



**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

Quebec

K1A 0S5

Bid Fax: (819) 997-9776

**REQUEST FOR PROPOSAL  
DEMANDE DE PROPOSITION**

**Proposal 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.

**Proposition 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 sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du**

**fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Detection, Simulation and Optical Systems Division  
Place du Portage III, 8C2

11 rue Laurier Street

Gatineau

Quebec

K1A 0S5

<b>Title - Sujet</b> Night Vision Monocular Devices	
<b>Solicitation No. - N° de l'invitation</b> F7013-220304/A	<b>Date</b> 2023-08-17
<b>Client Reference No. - N° de référence du client</b> F7013-220304	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$QT-021-29145	
<b>File No. - N° de dossier</b> 021qt.F7013-220304	<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> Eastern Daylight Saving Time EDT <b>on - le 2023-10-12</b> Heure Avancée de l'Est HAE	
<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> Carbone, Julian	<b>Buyer Id - Id de l'acheteur</b> 021qt
<b>Telephone No. - N° de téléphone</b> (613) 447-8326 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>  Specified Herein Précisé dans les présentes	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

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

**For the Provision of (20) portable Monocular Night Vision Devices (MNVD) for the Canadian Coast Guard Search and Rescue (SAR) Lifeboats at various SAR stations across Canada. These vessels will be equipped with portable MNVD for conducting maritime night searches for persons in need of assistance.**

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## **PART 1 - GENERAL INFORMATION**

### **1.1 Security Requirements**

There are no security requirements applicable to this contract.

### **1.2 Statement of Requirement**

The Contractor must perform the Work in accordance with the Statement of Requirement in Annex A.

### **1.3 Debriefings**

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 from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

### **1.4 Canada Post Corporation's (CPC) Connect service**

This bid solicitation allows bidders to use the CPC Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

## **PART 2 - BIDDER INSTRUCTIONS**

### **2.1 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) (<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](#) (2022-03-29) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of [2003](#), Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days  
Insert: 90days

### **2.2 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 in the bid solicitation.

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021QT  
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Note: For bidders choosing to submit using Canada Post Corporation's (CPC) Connect service for bids closing at the Bid Receiving Unit in the National Capital Region (NCR) the email address is:

tpsgc.pareceptiondessoumissions-apbidreceiving.pwgsc@tpsgc-pwgsc.gc.ca

Note: Bids will not be accepted if emailed directly to this email address. This email address is to be used to open a CPC Connect conversation, as detailed in Standard Instructions [2003](#), or to send bids through a CPC Connect message if the bidder is using its own licensing agreement for CPC Connect service.

### 2.3 Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, Bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required 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 with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

#### 2.3.1 Definitions

For the purposes of this clause,

"former public servant" is any former member of a department as defined in the [Financial Administration Act](#), R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the [Public Service Superannuation Act](#) (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the [Supplementary Retirement Benefits Act](#), R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the [Canadian Forces Superannuation Act](#), R.S., 1985, c. C-17, the [Defence Services Pension Continuation Act](#), 1970, c. D-3, the [Royal Canadian Mounted Police Pension Continuation Act](#), 1970, c. R-10, and the [Royal Canadian Mounted Police Superannuation Act](#), R.S., 1985, c. R-11, the [Members of Parliament Retiring Allowances Act](#), R.S. 1985, c. M-5, and that portion of pension payable to the [Canada Pension Plan Act](#), R.S., 1985, c. C-8.

#### 2.3.2 Former Public Servant (FPS) in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes ( ) No ( )**

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

- a. name of former public servant;

- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with [Contracting Policy Notice: 2012-2](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

### 2.3.3 Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes ( ) No ( )**

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

### 2.4 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 10 (*ten*) 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 question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

### 2.5 Applicable Laws

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

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.

### 2.6 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.

- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
- Office of the Procurement Ombudsman (OPO)
  - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.

## PART 3 - BID PREPARATION INSTRUCTIONS

### 3.1 Bid Preparation Instructions

The Bidder must submit its bid using epost Connect or via fax. Canada requests that the Bidder submit its bid in accordance with section 8.2 of the 2003 standard instructions. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

Bids must be separated into individual PDF documents as follows:

Section I: Technical Bid  
Section II: Financial Bid  
Section III: Certifications

#### Section I: Technical Bid

Bidders must submit their technical bid in accordance with 4.1.1 Technical Evaluation. In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

#### Section II: Financial Bid

Bidders must submit their financial bid in accordance with 4.1.2 Financial Evaluation.

#### Section III: Certification

Bidders must submit the certifications and additional information required under Part 5.

### 3.2 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex C, to identify which ones are accepted.

If Annex C is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

### 3.3 Exchange Rate Fluctuation

The requirement does not offer exchange rate fluctuation risk mitigation. Requests for exchange rate

fluctuation risk mitigation will not be considered. All bids including such provision will render the bid non-responsive.

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

### **4.1 Evaluation Procedures**

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

#### **4.1.1 Technical Evaluation**

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

Please refer to Appendix 1 – System Requirements Specification - Section 3 – Requirements

##### **4.1.1.2 Bid Evaluation Matrix**

Please refer to Annex D – Bid Evaluation Matrix

#### **4.1.2 Financial Evaluation**

Please refer to Annex B – Basis of Payment

Evaluation of Price-Canadian/Foreign Bidders

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 Applicable Taxes excluded.
  - b. Foreign-based Bidders must submit firm prices, Canadian customs duties and excise taxes included, and Applicable Taxes excluded.
2. Unless the bid solicitation specifically requires bids to be submitted in Canadian currency, 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, or on another date specified in the bid solicitation, will be applied as a conversion factor to the bids submitted in foreign currency.
3. Canada requests that Bidders provide prices DDP. Bids will be assessed on a DDP destination 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.



## **4.2 Basis of Selection**

### **4.2.1 Basis of Selection – A0031T**

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.

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

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

### **5.1 Certifications Required with the Bid**

Bidders must submit the following duly completed certifications as part of their bid.

#### **5.1.1 Integrity Provisions - Declaration of Convicted Offences**

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

### **5.2 Certifications Precedent to Contract Award and Additional Information**

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder 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 bid non-responsive.

#### **5.2.1 Integrity Provisions – Required Documentation**

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

## PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### 6.1 Security Requirements

There is no security requirement applicable to the Contract.

### 6.2 Statement of Requirement

The Contractor must perform the Work in accordance with the Statement of Requirement in Annex A.

### 6.3 Task Authorization

The maintenance and support portion of the Work to be performed under the Contract will be on a when-requested basis using a Task Authorization (TA) process. The Work described in the TA must be in accordance with the scope of the Contract.

#### 6.3.1 Task Authorization Process

- 1) The Technical Authority will provide the Contractor with a description of the task using an PWGSC "Task Authorization Form 572" specified in Annex E.
- 2) The TA will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The TA will also include the applicable basis (bases) and methods of payment as specified in the Contract.
- 3) The Contractor must provide the Technical Authority, within 5 calendar days of its receipt, the proposed total estimated cost for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract.
- 4) Upon acceptance of the Contractor's proposal, the Technical Authority and/or the Contracting Authority will authorize (sign) the TA and provide the authorized TA to the Contractor. The Contractor must not commence work until a TA authorized by the Technical Authority and/or Contracting Authority has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been authorized will be done at the Contractor's own risk.

#### 6.3.2 Task Authorization Limit

The Technical Authority may authorize individual TA up to a limit of \$\_\_\_\_\_ *(to be inserted at contract award)* applicable Taxes included, inclusive of any revisions.

The Contracting Authority must be copied when all TA's are issued by the Technical Authority to the Contractor. Any TA to be issued in excess of that limit must be authorized by the Contracting Authority before issuance.

## 6.4 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) (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

### 6.4.1 General Conditions

[2010A](#) (2022-12-01), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

## 6.5 Term of Contract

### 6.5.1 Period of the Contract

The period of the Contract is for 5 (five) years from date of Contract award.

### 6.5.2 Delivery Date

All the deliverables must be received within 90 days of contract award.

### 6.5.3 Delivery Points

Name of Delivery Location	Delivery Point of Contact	Delivery Location
CCG Prescott Station	TBD	401 King St W Prescott, ON K0E 1T0
CCG Bickerton Station	TBD	82 Eastside Bickerton Rd. Bickerton, NS B0J 1A0
CCG Shediac Station	TBD	4 Navy Way Saint John, NB E2L 4B3
CCG Atlantic Region	TBD	280 Southside Rd., Tech Stores St. John's, NL A1E 1A1
Clarks Harbour	TBD	93 Boundary Rd. Clark's Harbour, NS B0W 1P0

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## 6.6 Authorities

### 6.6.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Julian Carbone  
Title: Supply Specialist  
Public Works and Government Services Canada  
Defence and Marine Procurement Branch  
Place du Portage, Phase III  
11 Laurier St  
Gatineau, QC K1A 0K2  
Telephone: 613-447-8326  
E-mail address: [julian.carbone@tpsgc-pwgsc.gc.ca](mailto:julian.carbone@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.

### 6.6.2 Project Authority (To be inserted at contract award)

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.

### 6.6.3 Technical Authority (To be inserted at contract award)

The Technical Authority for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

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The Technical Authority named above 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 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 contract amendment issued by the Contracting Authority.

#### **6.6.4 Contractor's Representative** (To be completed by the Bidder)

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

#### **6.7 Payment**

##### **6.7.1 Basis of Payment**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid in accordance with Annex B - Basis of Payment.

##### **6.7.2 Limitation of Price**

SACC Manual clause C6000C (2017-08-17) Limitation of Price

##### **6.7.3 Firm Price, Firm Unit Price(s), or Firm Lot Price(s)**

For the Work described in section 2.2 of the Statement of Requirement in Annex A.

In consideration of the Contractor satisfactorily completing its obligations under the Contract, the Contractor will be paid a firm price, for a cost of \$\_\_\_\_\_ (insert the amount at contract award). Customs duties are included and Applicable Taxes are extra.

For the firm price portion of the Work only, 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.

##### **6.7.4 Individual Task Authorizations**

The Contractor will be paid for the Work specified in the authorized task authorization, in accordance with the Basis of payment at Annex B.

Canada's liability to the Contractor under the authorized task authorization must not exceed the limitation of expenditure specified in the authorized task authorization. Custom duties are included and Applicable Taxes are extra.

No increase in the liability of Canada or in the price of the Work specified in the authorized task authorization resulting from any design changes, modifications or interpretations of the Work will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been authorized, in writing, by the Contracting Authority before their incorporation into the Work.

#### **6.7.5 Electronic Payment of Invoices – Contract**

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);

#### **6.8 Invoicing Instructions**

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. Invoices must be distributed as follows:

- One (1) electronic copy must be forwarded to the Procurement Authority identified under the section entitled "Authorities" of the Contract.
- One (1) electronic copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

#### **6.9 Certifications and Additional Information**

##### **6.9.1 Compliance**

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

#### **6.10 Applicable Laws**

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

#### **6.11 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 Articles of Agreement;
- (b) the general conditions: 2010A (2022-12-01), General Conditions - Goods (Medium Complexity);

- (c) Annex B, Basis of Payment;
- (d) Annex A, Statement of Requirement;
- (e) the Contractor's bid dated \_\_\_\_\_ (*insert date of bid*)

#### 6.12 Insurance – No Specific Requirement

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

#### 6.13 SACC Manual Clauses

A9006C	Defence Contract	2012-07-16
A9131C	Controlled Goods Program – Contract	2020-11-19
B7500C	Excess Goods	2006-06-16
C0100C	Discretionary Audit – Commercial Goods and/or Services	2010-01-11
D2000C	Marking	2007-11-30
D2001C	Labelling	2007-11-30
D2025C	Wood Packaging Materials	2017-08-17
D5510C	Quality Assurance Authority (Department of National Defence) -Canadian-based Contractor	2022-05-12
D5511C	Test Validation	2010-01-11
D5545C	ISO 9001:2008 – Quality Management Systems – Requirements (Quality Assurance Code C)	2019-05-30
D5540C	ISO 9001:2008 – Quality Management Systems – Requirements (Quality Assurance Code Q)	2021-05-20
D5606C	Release Documents Department of National Defence -Canadian-based Contractor	2017-11-28
D3010C	Dangerous Goods/Hazardous Products	2016-01-28
D3015C	Delivery of Dangerous Goods/Hazardous Products	2014-09-25
D6010C	Palletization	2007-11-30
D9002C	Incomplete Assemblies	2007-11-30
1031-2	Contract Cost Principles	2012-07-16

#### 6.14 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "[Dispute Resolution](#)".

## **ANNEX "A"**

### **STATEMENT OF REQUIREMENT**

#### **1.0 SCOPE**

##### **1.1 Purpose**

The purpose of this Statement of Requirement (SOR) is to describe the requirements and work effort required from the Contractor by the Canadian Coast Guard (CCG) for the supply of (20) portable Monocular Night Vision Devices (MNVD).

##### **1.2 Background**

The CCG is in the process of building new Search and Rescue (SAR) Lifeboats for various SAR stations across Canada. These vessels will be equipped with portable MNVD for conducting maritime night searches for persons in need of assistance.

##### **1.3 Intended Use**

The MNVD procured through this project is intended for domestic, operational and training use by the CCG SAR Lifeboat teams.

##### **1.4 Non-Developmental Item**

CCG does not intend to fund a developmental project to achieve this requirement. It is therefore a mandatory requirement that the offered Monocular Night Vision Device Components (this includes the MNVD housing and I<sup>2</sup> tube) be of proven (tested) design, be in current production or have been within the past 12 months, and be in-use by a North Atlantic Treaty Organization (NATO) or American, British, Canadian, Australian, and New Zealand (ABCANZ) member armed forces.

##### **1.5 Intent**

CCG will procure limited quantities of MNVD (20) for vessels across various SAR stations. If the performance and comfort are satisfactory for the operators, CCG intends to procure further MNVD to outfit SAR vessels in the future through this Contract.

##### **1.6 Applicable Documents**

Appendix 1 – System Requirements Specification for Monocular Night Vision Device Kit (SRS for MNVD Kit)

Appendix 2 – References, Acronyms and Glossary (RAG)

#### **2.0 GENERAL REQUIREMENTS**

##### **2.1 Scope of Work**

The work to be performed requires the provision, inspection, and delivery of the MNVD, and includes a provision for maintenance & support throughout the full contract term which will be initiated through the use of Task Authorization (TA) process.



## 2.2 Deliverables

The contractor must provide MNVD, as per Annex B "List of Deliverables for Monocular Night Vision Device System". The Contractor must provide the deliverables in Table 2-1.

**Table 2-1: Deliverables**

**Each MNVD Kit must contain the following:**

Item	Reference
2 Monocular Night Vision Device	Appendix 1 "SRS for MNVD Kit", Section 3.1
1 Head Mount Assembly	Appendix 1 "SRS for MNVD Kit", Section 3.2
1 Bridge Mount	Appendix 1 "SRS for MNVD Kit", Section 3.3
2 Sacrificial Filter	Appendix 1 "SRS for MNVD Kit", Section 3.4
1 Cleaning Kit	Appendix 1 "SRS for MNVD Kit", Section 3.5
1 Neck Cord	Appendix 1 "SRS for MNVD Kit", Section 3.6
2 Eyecup	Appendix 1 "SRS for MNVD Kit", Section 3.7
2 Front Lens Cap	Appendix 1 "SRS for MNVD Kit", Section 3.8
1 MNVD Kit Pouch	Appendix 1 "SRS for MNVD Kit", Section 3.9
1 MNVD Carrying Pouch	Appendix 1 "SRS for MNVD Kit", Section 3.10
2 Demist Shield	Appendix 1 "SRS for MNVD Kit", Section 3.11
1 AA battery	Appendix 1 "SRS for MNVD Kit", Section 3.12
1 Operators Manual	Annex A "SOR for MNVD", Section 2.3
1 Quick Reference Guide	Annex A "SOR for MNVD", Section 2.3
1 Kit List	Annex A "SOR for MNVD", Section 2.3
1 Hazard Warning Sheet	Annex A "SOR for MNVD", Section 2.3

## 2.3 Technical Publications Specifications

- 2.3.1 All Technical Publications must be bilingual, in English and French. It is acceptable for the Technical Publications to contain both the English and French text in a single document, or to provide separate Technical Publications (one in English and the other in French).
- 2.3.2 Unless otherwise specified, the Technical Publications may be in contractor or commercial format. Unless otherwise specified, the Technical Publications must be in a paper-based format.
- 2.3.3 The Technical Publications Specifications apply to the following deliverables:
  - a. Operators Manual
  - b. Quick Reference Guide

- c. Kit List
  - d. Hazard Warning Sheet
- 2.3.4 The Contractor must provide a digital copy of each Technical Publication in searchable PDF format to the Technical Authority.
- 2.3.5 Operators Manual. The Operator's Manual must contain operating instructions, operator maintenance instructions, and related safety instructions.
- 2.3.6 Quick Reference Guide. The Quick Reference Guide (QRG) must contain the basic instructions necessary for MNVD usage. The QRG must be printed in colour on weather resistant material. The QRG must be no larger than thirteen (13) cm by nine (9) cm. The QRG may be foldable and printed on both sides. The QRG must provide users with an overview of how to use the equipment and its accessories. The Contractor must submit a draft of the QRG for the TA's review within 30 days of Contract Award. The Contractor must not start production of the QRG until the TA has accepted the document.
- 2.3.7 Kit List. The Kit List must contain a complete list of all equipment, accessories and consumables furnished in the MNVD Kit. The Kit List must identify which items in the MNVD Kit are controlled goods. The Kit List must include a picture of each item next to its respective name. The Kit List must be printed in colour on weather resistant material.. The Contractor must submit a draft of the Kit List for the TA's review within 30 days of Contract Award. The Contractor must not start production of the Kit List until the TA has accepted the document.
- 2.3.8 Hazard Warning Sheet. The Hazard Warning Sheet must identify all safety hazards posed by the items in the MNVD kit throughout the lifetime of the system. This includes: hazardous materials; dangers posed to users and handlers; and warnings on dangerous usage. The Hazard Warning Sheet must be printed in colour on weather resistant material. The Contractor must submit a draft of the Hazard Warning Sheet for the TA's review within 30 days of Contract Award. The Contractor must not start production of the Hazard Warning Sheet until the TA has accepted the document.
- 3.0 ACCEPTANCE PROCESS AND CRITERIA**
- 3.1 In each MNVD kit, the Contractor must provide a signed statement from the MNVD I<sup>2</sup> tube Original Equipment Manufacturer (OEM) certifying that the I<sup>2</sup> tube provided meets the design performance specifications, in support of the proposed equipment meeting the requirements in Appendix 1, "MNVD Kit SRS", Section 3.1.2.
- 3.1.2 Certificate of Conformity. The Contractor must produce a separate Certificate of Conformity (CoC) for each MNVD Kit. Each CoC must indicate that the MNVD Kit meets all requirements in Appendix 1, "MNVD Kit SRS". The Contractor must send a PDF copy of each CoC to the TA.

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File No. - N° du dossier  
021QT F7013-220304

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**ANNEX B**  
**BASIS OF PAYMENT**

Table 1 - Initial Acquisition Cost of Night Vision Device Full Kit – As per Table 2-1: Deliverables			
Part No.	Quantity	Unit Cost	Total Cost (Quantity x Unit Cost)
	10		

Table 2 – Maintenance & Support Costing per Level TOTAL Firm Hourly Rate (To be completed after contract award)					
Level of In-Service Maintenance and Support	Year 1	Year 2	Year 3	Year 4	Year 5
Level 1	/Hour	/Hour	/Hour	/Hour	/Hour
Level 2	/Hour	/Hour	/Hour	/Hour	/Hour
Level 3	/Hour	/Hour	/Hour	/Hour	/Hour
For Evaluation Purposes:	To be completed with bid submission				
Level 1 (rate x 50 person hours)					
Level 2 (rate x 50 person hours)					
Level 3 (rate x 25 person hours)					

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<b>Totals for Evaluation Purposes:</b>					
<b>Total of Levels 1, 2, &amp; 3 for Years 1- Year 5 for Evaluation:</b>	\$				

Levels of Maintenance - Levels of maintenance are defined as a measure of the maintenance content and time required to perform a task. Tasks are classified into levels based on the extent and complexity of work that should normally be performed at each level.

Level one – Level one maintenance is defined as maintenance tasks that are within the Core Work of the Contractor to address without external support, special equipment and skills, or facilities. It includes regular inspections, servicing, preliminary diagnosis of faults, and minor corrective maintenance tasks.

Level two – Level two maintenance is defined as corrective maintenance tasks by repair or replacement of parts or assemblies on equipment that are beyond the scope of level one maintenance. Level two maintenance requires some level of special tools and test equipment or skilled technician to perform the work.

Level three – Level three maintenance is defined as any maintenance activity requiring the involvement of an off-site agency or service that is engaged to provide goods, services or activities beyond the capacity or capability of the maintenance requester.

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Table 3 –Optional Purchase Pricing							
Item	Part Number	Description	Year 1	Year 2	Year 3	Year 4	Year 5
1		Full Kit As per Table 2-1 Deliverables					
2		Monocular Night Vision Device					
3		Head Mount Assembly					
4		Bridge Mount					
5		Sacrificial Filter					
6		Cleaning Kit					
7		Neck Cord					
8		Eyecup					
9		Front Lens Cap					
10		MNVD Kit Pouch					
11		MNVD Carrying Pouch					
12		Demist Shield					
13		Operators Manual					

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14		Quick Reference Guide					
15		Kit List					
16		Hazard Warning Sheet					
Totals for Evaluation Purposes Only:							
Totals of Year 1 – Year 5 for Evaluation:							

**\*Note\*:** Basis of Selection: The Total Costs of Tables 1, 2 and 3 will be added for the determination of the lowest evaluated price.

**Table 4 – Pricing for Evaluation**

	Price for Evaluation
Table 1 (Total Cost - Quantity x Unit Cost) Total x 70%	
Table 2 (Total of Levels 1, 2, & 3 for Years 1- Year 5 for Evaluation) Total x 15%	
Table 3 (Totals of Year 1 – Year 5 for Evaluation) Total x 15%	
<b>Totals:</b>	

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## ANNEX C TO PART 3 OF THE BID SOLICITATION

### ELECTRONIC PAYMENT INSTRUMENTS

*As indicated in Part 3, clause 3.1.2, the Bidder must identify which electronic payment instruments they are willing to accept for payment of invoices.*

The Bidder accepts any of the following Electronic Payment Instrument(s):

- ☐ VISA Acquisition Card;
- ☐ MasterCard Acquisition Card;
- ☐ Direct Deposit (Domestic and International);
- ☐ Electronic Data Interchange (EDI);
- ☐ Wire Transfer (International Only);

## ANNEX D – BID EVALUATION MATRIX

ID	REQUIREMENTS	Comply (Y/N)	Location in Bid (Page No.)
<b>1.0</b>	<b>MNVD</b>		
<b>1.1</b>	<b>General</b>		
1.1.1	The MNVD architecture must be Monocular.		
1.1.2	The MNVD must have a maximum length of no more than One Hundred and Fourteen (114) mm, excluding the eyecup.		
1.1.3	The MNVD must have a mass of no more than Three Hundred Fifty Five (355) grams including the eye cup, front lens cap, housing, I <sup>2</sup> tube, eyepiece, and objective lens, and excluding the battery.		
1.1.4	The MNVD must have an eyepiece Diopter Adjustment from minus Six diopters to plus Two diopters with a continuous diopter adjustment (-6 D to +2 D).		
1.1.5	The MNVD must have a Field of View (FOV) of no less than Forty degrees (40°).		
1.1.6	The MNVD must have a built-in illuminator in the Near Infrared (NIR) band.		
1.1.7	The MNVD must have autogating.		
1.1.8	The MNVD must have manual gain control functionality.		
1.1.9	The MNVD must have an Objective Focus Range of no less than Twenty Five (25) cm to infinity.		
1.1.10	The MNVD must have a magnification of One (1).		
1.1.11	The MNVD must have a lens coating to prevent condensation from forming on the objective lens.		
<b>1.2</b>	<b>I<sup>2</sup> Tube</b>		
1.2.1	The I <sup>2</sup> Tube phosphor type must be White.		
1.2.2	The I <sup>2</sup> Tube must have a Figure of Merit (FOM) of no less than Twenty Two Hundreds (2200).		
1.2.3	The I <sup>2</sup> Tube must have a limiting resolution of no less than Seventy Two (72) lp/mm.		
1.2.4	The I <sup>2</sup> Tube must have a Signal to Noise Ratio (SNR) of no less than Thirty (30) at 108 µlux.		
1.2.5	The I <sup>2</sup> Tube halo size must be 0.85 mm or better.		
1.2.6	The I <sup>2</sup> tube must have a maximum Equivalent Background Input (EBI) of 0.50 ulux at 20°C.		
1.2.7	The I <sup>2</sup> tube must have an automated Bright Source Protection (BSP).		
1.2.8	The I <sup>2</sup> Tube must have a minimum lifetime of 10,000 hours.		



1.2.9	The I <sup>2</sup> Tube must meet the manufacturer's current published specifications for any functional or performance parameter not specified in this SRS.		
1.3	<b>Concealment</b>		
1.3.1	The MNVD must be matte colour.		
1.3.2	After the initiation, the operational MNVD must not produce any noise from internal mechanical parts.		
1.3.4	After the initiation, the operational MNVD be perceived to be silent in a tactical environment.		
1.3.5	The MNVD must not have any alarms or audible indicators.		
1.3.6	The MNVD must not have any flashing lights or other such visible indicators. A visible battery indicator and/or active mode indicator in the field of view of the MNVD are acceptable, as long as they turn off when in stowed position.		
1.4	<b>Power</b>		
1.4.1	The MNVD must operate on commercially available AA batteries.		
1.4.2	The MNVD must operate on only one (1) AA battery.		
1.4.3	The MNVD must operate continuously for no less than 30 hours on a single battery at 20°C ambient temperature		
1.4.4	The MNVD must have an auto-off function that turns the MNVD off when moved from in-use position to stowed position.		
1.4.5	The MNVD must have an auto-on function that turns the MNVD ON when moved from stowed position to in-use position.		
1.4.6	The auto-off function must not activate when the MNVD is in in-use position, regardless of the movements or position of the user.		
1.4.7	The auto-on function must not activate when the MNVD is in stowed position, regardless of the movements or position of the user.		
1.4.8	The MNVD must have a visual indication for proper alignment of battery installation (positive/negative).		
1.5	<b>Human Factors</b>		
1.5.1	The MNVD must be able to be used by both the right and left eye.		
1.5.2	The MNVD must have an Eye Relief between Twenty Three (23) and Twenty Five (25) mm.		
1.5.3	The arrangement, size and shape of operator controls for the MNVD and head mount assembly must permit the following actions with a commercially insulated glove: 1) Turning the MNVD on; 2) Turning the MNVD off. 3) When operated in the Head Mount Assembly, switching between in-use position and stowed position.		
1.6	<b>Environmental</b>		

1.6.1	The MNVD must meet all performance requirements in this SRS without incurring physical damage and without degradation of performance, during and after exposure to any combination of the meteorological and induced climatic conditions described in this SRS.		
1.7	<b>Low Temperature - Operation</b>		
1.7.1	The MNVD must operate without physical damage and without degradation of performance in all low temperature environments associated with the C0, C1 and C2 climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2. For this requirement, the lower boundary of the C2 climatic region will be evaluated at -40°C.  MIL-STD-810G, Change 1, Method 502.6, Procedure II and III, C2 Cold, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.		
1.7.2	The MNVD should operate without physical damage and without degradation of performance in all low temperature environments associated with the C0, C1, C2 and C3 (-51°C min) climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.  MIL-STD-810G, Change 1, Method 502.6, Procedure II and III, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement		
1.8	<b>Low Temperature - Storage</b>		
1.8.1	The MNVD must be stored without damage and without degradation of performance in all low temperature environments associated with the C0, C1 and C2 climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2. For this requirement, the lower boundary of the C2 climatic region will be evaluated at -40°C.  MIL-STD-810G, Change 1, Method 502.6, Procedure I, C2 Cold, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.		
1.8.2	The MNVD should be stored without damage and without degradation of performance in all low temperature environments associated with the C0, C1, C2 and C3 (-51°C min) climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.  MIL-STD-810G, Change 1, Method 502.6, Procedure I, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.		
1.9	<b>High Temperature - Operation</b>		
1.9.1	The MNVD must operate without damage and without degradation of performance in all high temperature environments associated with the A3, A2 and A1 (+49°C max) climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.  MIL-STD-810G, Change 1, Method 501.6, Procedure II, A1 Hot-Dry		

	Ambient Air Conditions, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.		
2.0	<b>High Temperature – Storage</b>		
2.0.1	<p>The MNVD must be stored without damage and without degradation of performance in all high temperature environments associated with the A3, A2, and A1 climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2. For this requirement, the upper boundary of the A1 climatic region, Induced Conditions, will be evaluated at +60°C.</p> <p>MIL-STD-810G, Change 1, Method 501.6, Procedure I, A1 Hot-Dry Induced Conditions, or equivalent test method, is a sufficient means to demonstrate compliance to this requirement.</p>		
2.0.2	<p>The MNVD should be stored without damage and without degradation of performance in all high temperature environments associated with the A3, A2, and A1 (+71°C max) climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.</p> <p>MIL-STD-810G, Change 1, Method 501.6, Procedure I, A1 Hot-Dry Induced Conditions, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>		
2.1	<b>Temperature Shock</b>		
2.1.2	<p>The MNVD should operate without damage and without degradation of performance under conditions of rapid changes in ambient air temperature as encountered during movements between in-door environments to out-door environments at either high temperature (+49°C) and low temperature (-40°C) extremes. The MNVD must not require any physical modifications or preparations in advance and must not be damaged or degraded from the thermal shocks.</p> <p>MIL-STD-810G, Change 1, Method 503.6, Procedure I-C or I-D, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>		
2.2	<b>High Humidity</b>		
2.2.1	<p>The MNVD should be stored and operate without damage and without degradation of performance in all high humidity environments associated with B1, B2 and B3 climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.</p> <p>MIL-STD-810G, Change 1, Method 507.6, Procedure II, Aggravated temperature-humidity (Figure 507.6) +30°C to +60°C at 95% RH, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>		
2.3	<b>Under-Water Immersion</b>		
2.3.1	The MNVD must not be damaged and must not be degraded in performance following immersion under water in any stowed or operating configuration to a depth of not less than 1 meter below the water surface for a duration of not less than 30 minutes. The MNVD		

	must not require any physical preparations or modifications in advance of being immersed and must be fully operable immediately following the immersion without any preparations or drying.  MIL-STD-810G, Change 1, Method 512.6, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement. An IP X7 or X8 rating is also a sufficient means to demonstrate compliance to this requirement.		
2.4	<b>Blowing Dust</b>		
2.4.1	The MNVD must be stored and operate without damage and without degradation of performance in environments with airborne fine dust particulates.  MIL-STD-810G, Change 1, Method 510.6, Procedure I, Blowing Dust, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement. An IP 5X or 6X rating is also a sufficient means to demonstrate compliance to this requirement		
2.5	<b>Altitude (Low Pressure) – Operation</b>		
2.5.1	The MNVD should be stored and operate without damage and without degradation of performance in all low ambient air pressure environments from sea level to 4,572 meters pressure-altitude above sea-level.  MIL-STD-810G, Change 1, Method 500.6, Procedure II, Operation/Air Carriage, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.		
2.6	<b>Transit Drop</b>		
2.6.1	The MNVD unpackaged or in its Carrying Pouch should operate without degradation of performance after being subjected to a 48 inch drop on any face, edge, and corner of the MNVD or carrying pouch.  MIL-STD-810G, Change 1, Method 516.7, Procedure IV, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.		
2.7	<b>Safety and Security</b>		
2.7.1	The MNVD must not pose a safety or health hazard to the user.		
2.8	<b>Head Mount Assembly</b>		
2.8.1	The Head Mount Assembly must be matte black colour.		
2.8.2	The Head Mount Assembly must be configurable for the use of the MNVD by either the Right or Left eye.		
2.8.3	The Head Mount Assembly must be complete in and of itself, without requiring additional accessories to make it operational.		
2.8.4	When mounted in the Head Mount Assembly, the MNVD must have a stowed position and an in-use position.		
2.8.5	When mounted in the Head Mount Assembly, the MNVD must require no more than a single action to switch between in-use position and stowed position.		

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2.8.6	When mounted in the Head Mount Assembly, the MNVD must require no more than a single action to switch between stowed position and in-use position.		
2.8.7	When mounted in the Head Mount Assembly, the MNVD must require no more than a single hand for removal from the Head Mount Assembly.		
2.8.8	The Head Mount Assembly must be compatible with head sizes from 5% to 95% as defined in the 2012 Canadian Forces Anthropometric Survey.		
2.8.9	The Head Mount Assembly must be adjustable to the user's head shape. For example, straps lengths may need to be adjusted to not lie on top of the user's ears.		
2.8.10	The Head Mount Assembly must be padded for comfort.		
2.8.11	The Head Mount Assembly must be made of non-abrasive materials for comfort.		
2.9	<b>Bridge Mount</b>		
2.9.1	The Bridge Mount must be capable of linking 2 MNVDs together to form binocular night vision device (BNVD) for use with the Head Mount.		
2.9.2	The distance between MNVDs on Bridge Mount must be adjustable to accommodate users with close set eyes to wide set eyes.		
2.9.3	The Bridge Mount must be matte black colour.		
2.9.4	The Bridge Mount must be complete in and of itself, without requiring additional accessories to make it operational.		
2.9.5	The Bridge Mount must not require any special tools for installation and configuration.		
3.1	<b>Sacrificial Filter</b>		
3.1.1	The Sacrificial Filter must be compatible with the MNVD.		
3.1.2	The Sacrificial Filter must protect the objective lens from the air dust, dirt and debris.		
3.1.3	The Sacrificial Filter must be complete in and of itself, without requiring additional accessories to make it operational.		
3.1.4	The Sacrificial Filter must not require any special tools for installation and configuration.		
3.2	<b>Cleaning Kit</b>		
3.2.1	The Cleaning Kit must include no less than the following items: 1. Lens Paper 2. Optical Brush 3. Cleaning Cloth 4. Cotton Swabs 5. 15 ml of Lens Cleaner		
3.2.2	The Cleaning Kit must have instructions on proper use of cleaning		

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	materials.		
3.2.3	The Cleaning Kit contents must be protected from dirt.		
3.3	<b>Neck Cord</b>		
3.3.1	The Neck Cord must be matte black colour.		
3.3.2	The Neck Cord must have a length no less than 100 cm.		
3.3.3	At minimum, the Neck Cord must be adjustable between the lengths of 50 cm and 100 cm.		
3.3.4	The Neck Cord must be made of non-abrasive materials.		
3.3.5	The Neck Cord must include a mechanism that attaches it to the MNVD.		
3.3.6	The Neck Cord, when attached to the MNVD, must not hinder the operations or performance of the MNVD.		
3.3.7	The Neck Cord must not dig into the user's neck when supporting the full weight of the MNVD.		
3.4	<b>Eyecup</b>		
3.4.1	The Eyecup must be matte black colour.		
3.4.2	The Eyecup must shield users from stray light.		
3.4.3	The Eyecup must shield light emissions from the MNVD.		
3.4.4	The Eyecup must be constructed of non-abrasive, soft, smooth, and flexible molded rubber materials.		
3.5	<b>Front Lens Cap</b>		
3.5.1	The Front Lens Cap must be matte black colour.		
3.5.2	The Front Lens Cap must protect the MNVD objective lens from damage and light.		
3.5.3	The Front Lens Cap must be complete in and of itself, without requiring additional accessories to make it operational.		
3.5.4	The Front Lens Cap must not require any special tools for installation and configuration.		
3.5.5	The Front Lens Cap must be permanently attached to the MNVD to prevent loss.		
3.6.6	The Front Lens Cap should be permanently attached to the MNVD by a flip mechanism.		
3.7	<b>MNVD Kit Pouch</b>		
3.7.1	The MNVD Kit Pouch must store the MNVD kit contents (Annex A "SOR for MNVD", section 2.2, table 2-1) excluding the MNVD Kit pouch itself.		
3.7.2	The MNVD Kit Pouch must be soft-sided.		
3.7.3	The MNVD Kit Pouch material must be 500 Denier Cordura Nylon with polyurethane back-coating in accordance with Mil-DTL-32439A Type III, and Class #3.		

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3.7.4	All MNVD Kit Pouch seams must be covered to prevent fraying.		
3.7.5	The MNVD Kit Pouch must have a metal zipper with double metal sliders to allow the pouch to be opened fully.		
3.7.6	The MNVD Kit Pouch attachment strap must support the weight of the MNVD Kit Pouch and its full contents for typical user movements, such as running and jumping.		
3.8	<b>MNVD Carrying Pouch</b>		
3.8.1	The MNVD Carrying Pouch must be right sized to store only the MNVD (SRS Sec. 3.1) attached to the Head Mount (SRS Sec. 3.2).		
3.8.2	The MNVD Carrying Pouch must be soft-sided.		
3.8.3	The MNVD Carrying Pouch material must be 500 Denier Cordura Nylon with polyurethane back-coating in accordance with Mil-DTL-32439A Type III, and Class #3.		
3.8.4	All MNVD Carrying Pouch seams must be covered to prevent fraying.		
3.8.5	The MNVD Carrying Pouch must have a closing mechanism that prevents its contents from falling out.		
3.8.6	The MNVD Carrying Pouch attachment strap must support the weight of the MNVD Carrying Pouch and its full contents for typical user movements, such as running and jumping.		
3.9	<b>Demist Shield</b>		
3.9.1	The Demist Shield must be matte black colour.		
3.9.2	The Demist Shield must prevent condensation from forming on the eyepiece.		
3.9.3	The Demist Shield must be compatible with the MNVD.		
3.9.4	The Demist Shield must be removable and reusable.		
3.9.5	The Demist Shield must be complete in and of itself, without requiring additional accessories to make it operational.		
3.9.6	The Demist Shield must not require any special tools for installation and configuration.		
4.1	<b>AA Batteries</b>		
4.1.1	The AA batteries must be commercially available lithium ion batteries.		

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**APPENDIX 1 TO ANNEX A**

**SYSTEM REQUIREMENTS SPECIFICATION**

**FOR**

**MONOCULAR**

**NIGHT VISION DEVICE KIT**



## 1. SCOPE

### 1.1. Purpose

1.1.1. The purpose of this System Requirements Specification (SRS) is to describe the key performance requirements for the Monocular Night Vision Device (MNVD) Kit and contents.

### 1.2. References, Acronyms and Glossary

1.1.2. References and the definitions of complex terminology used in this SRS are found in Appendix 2 to Annex, References, Acronyms and Glossary (RAG).

## 2. REQUIREMENTS VERIFICATION MATRIX

### 2.1. Purpose

2.1.1. The Requirements Verification Matrix (RVM) provides instruction on what form of verification will be required for CCG to determine whether or not the requirement has been met.

2.1.2. Where multiple verifications methods have been included, the Contractor may select their preferred method.

### 2.2. Abbreviations

2.2.1. The following is a list of the abbreviations used in the Requirements Verification Matrix to indicate the various methods of verification. Full definitions are found in the RAG (Appendix 2 to Annex A).

- I. C Verification by Certification.
- II. DE Verification by Description and Evidence.
- III. SC Verification by Statement of Compliance.
- IV. TR Verification by Test. Proof must be in the form of a Test Report.

### 2.3. Equivalency of Test Methods

2.3.1. MIL-STD-810G, Change 1, test methods are specified as a means of verifying compliance to the MNVD Kit environmental requirements within this SRS. Should the Contractor propose an Equivalent Test Method (be it other standard or prior versions of MIL-STD-810), the Contractor must demonstrate how the test methods are equivalent by identifying any gaps in the test methodologies or test severities, and where gaps exist, provide analysis that there would be no measureable impact on the MNVD Kit performance. The climatic and vibration test methods defined in MIL-STD-810G, Change 1, are considered by Canada to be equivalent to the test methods defined in STANAG 4370, AECTP 300 and AECTP 400 (current editions at time of RFP).

## 3. REQUIREMENTS

ID	REQUIREMENTS	RVM
3.1	MNVD	
3.1.1	General	
3.1.1.1	The MNVD architecture must be Monocular.	C, DE, SC, TR
3.1.1.2	The MNVD must have a maximum length of no more than One Hundred and Fourteen (114) mm, excluding the eyecup.	C, DE, SC, TR
3.1.1.3	The MNVD must have a mass of no more than Three Hundred Fifty Five (355) grams including the eye cup, front lens cap, housing, I <sup>2</sup> tube, eyepiece,	C, DE, SC, TR

	and objective lens, and excluding the battery.	
3.1.1.4	The MNVD must have an eyepiece Diopter Adjustment from minus Six diopters to plus Two diopters with a continuous diopter adjustment (-6 D to +2 D).	C, DE, SC, TR
3.1.1.5	The MNVD must have a Field of View (FOV) of no less than Forty degrees (40°).	C, DE, SC, TR
3.1.1.6	The MNVD must have a built-in illuminator in the Near Infrared (NIR) band.	C, DE, SC, TR
3.1.1.7	The MNVD must have autogating.	C, DE, SC, TR
3.1.1.8	The MNVD must have manual gain control functionality.	C, DE, SC, TR
3.1.1.9	The MNVD must have an Objective Focus Range of no less than Twenty Five (25) cm to infinity.	C, DE, SC, TR
3.1.1.10	The MNVD must have a magnification of One (1).	C, DE, SC, TR
3.1.1.11	The MNVD must have a lens coating to prevent condensation from forming on the objective lens.	C, DE, SC, TR
3.1.2	<b>I<sup>2</sup> Tube</b>	
3.1.2.1	The I <sup>2</sup> Tube phosphor type must be White.	C, DE, SC, TR
3.1.2.2	The I <sup>2</sup> Tube must have a Figure of Merit (FOM) of no less than Twenty Two Hundreds (2200).	C, DE, SC, TR
3.1.2.3	The I <sup>2</sup> Tube must have a limiting resolution of no less than Seventy Two (72) lp/mm.	C, DE, SC, TR
3.1.2.4	The I <sup>2</sup> Tube must have a Signal to Noise Ratio (SNR) of no less than Thirty (30) at 108 µlux.	C, DE, SC, TR
3.1.2.6	The I <sup>2</sup> Tube halo size must be 0.85 mm or better.	C, DE, SC, TR
3.1.2.7	The I <sup>2</sup> tube must have a maximum Equivalent Background Input (EBI) of 0.50 ulux at 20°C.	C, DE, SC, TR
3.1.2.8	The I <sup>2</sup> tube must have an automated Bright Source Protection (BSP).	C, DE, SC, TR
3.1.2.9	The I <sup>2</sup> Tube must have a minimum lifetime of 10,000 hours.	C, DE, SC, TR
3.1.2.10	The I <sup>2</sup> Tube must meet the manufacturer's current published specifications for any functional or performance parameter not specified in this SRS.	C, DE, SC, TR
3.1.3	<b>Concealment</b>	
3.1.3.1	The MNVD must be matte colour.	C, DE, TR
3.1.3.2	After the initiation, the operational MNVD must not produce any noise from internal mechanical parts.	C, DE, TR, SC
3.1.3.3	After the initiation, the operational MNVD be perceived to be silent in a tactical environment.	C, DE, SC, TR
3.1.3.4	The MNVD must not have any alarms or audible indicators.	C, DE, SC, TR
3.1.3.5	The MNVD must not have any flashing lights or other such visible indicators. A visible battery indicator and/or active mode indicator in the field of view of the MNVD are acceptable, as long as they turn off when in stowed position.	C, DE, SC, TR
3.1.4	<b>Power</b>	

3.1.4.1	The MNVD must operate on commercially available AA batteries.	C, DE, SC, TR
3.1.4.2	The MNVD must operate on only one (1) AA battery.	C, DE, SC, TR
3.1.4.3	The MNVD must operate continuously for no less than 30 hours on a single battery at 20°C ambient temperature	C, DE, SC, TR
3.1.4.4	The MNVD must have an auto-off function that turns the MNVD off when moved from in-use position to stowed position.	C, DE, SC, TR
3.1.4.5	The MNVD must have an auto-on function that turns the MNVD ON when moved from stowed position to in-use position.	C, DE, SC, TR
3.1.4.6	The auto-off function must not activate when the MNVD is in in-use position, regardless of the movements or position of the user.	C, DE, SC, TR
3.1.4.7	The auto-on function must not activate when the MNVD is in stowed position, regardless of the movements or position of the user.	C, DE, SC, TR
3.1.4.8	The MNVD must have a visual indication for proper alignment of battery installation (positive/negative).	C, DE, SC, TR
3.1.5	<b>Human Factors</b>	
3.1.5.1	The MNVD must be able to be used by both the right and left eye.	C, DE, SC, TR
3.1.5.2	The MNVD must have an Eye Relief between Twenty Three (23) and Twenty Five (25) mm.	C, DE, SC, TR
3.1.5.3	The arrangement, size and shape of operator controls for the MNVD and head mount assembly must permit the following actions with a commercially insulated glove: 4) Turning the MNVD on; 5) Turning the MNVD off. 6) When operated in the Head Mount Assembly, switching between in-use position and stowed position.	C, DE, SC, TR
3.1.6	<b>Environmental</b>	
3.1.6.1	The MNVD must meet all performance requirements in this SRS without incurring physical damage and without degradation of performance, during and after exposure to any combination of the meteorological and induced climatic conditions described in this SRS.	C, DE, SC, TR
3.1.6.2	<b>Low Temperature - Operation</b>	
3.1.6.2.1	The MNVD must operate without physical damage and without degradation of performance in all low temperature environments associated with the C0, C1 and C2 climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2. For this requirement, the lower boundary of the C2 climatic region will be evaluated at -40°C.  MIL-STD-810G, Change 1, Method 502.6, Procedure II and III, C2 Cold, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.	C, DE, SC, TR
3.1.6.2.2	The MNVD should operate without physical damage and without degradation of performance in all low temperature environments associated with the C0, C1, C2 and C3 (-51°C min) climatic regions as described in STANAG 4370,	C, DE, SC, TR

	<p>AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.</p> <p>MIL-STD-810G, Change 1, Method 502.6, Procedure II and III, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement</p>	
3.1.6.3	<b>Low Temperature - Storage</b>	
3.1.6.3.1	<p>The MNVD must be stored without damage and without degradation of performance in all low temperature environments associated with the C0, C1 and C2 climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2. For this requirement, the lower boundary of the C2 climatic region will be evaluated at -40°C.</p> <p>MIL-STD-810G, Change 1, Method 502.6, Procedure I, C2 Cold, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>	C, DE, SC, TR
3.1.6.3.2	<p>The MNVD should be stored without damage and without degradation of performance in all low temperature environments associated with the C0, C1, C2 and C3 (-51°C min) climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.</p> <p>MIL-STD-810G, Change 1, Method 502.6, Procedure I, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>	C, DE, SC, TR
3.1.6.4	<b>High Temperature - Operation</b>	
3.1.6.4.1	<p>The MNVD must operate without damage and without degradation of performance in all high temperature environments associated with the A3, A2 and A1 (+49°C max) climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.</p> <p>MIL-STD-810G, Change 1, Method 501.6, Procedure II, A1 Hot-Dry Ambient Air Conditions, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>	C, DE, SC, TR
3.1.6.5	<b>High Temperature – Storage</b>	
3.1.6.5.1	<p>The MNVD must be stored without damage and without degradation of performance in all high temperature environments associated with the A3, A2, and A1 climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2. For this requirement, the upper boundary of the A1 climatic region, Induced Conditions, will be evaluated at +60°C.</p> <p>MIL-STD-810G, Change 1, Method 501.6, Procedure I, A1 Hot-Dry Induced Conditions, or equivalent test method, is a sufficient means to demonstrate compliance to this requirement.</p>	C, DE, SC, TR
3.1.6.5.2	<p>The MNVD should be stored without damage and without degradation of performance in all high temperature environments associated with the A3, A2, and A1 (+71°C max) climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.</p> <p>MIL-STD-810G, Change 1, Method 501.6, Procedure I, A1 Hot-Dry Induced Conditions, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>	C, DE, SC, TR

3.1.6.6	<b>Temperature Shock</b>	
3.1.6.6.1	<p>The MNVD should operate without damage and without degradation of performance under conditions of rapid changes in ambient air temperature as encountered during movements between in-door environments to out-door environments at either high temperature (+49°C) and low temperature (-40°C) extremes. The MNVD must not require any physical modifications or preparations in advance and must not be damaged or degraded from the thermal shocks.</p> <p>MIL-STD-810G, Change 1, Method 503.6, Procedure I-C or I-D, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>	C, DE, SC, TR
3.1.6.7	<b>High Humidity</b>	
3.1.6.7.1	<p>The MNVD should be stored and operate without damage and without degradation of performance in all high humidity environments associated with B1, B2 and B3 climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.</p> <p>MIL-STD-810G, Change 1, Method 507.6, Procedure II, Aggravated temperature-humidity (Figure 507.6) +30°C to +60°C at 95% RH, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>	C, DE, SC, TR
3.1.6.8	<b>Under-Water Immersion</b>	
3.1.6.8.1	<p>The MNVD must not be damaged and must not be degraded in performance following immersion under water in any stowed or operating configuration to a depth of not less than 1 meter below the water surface for a duration of not less than 30 minutes. The MNVD must not require any physical preparations or modifications in advance of being immersed and must be fully operable immediately following the immersion without any preparations or drying.</p> <p>MIL-STD-810G, Change 1, Method 512.6, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement. An IP X7 or X8 rating is also a sufficient means to demonstrate compliance to this requirement.</p>	C, DE, SC, TR
3.1.6.9	<b>Blowing Dust</b>	
3.1.6.9.1	<p>The MNVD must be stored and operate without damage and without degradation of performance in environments with airborne fine dust particulates.</p> <p>MIL-STD-810G, Change 1, Method 510.6, Procedure I, Blowing Dust, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement. An IP 5X or 6X rating is also a sufficient means to demonstrate compliance to this requirement</p>	C, DE, SC, TR
3.1.6.10	<b>Altitude (Low Pressure) – Operation</b>	
3.1.6.10.1	<p>The MNVD should be stored and operate without damage and without degradation of performance in all low ambient air pressure environments from sea level to 4,572 meters pressure-altitude above sea-level.</p> <p>MIL-STD-810G, Change 1, Method 500.6, Procedure II, Operation/Air Carriage, or Equivalent Test Method, is a sufficient means to demonstrate</p>	C, DE, SC, TR

	compliance to this requirement.	
3.1.6.11	<b>Transit Drop</b>	
3.1.6.11.1	The MNVD unpackaged or in its Carrying Pouch should operate without degradation of performance after being subjected to a 48 inch drop on any face, edge, and corner of the MNVD or carrying pouch. MIL-STD-810G, Change 1, Method 516.7, Procedure IV, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.	C, DE, SC, TR
3.1.7	<b>Safety and Security</b>	
3.1.7.1	The MNVD must not pose a safety or health hazard to the user.	C, DE, SC, TR
3.2	<b>Head Mount Assembly</b>	
3.2.1	The Head Mount Assembly must be matte black colour.	C, DE, SC, TR
3.2.2	The Head Mount Assembly must be configurable for the use of the MNVD by either the Right or Left eye.	C, DE, SC, TR
3.2.3	The Head Mount Assembly must be complete in and of itself, without requiring additional accessories to make it operational.	C, DE, SC, TR
3.2.4	When mounted in the Head Mount Assembly, the MNVD must have a stowed position and an in-use position.	C, DE, SC, TR
3.2.5	When mounted in the Head Mount Assembly, the MNVD must require no more than a single action to switch between in-use position and stowed position.	C, DE, SC, TR
3.2.6	When mounted in the Head Mount Assembly, the MNVD must require no more than a single action to switch between stowed position and in-use position.	C, DE, SC, TR
3.2.7	When mounted in the Head Mount Assembly, the MNVD must require no more than a single hand for removal from the Head Mount Assembly.	C, DE, SC, TR
3.2.8	The Head Mount Assembly must be compatible with head sizes from 5% to 95% as defined in the 2012 Canadian Forces Anthropometric Survey.	C, DE, SC, TR
3.2.9	The Head Mount Assembly must be adjustable to the user's head shape. For example, straps lengths may need to be adjusted to not lie on top of the user's ears.	C, DE, SC, TR
3.2.10	The Head Mount Assembly must be padded for comfort.	C, DE, SC, TR
3.2.11	The Head Mount Assembly must be made of non-abrasive materials for comfort.	C, DE, SC, TR
3.3	<b>Bridge Mount</b>	
3.3.1	The Bridge Mount must be capable of linking 2 MNVDs together to form binocular night vision device (BNVD) for use with the Head Mount.	C, DE, SC, TR
3.3.2	The distance between MNVDs on Bridge Mount must be adjustable to accommodate users with close set eyes to wide set eyes.	C, DE, SC, TR
3.3.3	The Bridge Mount must be matte black colour.	C, DE, SC, TR
3.3.4	The Bridge Mount must be complete in and of itself, without requiring additional accessories to make it operational.	C, DE, SC, TR

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3.3.5	The Bridge Mount must not require any special tools for installation and configuration.	C, DE, SC, TR
<b>3.4</b>	<b>Sacrificial Filter</b>	
3.4.1	The Sacrificial Filter must be compatible with the MNVD.	C, DE, SC, TR
3.4.2	The Sacrificial Filter must protect the objective lens from the air dust, dirt and debris.	C, DE, SC, TR
3.4.3	The Sacrificial Filter must be complete in and of itself, without requiring additional accessories to make it operational.	C, DE, SC, TR
3.4.4	The Sacrificial Filter must not require any special tools for installation and configuration.	C, DE, SC, TR
<b>3.5</b>	<b>Cleaning Kit</b>	
3.5.1	The Cleaning Kit must include no less than the following items: 6. Lens Paper 7. Optical Brush 8. Cleaning Cloth 9. Cotton Swabs 10. 15 ml of Lens Cleaner	C, DE, SC, TR
3.5.2	The Cleaning Kit must have instructions on proper use of cleaning materials.	C, DE, SC, TR
3.5.3	The Cleaning Kit contents must be protected from dirt.	C, DE, SC, TR
<b>3.6</b>	<b>Neck Cord</b>	
3.6.1	The Neck Cord must be matte black colour.	C, DE, SC, TR
3.6.2	The Neck Cord must have a length no less than 100 cm.	C, DE, SC, TR
3.6.3	At minimum, the Neck Cord must be adjustable between the lengths of 50 cm and 100 cm.	C, DE, SC, TR
3.6.4	The Neck Cord must be made of non-abrasive materials.	C, DE, SC, TR
3.6.5	The Neck Cord must include a mechanism that attaches it to the MNVD.	C, DE, SC, TR
3.6.6	The Neck Cord, when attached to the MNVD, must not hinder the operations or performance of the MNVD.	C, DE, SC, TR
3.6.7	The Neck Cord must not dig into the user's neck when supporting the full weight of the MNVD.	C, DE, SC, TR
<b>3.7</b>	<b>Eyecup</b>	
3.7.1	The Eyecup must be matte black colour.	C, DE, SC, TR
3.7.2	The Eyecup must shield users from stray light.	C, DE, SC, TR
3.7.3	The Eyecup must shield light emissions from the MNVD.	C, DE, SC, TR
3.7.4	The Eyecup must be constructed of non-abrasive, soft, smooth, and flexible molded rubber materials.	C, DE, SC, TR
<b>3.8</b>	<b>Front Lens Cap</b>	
3.8.1	The Front Lens Cap must be matte black colour.	C, DE, SC, TR



3.8.2	The Front Lens Cap must protect the MNVD objective lens from damage and light.	C, DE, SC, TR
3.8.3	The Front Lens Cap must be complete in and of itself, without requiring additional accessories to make it operational.	C, DE, SC, TR
3.8.4	The Front Lens Cap must not require any special tools for installation and configuration.	C, DE, SC, TR
3.8.5	The Front Lens Cap must be permanently attached to the MNVD to prevent loss.	C, DE, SC, TR
3.8.6	The Front Lens Cap should be permanently attached to the MNVD by a flip mechanism.	C, DE, SC, TR
<b>3.9</b>	<b>MNVD Kit Pouch</b>	
3.9.1	The MNVD Kit Pouch must store the MNVD kit contents (Annex A "SOR for MNVD", section 2.2, table 2-1) excluding the MNVD Kit pouch itself.	C, DE, TR, SC
3.9.2	The MNVD Kit Pouch must be soft-sided.	C, DE, TR
3.9.3	The MNVD Kit Pouch material must be 500 Denier Cordura Nylon with polyurethane back-coating in accordance with Mil-DTL-32439A Type III, and Class #3.	C, DE, TR, SC
3.9.4	All MNVD Kit Pouch seams must be covered to prevent fraying.	C, DE, TR, SC
3.9.5	The MNVD Kit Pouch must have a metal zipper with double metal sliders to allow the pouch to be opened fully.	C, DE, TR, SC
3.9.6	The MNVD Kit Pouch attachment strap must support the weight of the MNVD Kit Pouch and its full contents for typical user movements, such as running and jumping.	C, DE, TR, SC
<b>3.10</b>	<b>MNVD Carrying Pouch</b>	C, DE, TR, SC
3.10.1	The MNVD Carrying Pouch must be right sized to store only the MNVD (SRS Sec. 3.1) attached to the Head Mount (SRS Sec. 3.2).	C, DE, TR, SC
3.10.2	The MNVD Carrying Pouch must be soft-sided.	C, DE, TR, SC
3.10.3	The MNVD Carrying Pouch material must be 500 Denier Cordura Nylon with polyurethane back-coating in accordance with Mil-DTL-32439A Type III, and Class #3.	C, DE, TR, SC
3.10.4	All MNVD Carrying Pouch seams must be covered to prevent fraying.	C, DE, TR, SC
3.10.5	The MNVD Carrying Pouch must have a closing mechanism that prevents its contents from falling out.	C, DE, TR, SC
3.10.6	The MNVD Carrying Pouch attachment strap must support the weight of the MNVD Carrying Pouch and its full contents for typical user movements, such as running and jumping.	C, DE, TR, SC
<b>3.11</b>	<b>Demist Shield</b>	
3.11.1	The Demist Shield must be matte black colour.	C, DE, TR, SC
3.11.2	The Demist Shield must prevent condensation from forming on the eyepiece.	C, DE, TR, SC
3.11.3	The Demist Shield must be compatible with the MNVD.	C, DE, TR, SC
3.11.4	The Demist Shield must be removable and reusable.	C, DE, TR, SC



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3.11.5	The Demist Shield must be complete in and of itself, without requiring additional accessories to make it operational.	C, DE, TR, SC
3.11.6	The Demist Shield must not require any special tools for installation and configuration.	C, DE, TR, SC
<b>3.12</b>	<b>AA Batteries</b>	
3.12.1	The AA batteries must be commercially available lithium ion batteries.	C, DE, TR, SC

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**APPENDIX 2 TO ANNEX A**

**REFERENCES, ACRONYMS AND GLOSSARY**

**FOR**

**MONOCULAR**

**NIGHT VISION DEVICE SYSTEM**

## 1. REFERENCES

### 1.1. Canadian Supplied Publications

Document number	Description
	Specification – Acceptance of Commercial and Foreign Government Publications as Adopted Publications
	Policy/Management Procedures and Guidelines – Writing, Format and Production of Technical Publications
	Specification for Marking for Storage and Shipment

## 2. ACRONYMS

Acronym	Description
A	Analysis
ABCANZ	American, British, Canadian, Australian, and New Zealand
BNVD	Binocular Night Vision Device
BSP	Bright-Source Protection
C	Certification
CA	Contracting Authority
CAGE	Commercial and Government Entity
CoC	Certification of Conformity
D	Demonstration
DE	Description and Evidence
EBI	Equivalent Background Illumination
FAI	First Article Inspection
FOM	Figure of Merit
FOV	Field of View
IAW	In Accordance With
I	Inspection
I <sup>2</sup>	Image Intensifier
IP	Ingress Protection
MNVD	Monocular Night Vision Device
NATO	North Atlantic Treaty Organization
NBC	Nuclear Biological Chemical
NSN	NATO Stock Number
NVD	Night Vision Device
PA	Procurement Authority
PBCP	Phased Bid Compliance Process

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Acronym	Description
OEM	Original Equipment Manufacturer
QA	Quality Assurance
QRG	Quick Reference Guide
RFP	Request For Proposal
RSPL	Recommend Spare Parts List
RVM	Requirements Verification Matrix
SC	Statement of Compliance
SNR	Signal-to-Noise Ratio
SOW	Statement of Work
SPTD	Supplementary Provisioning Technical Documentation
STTE	Special Tools and Test Equipment
SRS	System Requirements Specification
TA	Technical Authority
TR	Test Report
WD	Working Days

### 3. GLOSSARY

Terms	Definition
Analysis	An element of verification that uses established technical evaluation or mathematical models or simulations, algorithms, calculations, charts, graphs, representative data, or other scientific principles and procedures to provide evidence that stated requirements are met.
Auto-gated	The ability to regulate the photocathode voltage as lighting conditions change.
Bright-Source Protection	The electronic function that reduces the voltage to the photocathode when an I <sup>2</sup> device is exposed to bright light sources.
Certification	An element of verification used when the performance, behaviour or attributes of the system are to be in accordance with a recognized military, national or industry standard. When "Certification" is requested, the Contractor must provide evidence that the system is in compliance with a recognized military, national or industry standard. The evidence must be issued by an accredited test organization and demonstrate, certify or warrant that the proposed system fully complies with the requirement.
Description and Evidence	An element of verification consisting of a written representation of the system, and a written explanation of how the system meets the requirement criteria. The written representation and written explanation must be supported with evidence in the form of relevant extracts from product specifications, manuals, pictures, screen shots, sample data outputs, certificates, test reports or other such supporting documentation.

Terms	Definition
Diopter	The measurement used to define eye correction or the refractive power of a lens in units of $m^{-1}$ .
Equivalent Background Illumination	The input illumination required to give an increase in screen brightness that is equal to the screen brightness when there is no incident light on the photocathode.
Eye Relief	The distance between the user's eye and the eyepiece lens of an optical device at which the viewed scene can be clearly seen.
Figure of Merit	The measure of line pair per millimeter times the signal to noise ratio.
Field of View	The angular size of the scene that is observable while looking through an optical device.
Functionality	The quality of being suited to serve a purpose well; practicality, the range of operations that can be run on a computer or other (ref: oxford dictionary).
Gain Control	The capability to adjust the level of brightness of the displayed image for Image Intensifier ( $I^2$ ) tube.
Halo	The halo is a diffuse bright disk which surrounds bright radiation sources.
In-use Position	In the context of this SRS, the in-use position consists of any configuration where the MNVD is affixed to the user, either by head mount or by helmet mount, in front of the user's eye and is in operation, providing a night vision capability to the user.
Monocular	A device consisting of a single-eyepiece
Neck Cord	This can be attached to the MNVD and, when used, is worn around the user's neck for easy transportation and movement of the MNVD.
Operability	Ability of a system in which it can fulfil all requirements of performance and safety.
Signal-to-Noise Ratio	The ratio of the dc signal to the rms noise measured at the optical output of a night vision device over a 10 Hz noise-equivalent passband.
Stowed Position	Any configuration where the MNVD is affixed to the user, either by head mount or by helmet mount, but tilted away from the user's eye, and no longer provides a night vision capability to the user.
Statement of Compliance	An element of verification consisting of a written statement from the Contractor. The statement provides confirmation to the Government of Canada that the Contractor understands the specification criterion and that their proposal must be compliant with this criterion.
Tactical Environment	A tactical environment is an outdoor space devoid of noise from vehicles or people.
Test	Test is an element of verification consisting of determining through critical evaluation (technical or scientific) the measurable properties or elements of items, including functional operation. All

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Terms	Definition
	tests must adhere to the application of established scientific principles and procedures.
Test Report	<p>A document that records data obtained from a Test, and shows the comparison of test results with test objectives. The Test Report must contain the following information:</p> <ul style="list-style-type: none"><li>a) Institution conducting test;</li><li>b) A description of the Test and the conditions under which it was conducted;</li><li>c) Test Data (data obtained during the test);</li><li>d) Test Results; and</li><li>e) Conclusion/Findings (analysis and evaluation of quantitative data that demonstrates that the test results meet the specification criterion).</li></ul>