order to get a score out of 100, as follows:

$$\text{Price Score} = 100 \times (\text{Lowest Proposal Price} / \text{Current Proposal Price})$$

The lowest priced CPU will have a Price Score of 100, and the remainder CPUs will have price score that is a fraction of 100 based upon the total Price Score for that CPU in comparison to the lowest total Price Score. The lowest cost will be the CPU with the lowest overall total combined cost over the period of the contract (Main and Optional Procurements).

#### 2.3.1.3 Best Value Determination

Each CPU Technical Merit and Price Score is combined to obtain a Total Score, with the highest overall score representing the CPU with the best value to DND. The assigned weighting factors (70% Technical and 30% Price) represent the importance of the technical aspects of the CPU in protection of the user. The formula to calculate the total score for each system is as follows:

$$\text{Total Score} = (70\% \times \text{Technical Merit Score}) + (30\% \times \text{Price Score})$$

The CPU with the highest total score will be recommended for Standing Offer Agreement award (Annex F).

**APPENDIX 1      SCIENTIFIC AND TECHNOLOGY COMPLIANCE REQUIREMENT**

<b>Mandatory Requirement</b>	<b>Method of Assessment</b>
The CPU must meet Class 3 liquid and vapour protection standard for Chemical Biological Radioactive Nuclear (CBRN) ensembles in accordance with NFPA 1994 (or equivalent).	DND will assess compliance by conducting a paper technical evaluation of Contractor supplied test report packages, to ensure that the proposed product meets or exceeds the NFPA 1994 standard for Class 3 protection for CBRN ensembles.
The CPU shall provide at least six (6) hours of protection to the operator based on the permeation/penetration protocol.	DND will assess compliance by testing the CPU using the permeation/ penetration protocol at the accredited laboratory at DRDC Suffield. DRDC Suffield will provide a standardized textile to be used as the outer shell for each undergarment submitted for consideration. The CPU shall provide at least six (6) hours of protection to the operator based on the permeation/penetration protocol or the bid will be deemed non-compliant and given no further consideration.

## **APPENDIX 2      PROOF OF CONCEPT TRIAL**

### **A1.1    General**

This Appendix details the Proof of Concept trial for the CPU.

### **A1.2    Scheduling**

The Proof of Concept trial will be conducted at a DND facility and each participant will be required to complete the trials wearing the specified order of dress for the particular trial and the CPU being evaluated.

### **A1.3    Proof Of Concept Trial Plan**

#### **A1.3.1   General**

The Proof of Concept trial is designed to assess operator mobility, survivability and lethality while wearing the CPU. The trials are task-based and are focused on the operator's ability to effectively conduct these tasks and their perceived physical and thermal discomfort. The trials will be conducted in an environment that simulates operational tasks, and each task will be rated qualitatively through the use of a systematic user rating. A group of non-participants will assist the participants in recording the results at each phase of the trial program as well as ensuring that there are no unfair or biased components injected into the trial program.

#### **A1.3.2   Participants**

The participants will be selected based on their specialty skill sets, with the selection covering the size range of the CPU in order to provide a representative sample of the end-user community. All participants will be familiar with the use and wearing of a CPU in the operational environments for which it is designed. Each participant must complete all tasks within the specific test for all CPUs under evaluation. Should a participant become incapacitated or unavailable to complete the test for all CPUs, the activity will be deemed incomplete for that participant and none of the results for that participant will be included in the overall assessment of that test.

#### **A1.3.3   Trial Program**

The trial will be conducted over a period of several days depending on the number of CPUs to be assessed. Each participant will be required to complete the trials wearing the activity-specified uniform and equipment along with a randomly selected CPU. Rest periods will be included in the trial program to eliminate the bias of physical exhaustion from the assessment process.

##### **A1.3.3.1      User Rating**

Participants will provide task evaluations at the completion of various activities for each CPU. The trial data collected, including the participant evaluations, will be recorded on the Trial Questionnaire forms, which will be completed for each participant as follows:

- (a)      Appendix 3 - Trial Questionnaire - Fit Sizing (Activity 1);
- (b)      Appendix 4 - Trial Questionnaire – Operational Task Effectiveness (Activity 2);
- (c)      Appendix 5 - Trial Questionnaire – Weapon and Equipment Compatability (Activity 3);
- (d)      Appendix 6 - Trial Questionnaire - Close Quarter Battle Skills (Activiy 4); and
- (e)      Appendix 7 - Trial Questionnaire – Sampling (Activity 5).

The participant evaluations will be captured by individual ratings of various criteria using a non-biased approach to collecting user perception. A 7-point scale will be used to provide a clear and understandable quantification of the participants' perceptions in a controlled manner. Some tests, as designated on the individual Trial Questionnaires, are assigned a higher weight. The scale is defined as follows:

7-Point Scale

Rating	Participant Perception	Assessment Scale	Score
1	Completely Unacceptable	The CPU did not meet any requirements for the task and had severe limitations that would prevent the operator from completing the task.	0
2	Reasonably Unacceptable	The CPU met the minimal requirements for the task and had some limitations that may prevent the operator from completing the task.	1
3	Barely Unacceptable	The CPU met some of the requirements for the task and performed in a manner that that may prevent the operator from completing the task.	2
4	Borderline	The CPU met some of the requirements for the task and performed in a manner that would permit the operator to complete the task with significant limitations on range of use.	3
5	Barely Acceptable	The CPU met most of the requirements for the task and performed in a manner that would permit the operator to complete the task with few limitations on range of use.	4
6	Reasonably Acceptable	The CPU met most of the requirements for the task and performed well in the hands of the operator with only minor limitations.	5
7	Completely Acceptable	The CPU met or exceeded all requirements for the task and performed in every way expected by the operator.	6

A1.3.4 Activities and Procedures

The trials and the data collection procedures are detailed in the following sections. The activities are based upon the actual training and qualification tests used in advanced combat training and, as such, only generic descriptions of the tests are provided. The participants will complete the trials wearing a CAF issued combat uniform without a CPU in order to establish a baseline condition, and with each CPU in succession in a configuration consistent with the task. Not all participants will complete all of the trials as they may not be relevant to their specific role (Tactical/Operational or CBRN Specialist). The CPU Hood, Gloves, and Socks will be worn as specified for each individual activity. Prior to commencing the trials, the participants will be prepared to receive optional training from each Bidder on the fit and use of the CPU in accordance with Annex B.

A1.3.4.1 Activity 1 – Fit Sizing

The participant will conduct the following task:

- (a) Test 1A – Fit Sizing: The participant will put on the CPU to be tested with the assistance of an observer. The participant will conduct an assisted doffing of the CPU, followed by an unassisted donning and doffing according to decontamination protocols;

- (b) The participant will complete the Fit Sizing (Pre-Washed) section of the Fit Sizing questionnaire at Appendix 3. The assessments includes:
  - i. Fit Sizing – Rate the fit of the CPU, including the adjustability of the system to the individual user; and
  - ii. Comfort/Use – Rate the overall thermal and physical comfort and usability (range of motion, flexibility, etc.) of the CPU;
- (c) The CPUs from each Bidder will be washed five (5) times each;
- (d) Test 1B - Fit Sizing: The participant will put on the CPU to be tested with the assistance of an observer. The participant will conduct an assisted doffing of the CPU, followed by an unassisted donning and doffing according to decontamination protocols; and
- (e) The participant will complete the Fit Sizing (Post-Washed) section of the Fit Sizing questionnaire at Appendix 3. The assessments includes:
  - i. Fit Sizing – Rate the fit of the CPU, including the adjustability of the system to the individual user; and
  - ii. Comfort/Use – Rate the overall thermal and physical comfort and usability (range of motion, flexibility, etc.) of the CPU.

A1.3.4.2 Activity 2 - Strenuous Activity Trial

Depending on the time of year, some/all of these tasks may be performed within an environmental chamber. Prior to commencing the tasks in this activity, the participant will put on the CPU to be tested with the assistance of an observer. Participants will add the associated hood, socks and gloves for Tests 2C and 2D, in addition to appropriate additional protective clothing and equipment (uniform, respirator, body armour, helmet, etc.). The participant will conduct the following tasks:

- (a) Test 2A - The participant will conduct a strenuous running drill consisting of a light jog for 100 m (109 yds) followed by a sprint for 50 m (54.5 yds) repeated five (5) times continuously without a break between sets;
- (b) Test 2B - The participant will complete an agility run around a series of five (5) pylons distributed at varying intervals on a course that is 100 m (109 yds) in length and 5 m (5.5 yds) in width. The participant will begin at the start position in the standing position and then run in a zigzag pattern around the outside of the pylons, stopping at each pylon to take aim and fire a simulated shot at the target;
- (c) Test 2C - The participant will complete a series of activities that are designed to test the ability to conduct an insertion/extraction. The participant will begin at the top of the rappelling/fast roping tower with both feet on the platform, and then, in accordance with standard procedures:
  - i. Rappel to the bottom of the tower;
  - ii. Scale the caving ladder as swiftly as they are able; and
  - iii. Fast rope to the bottom of the tower;
- (d) Test 2D - The participant will complete a series of activities that are designed to test the ability to conduct a forced entry into a room as follows:
  - i. Stair Climb - The participant will begin at the bottom of the stairs with both feet on the platform in front of the stairs, and then scale the stairs as swiftly as they are able until both feet are on the balcony above the stairs;
  - ii. Stair Descent - The participant will begin at the top of the stairs, and then descend the stairs as swiftly as they are able;

- iii. Forced Entry - The participant will simulate a forced entry through a doorway by striking the forced entry measurement device with a sledge hammer until the required level of absorbed energy is achieved;
  - iv. Push-Pull - The participant will maneuver the Push-Pull machine in the appropriate manner to simulate hand-to-hand combat. The activity is complete when the machine has been successfully manipulated into the required positions; and
  - v. Casualty Evacuation - The participant will, by means of pulling on a man-down drag strap, remove the casualty from the defined danger area as swiftly as they are able;
- (e) The participant will complete the Strenuous Activity Trial Questionnaire at Appendix 4.

A1.3.4.3 Activity 3 – Weapon and Equipment Compatibility Trial

Prior to commencing each task in this activity, the participant will put on the CPU and associated hood, gloves and socks to be tested with the assistance of an observer. The participant will conduct the following tasks:

- (a) Test 3 – The participant will conduct individual application shooting on a live firing range using various weapons in a course of fire drill. The tasks include movement through various firing points and positions (e.g., prone, kneeling, standing); and
- (b) The participant will then complete the Weapon and Equipment Compatibility Trial Questionnaire at Appendix 5.

A1.3.4.4 Activity 4 – Close Quarter Battle (CQB) Skills Trial

This final series of tests will be conducted once all previous tests have been completed in full. The participant will conduct the following tasks:

- (a) Test 4 – CQB: The participant will conduct close quarter battle drills and rate the acceptability of the CPU for comfort, fit, durability and functionality;
- (b) The participant will complete the Close Quarter Battle Skills Questionnaire at Appendix 6.

A1.3.4.5 Activity 5 – Sampling Trial

Prior to commencing each task in this activity, the participant will put on the CPU and associated hood, gloves and socks to be tested with the assistance of an observer. The participant will conduct the following tasks:

- (a) The participant will open a 45 gallon sealed drum and take a sample in accordance with standard procedures;
- (b) The participant will run a provisional identification of the sample contents using a portable detector; and
- (c) The participant will complete the Sampling Questionnaire at Appendix 7.

### APPENDIX 3 TRIAL QUESTIONNAIRE - FIT SIZING (ACTIVITY 1)

Participant Name/Number:	
Date:	
CPU:	
Shirt Size:	
Pant Size:	

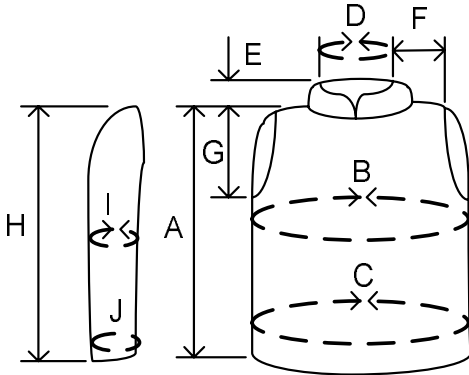
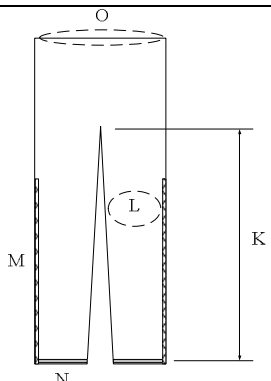
Rating	Participant Perception	Assessment Scale	Score
1	Completely Unacceptable	The CPU did not meet any requirements for the task and had severe limitations that would prevent the operator from completing the task.	0
2	Reasonably Unacceptable	The CPU met the minimal requirements for the task and had some limitations that may prevent the operator from completing the task.	1
3	Barely Unacceptable	The CPU met some of the requirements for the task and performed in a manner that that may prevent the operator from completing the task.	2
4	Borderline	The CPU met some of the requirements for the task and performed in a manner that would permit the operator to complete the task with significant limitations on range of use.	3
5	Barely Acceptable	The CPU met most of the requirements for the task and performed in a manner that would permit the operator to complete the task with few limitations on range of use.	4
6	Reasonably Acceptable	The CPU met most of the requirements for the task and performed well in the hands of the operator with only minor limitations.	5
7	Completely Acceptable	The CPU met or exceeded all requirements for the task and performed in every way expected by the operator.	6

Test 1A – Fit Sizing (Pre-Washed)							
Rate the CPU in the following dimensions for acceptability for length, openings, etc. For example, in regards to leg inseam, please rate if leg length is long enough (that can be too short or too long), as well if the inseam is of appropriate length (i.e. rides too high).	Fit Sizing						
	☹						☺
	0	1	2	3	4	5	6
<b>Shirt</b>							
Length (A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chest Girth (B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waist Girth (C)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neck Opening (D)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Collar Height (E)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Width at Shoulder (F)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arm Opening (G)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arm Length (H)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arm Girth (I)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wrist Opening (J)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Pant							
Length of Inseam (K)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leg Girth Mid-Thigh (L)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leg Slide Fastener Closure System (M)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comfort of Stretch Cuff (N)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adjustability of Pant Closure at Waist (O)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate the CPU in the following:				Comfort/Use ☹️ 0 1 2 3 4 5 6 ☺️			
Softness/Abrasiveness on Skin				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobility through arms (Shoulder taps, cross-toe touches, etc.)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobility through legs (Squats, waist-bends, crouch, etc.)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Range of Motion of neck				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flexibility/Stiffness				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combat uniform compatibility (Does the CPU bunch up anywhere when putting the combat uniform on over top?)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wrist closures (Type, useability)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ankle closures (Type, useability)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hood (size, adjustment, range of motion, obstruction of view, compatibility with respirator)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combat boots compatibility (socks bunch up, hot spots, slippage when walking, fit of boot)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glove compatibility (How do the CPU gloves feel under shooting gloves, work gloves, etc.)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of Doffing (assisted)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of Donning (unassisted)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of Doffing (unassisted)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall Comfort (thermal and physical) of the CPU	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Score	(____/180) x 5 = ____

Test 1B – Fit Sizing (Post-Washed)							
Rate the CPU in the following dimensions for acceptability for length, openings, etc. For example, in regards to leg inseam, please rate if leg length is long enough (that can be too short or too long), as well if the inseam is of appropriate length (i.e. rides too high).	<div style="text-align: center;">Fit Sizing</div> <div style="display: flex; justify-content: space-around;"> <span>☹</span> <span>☺</span> <span>☺</span> </div> <div style="display: flex; justify-content: space-around;"> <span>0</span> <span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> </div>						
<b>Shirt</b>							
Length (A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chest Girth (B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waist Girth (C)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neck Opening (D)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Collar Height (E)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Width at Shoulder (F)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arm Opening (G)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arm Length (H)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arm Girth (I)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wrist Opening (J)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							
<b>Pant</b>							
Length of Inseam (K)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leg Girth Mid-Thigh (L)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leg Slide Fastener Closure System (M)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comfort of Stretch Cuff (N)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adjustability of Pant Closure at Waist (O)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							
Rate the CPU in the following:	<div style="text-align: center;">Comfort/Use</div> <div style="display: flex; justify-content: space-around;"> <span>☹</span> <span>☺</span> <span>☺</span> </div>						

	0	1	2	3	4	5	6
Softness/Abrasiveness on Skin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobility through arms (Shoulder taps, cross-toe touches, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobility through legs (Squats, waist-bends, crouch, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Range of Motion of neck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flexibility/Stiffness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combat uniform compatibility (Does the CPU bunch up anywhere when putting the combat uniform on over top?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wrist closures (Type, useability)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ankle closures (Type, useability)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hood (size, adjustment, range of motion, obstruction of view, compatibility with respirator)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combat boots compatibility (socks bunch up, hot spots, slippage when walking, fit of boot)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glove compatibility (How do the CPU gloves feel under shooting gloves, work gloves, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of Doffing (assisted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of Donning (unassisted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of Doffing (unassisted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall Comfort (thermal and physical) of the CPU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Score</b>	<b>( ____/180) x 5 = ____</b>						

Comments:

**APPENDIX 4 TRIAL QUESTIONNAIRE – OPERATIONAL TASK EFFECTIVENESS  
(ACTIVITY 2)**

Participant Name/Number:	
Date:	
CPU:	
Shirt Size:	
Pant Size:	

Rating	Participant Perception	Assessment Scale	Score
1	Completely Unacceptable	The CPU did not meet any requirements for the task and had severe limitations that would prevent the operator from completing the task.	0
2	Reasonably Unacceptable	The CPU met the minimal requirements for the task and had some limitations that may prevent the operator from completing the task.	1
3	Barely Unacceptable	The CPU met some of the requirements for the task and performed in a manner that that may prevent the operator from completing the task.	2
4	Borderline	The CPU met some of the requirements for the task and performed in a manner that would permit the operator to complete the task with significant limitations on range of use.	3
5	Barely Acceptable	The CPU met most of the requirements for the task and performed in a manner that would permit the operator to complete the task with few limitations on range of use.	4
6	Reasonably Acceptable	The CPU met most of the requirements for the task and performed well in the hands of the operator with only minor limitations.	5
7	Completely Acceptable	The CPU met or exceeded all requirements for the task and performed in every way expected by the operator.	6

Test 2A: Strenuous Running							
Rate the acceptability of the system for the following criteria while conducting the strenuous running drills:				User Assessment			
				☹		☺	☺
				0	1	2	3
				4	5	6	
Physical comfort during activities (chaffing, etc.)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thermal comfort during activities (hot, cold, breathability, etc.)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skin compatibility (irritation, itchy, etc.)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment compatibility				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Score				( ____ / 24 ) x 5 = ____			

Test 2B: Agility Run							
Rate the acceptability of the system for the following criteria while conducting the agility run:				User Assessment			
				☹		☺	☺
				0	1	2	3
				4	5	6	
Physical comfort during activities (chaffing, etc.)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thermal comfort during activities (hot, cold, breathability, etc.)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skin compatibility (irritation, itchy, etc.)				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Equipment compatibility	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Score</b>	( ____ / 24) x 5 = ____

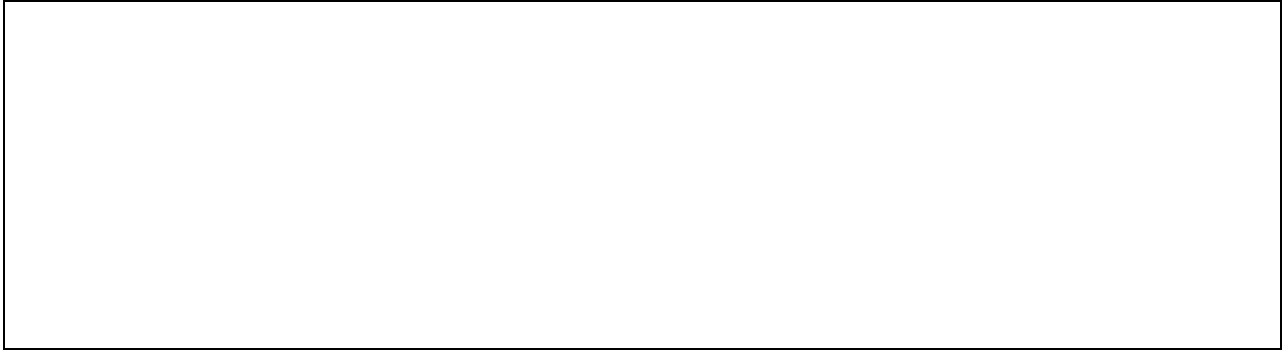
<b>Test 2C: Insertion and Extraction</b>	
Rate the acceptability of the system for the following criteria while conducting insert/extract drills:	<div style="text-align: center;">User Assessment</div> <div style="display: flex; justify-content: space-around;"> <span>☹</span> <span>☺</span> <span>☺</span> </div> <div style="display: flex; justify-content: space-around;"> <span>0</span> <span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> </div>
Physical comfort during activities (chaffing, etc.)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Thermal comfort during activities (hot, cold, breathability, etc.)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Skin compatibility (irritation, itchy, etc.)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Equipment compatibility	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Score</b>	( ____ / 24) x 5 = ____

<b>Test 2D: Forced Entry</b>	
Rate the acceptability of the system for the following criteria while conducting forced entry drills:	<div style="text-align: center;">User Assessment</div> <div style="display: flex; justify-content: space-around;"> <span>☹</span> <span>☺</span> <span>☺</span> </div> <div style="display: flex; justify-content: space-around;"> <span>0</span> <span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> </div>
Physical comfort during activities (chaffing, etc.)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Thermal comfort during activities (hot, cold, breathability, etc.)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Skin compatibility (irritation, itchy, etc.)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Equipment compatibility	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Score</b>	( ____ / 24) x 15 = ____

<b>Overall</b>	
Rate the acceptability of the system for the following criteria while conducting all drills:	<div style="text-align: center;">User Assessment</div> <div style="display: flex; justify-content: space-around;"> <span>☹</span> <span>☺</span> <span>☺</span> </div> <div style="display: flex; justify-content: space-around;"> <span>0</span> <span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> </div>
Does the CPU shift around during tasks?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Do the sleeves or pant legs ride up?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Do the socks cause blisters?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Field of view?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Score</b>	( ____ / 24) x 5 = ____

TOTALS	
Test 2A: Strenuous Running	____ out of 5
Test 2B: Agility Run	____ out of 5
Test 2C: Insertion and Extraction	____ out of 5
Test 2D: Forced Entry	____ out of 15
Overall	____ out of 5
<b>TOTAL:</b>	<b>____ out of 35</b>

Comments:



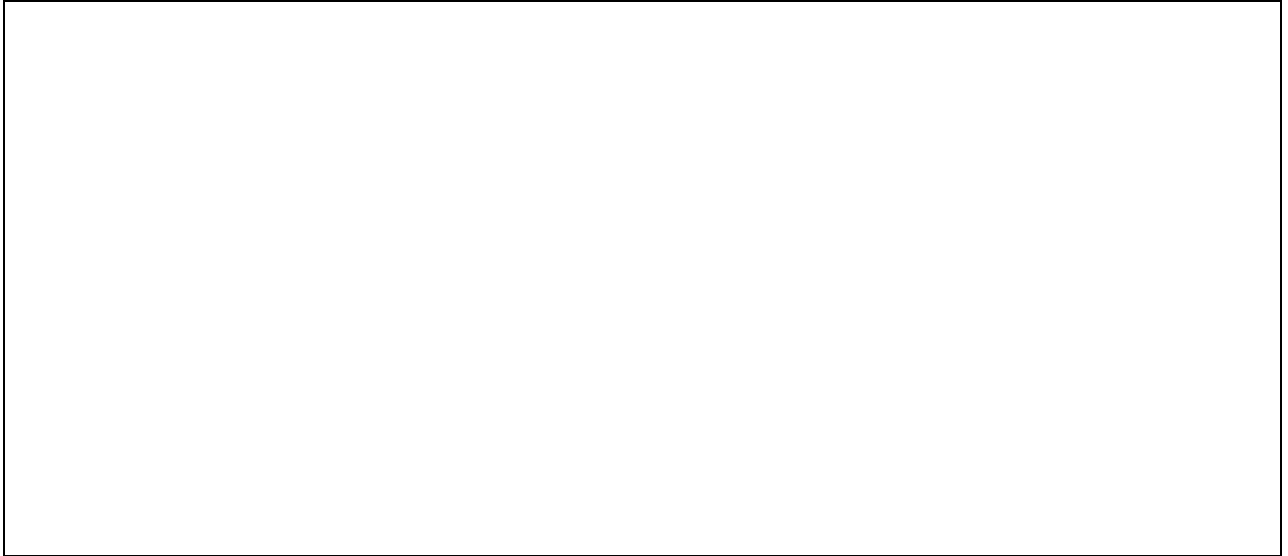
### APPENDIX 5 TRIAL QUESTIONNAIRE – WEAPON AND EQUIPMENT COMPATABILITY (ACTIVITY 3)

Participant Name/Number:	
Date:	
CPU:	
Shirt Size:	
Pant Size:	

Rating	Participant Perception	Assessment Scale	Score
1	Completely Unacceptable	The CPU did not meet any requirements for the task and had severe limitations that would prevent the operator from completing the task.	0
2	Reasonably Unacceptable	The CPU met the minimal requirements for the task and had some limitations that may prevent the operator from completing the task.	1
3	Barely Unacceptable	The CPU met some of the requirements for the task and performed in a manner that that may prevent the operator from completing the task.	2
4	Borderline	The CPU met some of the requirements for the task and performed in a manner that would permit the operator to complete the task with significant limitations on range of use.	3
5	Barely Acceptable	The CPU met most of the requirements for the task and performed in a manner that would permit the operator to complete the task with few limitations on range of use.	4
6	Reasonably Acceptable	The CPU met most of the requirements for the task and performed well in the hands of the operator with only minor limitations.	5
7	Completely Acceptable	The CPU met or exceeded all requirements for the task and performed in every way expected by the operator.	6

Test 3: Weapon and Equipment Compatibility							
Rate the acceptability of the system for the following criteria while conducting course of fire drills:	User Assessment						
	☹			☺			☺
	0	1	2	3	4	5	6
Ease of conducting shooting drills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of adopting prone position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of adopting kneeling position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of adopting standing position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of conducting transition drills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of gaining and maintaining sight picture in any position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weapons manipulation with CPU glove under shooting gloves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effect of hood on field of view	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Score</b>	( ____ / 48) x 20 = ____						

Comments:





## APPENDIX 6 TRIAL QUESTIONNAIRE - CLOSE QUARTER BATTLE SKILLS (ACTIVITY 4)

Participant Name/Number:	
Date:	
CPU:	
Shirt Size:	
Pant Size:	

Rating	Participant Perception	Assessment Scale	Score
1	Completely Unacceptable	The CPU did not meet any requirements for the task and had severe limitations that would prevent the operator from completing the task.	0
2	Reasonably Unacceptable	The CPU met the minimal requirements for the task and had some limitations that may prevent the operator from completing the task.	1
3	Barely Unacceptable	The CPU met some of the requirements for the task and performed in a manner that that may prevent the operator from completing the task.	2
4	Borderline	The CPU met some of the requirements for the task and performed in a manner that would permit the operator to complete the task with significant limitations on range of use.	3
5	Barely Acceptable	The CPU met most of the requirements for the task and performed in a manner that would permit the operator to complete the task with few limitations on range of use.	4
6	Reasonably Acceptable	The CPU met most of the requirements for the task and performed well in the hands of the operator with only minor limitations.	5
7	Completely Acceptable	The CPU met or exceeded all requirements for the task and performed in every way expected by the operator.	6

Test 4: CQB							
Rate the acceptability of the system for the following criteria while conducting close quarter battle drills:	User Assessment						
	☹			☺			☺
	0	1	2	3	4	5	6
Physical comfort during activities (chaffing, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thermal comfort during activities (hot, cold, breathability, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skin compatibility (irritation, itchy, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment compatibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Score</b>	( ____ / 24 ) x 20 = ____						

Comments:

### APPENDIX 7 TRIAL QUESTIONNAIRE – SAMPLING (ACTIVITY 5)

Participant Name/Number:	
Date:	
CPU:	
Shirt Size:	
Pant Size:	

Rating	Participant Perception	Assessment Scale	Score
1	Completely Unacceptable	The CPU did not meet any requirements for the task and had severe limitations that would prevent the operator from completing the task.	0
2	Reasonably Unacceptable	The CPU met the minimal requirements for the task and had some limitations that may prevent the operator from completing the task.	1
3	Barely Unacceptable	The CPU met some of the requirements for the task and performed in a manner that that may prevent the operator from completing the task.	2
4	Borderline	The CPU met some of the requirements for the task and performed in a manner that would permit the operator to complete the task with significant limitations on range of use.	3
5	Barely Acceptable	The CPU met most of the requirements for the task and performed in a manner that would permit the operator to complete the task with few limitations on range of use.	4
6	Reasonably Acceptable	The CPU met most of the requirements for the task and performed well in the hands of the operator with only minor limitations.	5
7	Completely Acceptable	The CPU met or exceeded all requirements for the task and performed in every way expected by the operator.	6

Test 4A: Durability							
Rate the acceptability of the system for the following criteria while conducting the sampling task:	User Assessment						
	☹ 0	1	2	☺ 3	4	5	😊 6
Physical comfort during activities (chaffing, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thermal comfort during activities (hot, cold, breathability, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skin compatibility (irritation, itchy, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment compatibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Score</b>	<b>( ____/24) x 20 = ____</b>						

Comments:

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**STATEMENT OF WORK (STANDING OFFER AGREEMENT)  
FOR  
CHEMICAL PROTECTIVE UNDERGARMENTS**

**1.0 SCOPE**

**1.1. Purpose**

The purpose of this statement of work is to define the scope and requirements for a Standing Offer Agreement (SOA) for Chemical Protective Undergarments for the Department of National Defence (DND).

**1.2. Applicable Documents**

The following documents form part of this statement of work to the extent specified and are supportive of the statement of work when referenced; all other document references are to be considered supplemental information only. In the event of a conflict between the documents referenced herein and the contents of the statement of work, then the contents of the statement of work takes precedence.

- Canadian General Standards Board (CGSB) CAN/CGSB-43.22-2001 Corrugated Fibreboard Products

**2.0 DELIVERABLES**

**2.1. Specific Deliverables**

The Contractor must deliver the following for a period of five (5) years:

- (a) Chemical Protective Undergarments in accordance with the Performance and Technical Specifications at Annex C. Each call-up will specify quantities required by size; and
- (b) Training in accordance with Section 2.2.

**2.2. Training**

The Contractor must provide "Train-the-Trainer" type training as follows:

- (a) One (1) serial at each of the DND delivery locations;
- (b) Training for up to ten (10) DND candidates at each location; and
- (c) Training to include:
  - i. Warning/precautions on use;
  - ii. Care and cleaning;
  - iii. Repair; and
  - iv. Donning/doffing.

**2.3. Forecasted Demand**

The estimated forecasted demand is as follows:

Item	Description	Year 1	Year 2	Year 3	Year 4	Year 5
1	CPU Jacket	2430	480	480	480	480
2	CPU Pant	2430	480	480	480	480
3	CPU Hood	2430	960	960	960	960
4	CPU Socks (Pair)	2430	960	960	960	960

5	CPU Gloves (Pair)	2430	960	960	960	960
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*Note: The above items 1, 2 and 3 are for a two-piece system with detachable hood. If the system is a one-piece coverall with detachable hood, items 1 and 2 are to be replaced by a single item for the coverall. If the system has an attached hood, items 1 and 3 are to be replaced by a single item.*

### 3.0 REQUIREMENTS

#### 3.1. Quality Assurance Program

The Contractor must:

- (a) Establish, implement, document and maintain a quality system that ensures conformance to contractual requirements and meets the objectives of the ISO 9001 or equivalent quality system model during performance of this contract; and
- (b) Conduct Quality Conformance Inspections and Tests during manufacture in accordance with the Contractor's standard acceptance test plan.

#### 3.2. Packaging – Individual

Each garment must be neatly folded in accordance with good commercial practice and packaged individually. The package must consist of a polyethylene (or other transparent film) bag or envelope, made of material not less than one (1) mil thickness. The bags must be taped or stapled to effect closure and must be legibly marked (labeled) as follows (only required if the garment/equipment identification markings are not clearly visible through the bag):

- (a) NATO Stock Number (NSN) and/or Manufacturer Part Number;
- (b) Item Name; and
- (c) Size.

#### 3.3. Packaging – Quantity

A quantity of individual garment packages, of the same size, must be packed into a corrugated fiberboard box as follows:

- (a) Box construction and closure conforms to Canadian General Standards Board (CGSB) specification CAN/CGSB-43.22-2001;
- (b) Overall inside dimensions (length, width and depth added) must not exceed 1.5 meters (59 inches) and the box size and content quantity must be uniform for the duration of the SOA;
- (c) Maximum weight of the box and contents must not exceed 18 kg (40 pounds)
- (d) Stenciling or labelling on one end of each box, in legible figures as large as practicable in relation to the space available, the following information:
  - i. NATO Stock Number (NSN) or Manufacturer Part Number;
  - ii. Item Name/Nomenclature (in bilingual format);
  - iii. Quantity (per box);
  - iv. Gross Weight (nearest kg); and
  - v. SOA Serial Number - As specified on SOA.