

**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Réception des soumissions - TPSGC / Bid  
Receiving - PWGSC  
601 - 1550 Avenue d'Estimauville  
Québec  
Québec  
G1J 0C7

<b>Title - Sujet</b> Target hit sensor and filter	
<b>Solicitation No. - N° de l'invitation</b> W7701-135493/B	<b>Date</b> 2013-01-18
<b>Client Reference No. - N° de référence du client</b> W7701-135493	<b>GETS Ref. No. - N° de réf. de SEAG</b> PW-\$QCW-013-15135
<b>File No. - N° de dossier</b> QCW-2-35343 (013)	<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 2013-02-21</b>	
<b>Time Zone</b> Fuseau horaire Heure Normale du l'Est HNE	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Lessard, Pascal	<b>Buyer Id - Id de l'acheteur</b> qcw013
<b>Telephone No. - N° de téléphone</b> (418) 649-2819 ( )	<b>FAX No. - N° de FAX</b> (418) 648-2209
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> R&D POUR LA DEFENSE NATIONALE-VALCARTIER 2459 BLVD PIE XI NORD QUÉBEC Québec G3J1X5 Canada	

**INVITATION TO TENDER**  
**APPEL D'OFFRES**

**Tender To: Public Works and Government Services  
Canada**

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

**Soumission aux: Travaux Publics et Services  
Gouvernementaux Canada**

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

**Comments - Commentaires**

**Instructions: See Herein**

**Instructions: Voir aux présentes**

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

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

**Issuing Office - Bureau de distribution**  
TPSGC - PWGSC  
601 - 1550 Avenue d'Estimauville  
Québec  
Québec  
G1J 0C7

See Part 2 for Clauses and Conditions  
Voir Partie 2 pour Clauses et Conditions

Item Article	Description	Dest. Code Dest.	Inv. Code Fact.	Qty Qté	U. of I. U. de D.	Destination	Unit Price/Prix unitaire FOB/FAM	Plant/Usine	Delivery Req. Livraison Req.	Del. Offered Liv. offerte
1	Target hit sensor and filter	W7701	W7701	1	Lot	\$	XXXXXXXXXXXX		See Herein	

This bid solicitation cancels and supersedes previous bid solicitation number W7701-135493/A dated 2012-10-17 with a closing of 2012-11-26 at 2:00PM.

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W7701-135493

Amd. No. - N° de la modif.

File No. - N° du dossier

QCW-2-35343

Buyer ID - Id de l'acheteur

qcw013

CCC No./N° CCC - FMS No/ N° VME

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## **PART 1 - GENERAL INFORMATION**

### **1. Security Requirement**

There is no security requirement associated with the requirement.

### **2. Requirement**

The requirement is detailed under Annex A "Requirement".

### **3. Debriefings**

After contract award, bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

## PART 2 - BIDDER INSTRUCTIONS

### 1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation 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.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2012-11-19) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

### 2. Submission of Bids

Bids 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 bid solicitation.

### 3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders 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 questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

### 4. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the province of Quebec.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, 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 bidders.

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## PART 3 - BID PREPARATION INSTRUCTIONS

### 1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid ( one (1) hard copy)  
Section II: Financial Bid ( one (1) hard copy)  
Section III: Certifications (one (1) hard copy)

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

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

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

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, bidders are encouraged to:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and/or 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.

#### Section I: Technical Bid

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

#### The Bidder must provide the following with its Technical Bid:

- (i) **Mandatory Criteria:** The Bidder must fill in and provide the technical compliance table (section 1.1.1 of Part 4).
- (ii) **Documentation:** The Bidder must provide evidence (product specifications, publication, documented data or discussion points) showing compliance to the mandatory criteria.

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## **Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Goods and Services Tax (GST) or Harmonized Sales Tax (HST) must be shown separately, if applicable.

### **1.1 Exchange Rate Fluctuation**

C3011T (2010-01-11), Exchange Rate Fluctuation

## **Section III: Certifications**

Bidders must submit the certifications required under Part 5.

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## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 1. Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### 1.1 Technical Evaluation

- a. The Bidder must indicate, for each mandatory technical criterion, whether the proposed products comply or not, by checking the relevant box. The Bidder must clearly demonstrate how the proposed products comply to each criterion. Simply stating that the criteria is met, is not sufficient. Where it is necessary to refer to other documentation that is included in the Bid, Bidders should include the precise location of the reference material including the title of the document, and the page and paragraph numbers. The bidder must provide an answer for each criterion. The bidder must provide enough details to permit a complete evaluation.

Although bidders must propose products meeting all the specifications and components outlined in Annex A at the bid closing date, bids will be evaluated on the following criteria (next page) :

<b>Technical Compliance Table - Mandatory Criteria</b>			
<b>Automated pipetting system</b>			
<b>Automated pipetting system- Mandatory Criteria</b>	<b>Compliant</b>	<b>Non Compliant</b>	<b>Description / References</b>
<b>Non-contact target hit sensor</b>			
<b>1</b>	<ul style="list-style-type: none"> <li>Acoustic sensor technology based on measurement of the supersonic shock wave from the bullet;</li> </ul>		
<b>Target lifter</b>			
<b>2</b>	<ul style="list-style-type: none"> <li>Up and down of a target representing human silhouette</li> </ul>		
<b>3</b>	<ul style="list-style-type: none"> <li>Sturdy pop up target mechanism (unit totally enclosed and resistant to outdoor weather);</li> </ul>		
<b>Hit sensor integrated with target lifter, processor and communication unit</b>			
<b>4</b>	<ul style="list-style-type: none"> <li>Compact integrated unit designed to be portable:               <ul style="list-style-type: none"> <li>size (without the target) less than 1.6 m x 0.6 m x 0.6 m</li> <li>weight less than 35 kg excluding the batteries</li> <li>battery operated</li> <li>re-chargeable battery must be included</li> </ul> </li> </ul>		
<b>Controller software</b>			
<b>5</b>	<ul style="list-style-type: none"> <li>Wireless RF data transmission/reception with sensor unit (minimum range of 600m);</li> </ul>		
<b>6</b>	<ul style="list-style-type: none"> <li>Real-time and after-action impact location display (coordinates, statistics, graphical location) and time between target lift and hit;</li> </ul>		

## 1.2 Financial Evaluation

1. The price of the bid will be evaluated as follows:

A. Canadian-based bidders must submit firm prices, Canadian customs duties and excise taxes included, and Goods and Services Tax (GST) or Harmonized Sales Tax (HST) excluded.

B. foreign-based bidders must submit firm prices, Canadian customs duties, excise taxes and GST or HST excluded. Canadian customs duties and excise taxes payable by Canada will be added, for evaluation purposes only, to the prices submitted by foreign-based bidders.

2. Bids submitted in foreign currency will be converted to Canadian currency for evaluation purposes. The rate given by the Bank of Canada in effect on the bid solicitation closing date will be applied as a conversion factor to the bids submitted in foreign currency.

3. Bidders must provide prices DDP (Incoterm 2000) at Defence Research and Development Canada, Valcartier located at 2459 boul. Pie-XI North, Quebec, Quebec, G3J 1X5 (DRDC location). Bids will be assessed on a DDP (Incoterm 2000) basis."

4. For the purpose of the bid solicitation, bidders with an address in Canada are considered Canadian-based bidders and bidders with an address outside of Canada are considered foreign-based bidders.

## 2. Basis of Selection

### 2.1 Basis of Selection - Mandatory Technical Criteria

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract

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## PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and related documentation to be awarded a contract. Canada will declare a bid non-responsive if the required certifications and related documentation are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications, to provide the related documentation or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

### 1. Mandatory Certifications Required Precedent to Contract Award

#### 1.1 Code of Conduct and Certifications - Related documentation

By submitting a bid, the Bidder certifies, for himself and his affiliates, to be in compliance with the Code of Conduct and Certifications clause of the Standard instructions. The related documentation hereinafter mentioned will help Canada in confirming that the certifications are true. By submitting a bid, the Bidder certifies that it is aware, and that its affiliates are aware, that Canada may request additional information, certifications, consent forms and other evidentiary elements proving identity or eligibility. Canada may also verify the information provided by the Bidder, including the information relating to the acts or convictions specified herein, through independent research, use of any government resources or by contacting third parties. Canada will declare non-responsive any bid in respect of which the information requested is missing or inaccurate, or in respect of which the information contained in the certifications is found to be untrue, in any respect, by Canada. The Bidder and any of the Bidder's affiliates, will also be required to remain free and clear of any acts or convictions specified herein during the period of any contract arising from this bid solicitation.

Bidders who are incorporated, including those bidding as a joint venture, must provide with their bid or promptly thereafter a complete list of names of all individuals who are currently directors of the Bidder. Bidders bidding as sole proprietorship, including those bidding as a joint venture, must provide the name of the owner with their bid or promptly thereafter. Bidders bidding as societies, firms, partnerships or associations of persons do not need to provide lists of names. If the required names have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

Canada may, at any time, request that a Bidder provide properly completed and Signed Consent Forms (Consent to a Criminal Record Verification form- PWGSC-TPSGC 229) (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>) for any or all individuals aforementioned within the time specified. Failure to provide such Consent Forms within the time period provided will result in the bid being declared non-responsive.

## 2. Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

### 2.1 Federal Contractors Program - Certification

#### 2.1.1 Federal Contractors Program - over \$25,000 and below \$200,000

Suppliers who are subject to the Federal Contractors Program (FCP) and have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive federal government contracts over the threshold for solicitation of bids as set out in the Government Contracts Regulations. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- (a)  is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- (b)  is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;
- (c)  is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC, having not bid on requirements of \$200,000 or more;
- (d)  has not been declared an ineligible contractor by HRSDC, and has a valid certificate number as follows: \_\_\_\_\_.

Further information on the FCP is available on the HRSDC Web site.

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## PART 6 - RESULTING CONTRACT CLAUSES

### 1. Security Requirement

There is no security requirement associated with the requirement.

### 2. Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex A.

### 3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract 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.

#### 3.1 General Conditions

2010A (2012-11-19), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

#### 3.2 Supplemental General Conditions

4001, (2010-08-16) - Hardware Purchase, Lease and Maintenance  
4003, (2010-08-16) - Licensed Software

### 4. Term of Contract

#### 4.1 Delivery Date

All the deliverables must be received on or before **6 months** after contract award.

#### 4.2 Delivery Address

All deliverables must be received at:

Defence Research and Development Canada - Valcartier  
2459, Pie-XI Blvd  
Québec (Québec)  
G3J 1X5 Canada

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## 5. Authorities

### 5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Pascal Lessard

Title: Supply Specialist

Public Works and Government Services Canada

Acquisitions Branch

Address: 1550 avenue D'Estimauville, 6e étage, Québec (QC) G1J 0C7

Telephone: (418) 649-2819

Facsimile: (418) 648-2209

E-mail address: pascal.lessard@tpsgc-pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

### 5.2 Project Authority

The Project Authority for the Contract is:

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

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone : \_\_\_\_\_

Facsimile: \_\_\_\_\_

E-mail address: \_\_\_\_\_

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project 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 contract amendment issued by the Contracting Authority.

### 5.3 Contractor's Representative

**To be completed by the contractor with he's bid**

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

Telephone : \_\_\_\_\_

Facsimile: \_\_\_\_\_

E-mail address: \_\_\_\_\_

**5.4 Administrative officer**

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

**6. Payment**

**6.1 Basis of Payment**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm lot price, as specified in Annex B for a cost of \$ \_\_\_\_\_ (the amount will be insert at contract award). Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

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 Contracting Authority before their incorporation into the Work.

**6.2 Single Payment**

SACC Manual Clause H1000C (2008-05-12), Single Payment

**6.3 SACC Manual Clauses**

C2000C (2007-11-30), Taxes - Foreign-based Contractor

**6.4 Shipping Instructions - Delivery at Destination**

Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP) Defence Research and Development Canada - Valcartier, 2459 Pie-XI Blvd, Quebec, G3J 1X5, Canada, Incoterms 2000 for shipments from a commercial contractor.

**7. 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:

The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

## 8. Certifications

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

## 9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in \_\_\_\_\_.

## 10. 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 Articles of Agreement;
- (b) the supplemental general conditions 4001, (2010-08-16) - Hardware Purchase, Lease and Maintenance
- (c) the supplemental general conditions 4003, (2010-08-16) - Licensed Software
- (d) the general conditions 2010A (2012-11-19), General Conditions - Goods (Medium Complexity),
- (e) Annex A, Requirement;
- (f) Annex B, Basis of payment;
- (g) the Contractor's bid dated \_\_\_\_\_

## 11. Defence Contract

*SACC Manual* clause A9006C (2012-07-16), Defence Contract

## 12. SACC Manual Clauses

G1005C (2008-05-12), Insurance  
B1501C (2006-06-16), Electrical equipment

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## ANNEX "A"

### REQUIREMENT

#### 1.1 Non-contact target hit sensor

The Non-contact target hit sensor must comply with the following specifications:

- Acoustic sensor technology based on measurement of the supersonic shock wave from the bullet;
- Minimum projectile velocity at target : 450 m/s
- Window of detection at least 0.8m radius from center of target;
- Impact location accuracy of less than 15mm 90% of the time;
- Programmable detection zone around target;
- Time between successive recorded shots less than 70 ms;
- Capability to be calibrated by the operator in the field during a live firing campaign without interruption of the tests.
- Supports 5.56 x 45mm and 7.62 x 51 mm caliber rounds at distances between 5 and 600 meters

#### 1.2 Target lifter

The Target lifter must comply with following specifications:

- Up and down of a target representing human silhouette;
- Time to expose or retreat target less than 1 second;
- Sturdy pop up target mechanism (unit totally enclosed and resistant to outdoor weather);
- Basic target provided.

#### 1.3 Hit sensor integrated with target lifter, processor and communication unit

The Hit sensor integrated with target lifter, processor and communication unit must comply with following specifications:

- Compact integrated unit designed to be portable:
  - size (without the target) less than 1.6 m x 0.6 m x 0.6 m
  - weight less than 35 kg excluding the batteries
  - battery operated
  - re-chargeable battery must be included
- Set-up time in the field less than 15 minutes;
- Capability to measure time between target lift and target hit;
- Wireless RF data transmission with a minimum range of 600 m.

## 1.4 Controller software

The Controller software must comply with following specifications:

- Wireless RF data transmission/reception with sensor unit (minimum range of 600m);
- Sends signal for target lift according to scenario; receives hit coordinate and timing;
- Addresses, controls, and scores more than 10 sensor units and more than 1,000 hits;
- Information on lifter position (up-down);
- Real-time and after-action impact location display (coordinates, statistics, graphical location) and time between target lift and hit;
- Capability to create scenarios by the user during a firing test campaign, without requirement of any additional software;
- Impact location coordinates and timing available electronically for transfer to external computer for later analysis;
- Capability to adjust: hits to kill, scoring (points varying with target zone), shot window, target drop-off when in hit zone.

## 1.5 Controller hardware

The Controller hardware must comply with following specifications:

- Field (watertight) computer with at least 40 GB hard drive;
- Portable (maximum 15 inches laptop size, battery powered);
- Communication pack (all cables, connectors, connection boxes, etc) must be provided with the system to make it 100% functional from the start;

## 1.6 General

- Turnkey system
- 24-hour, all-weather operation; environmentally hardened;

**ANNEX "B"****Basis of payment**

<b>Article</b>	<b>Description</b>	<b>Firm unit price</b>	<b>Qty</b>	<b>Firm total price</b>	<b>Currency</b>
<b>1</b>	Hit sensor integrated with target lifter, processor and communication unit, in accordance with annex A.	_____ \$	10	_____ \$	
<b>2</b>	Controller software and hardware, in accordance with annex A.	_____ \$	2	_____ \$	
<b>3</b>	Operator training course at Defence Research and Development Canada (DRDC Valcartier for 4 operators. The course must cover familiarization, set-up, operation and maintenance of the system, in accordance with annex A			_____ \$	
<b>4</b>	The contractor must perform the on-site installation at DRDC Valcartier and perform a demonstration that the unit works properly, in accordance with annex A.			_____ \$	
<b>5</b>	A bilingual (French or English) detailed operation and maintenance guide must be provided with the equipment to perform period preventive and corrective maintenance as well as a trouble shooting procedure for the operating system. In addition, the maintenance guide must have a list of spares parts. The guide must be delivered in one (1) hard copy and one (1) electronic copy in Adobe PDF format on a CD or DVD. In accordance with annex A.	_____ \$	1	_____ \$	
<b>6</b>	Shipping and delivery fees *			_____ \$	
<b>TOTAL</b>				_____ \$	

\*Delivered Duty Paid (DDP) Defence Research and Development Canada - Valcartier, 2459 Pie-XI Blvd, Quebec, G3J 1X5, Canada, Incoterms 2000 for shipments from a commercial contractor.