

**RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS À:**
**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

<b>Title - Sujet</b> Naval Remote Weapon Station	
<b>Solicitation No. - N° de l'invitation</b> W8472-125389/B	<b>Amendment No. - N° modif.</b> 005
<b>Client Reference No. - N° de référence du client</b> W8472-125389	<b>Date</b> 2015-03-12
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$QF-101-24870	
<b>File No. - N° de dossier</b> 101qf.W8472-125389	<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 2015-04-30</b>	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
<b>F.O.B. - F.A.B.</b> Specified Herein - Précisé dans les présentes	
Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input checked="" type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Michael Rancourt	<b>Buyer Id - Id de l'acheteur</b> 101qf
<b>Telephone No. - N° de téléphone</b> (819) 956-3930 ( )	<b>FAX No. - N° de FAX</b> (819) 956-5650
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

**Vendor/Firm Name and Address**

Raison sociale et adresse du fournisseur/de l'entrepreneur

**Instructions: See Herein**

**Instructions: Voir aux présentes**

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

**Issuing Office - Bureau de distribution**

Electronics, Simulators and Defence Systems Div.  
/Division des systèmes électroniques et des systèmes de simulation et de défense  
11 Laurier St. / 11, rue Laurier  
8C2, Place du Portage  
Gatineau  
Québec  
K1A 0S5

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This Request for Information (RFI) amendment 5 is to :

- a. release Annex G - Evaluation Procedures and Basis of Selection, Annex D - Bid Evaluation Plan, and Appendix 1 to Annex D - Compliance Matrix;
- b. Provide an Industry feedback due date for the newly released draft RFP documents; and
- c. extend the RFI closing date.

### **1. Released Documents**

Note that the NRWS Draft RFP list of Annexes and Appendixes may need to be adjusted for a formal RFP process to create a better flow of documents. This release of draft RFP documents should be considered in the following order:

Annex G - Evaluation Procedures and Basis of Selection;  
Annex D - Bid Evaluation Plan; and  
Appendix 1 to Annex D - Compliance Matrix

Also note that the Industry Canada Industrial and Technological Benefits, and Value Proposition Bid Evaluation Documents are not ready for release at this time. It is Canada's intent to release these draft RFP documents under a future RFI amendment.

### **2. Due Date for the Newly Release Draft RFP Documents**

Canada requests that Industry submit their comments and feedback on Annex G, Annex D, and Appendix 1 to Annex D on or before April 26th 2015.

### **3. Extension to the RFI Closing Date**

This amendment 5 has extended the RFI closing date from March 31 2015, **to April 30 2015**. Note that this date does not reflect when feedback is due but rather to keep the RFI process open and continue communications with Industry.

All feedback and questions on the NRWS requirement are to be sent to the Contracting Authority at the following contact information. As per RFI amendment 1, the requirement for hard copy feedback is no longer required and all feedback can be submitted via e-mail :

Michael Rancourt  
Public Works and Government Services Canada  
Defence and Major Projects Sector  
Electronics, Simulators, and Defence Systems Division QF  
11 Laurier Street, Place du Portage, Phase III, 8C2-7  
Gatineau, QC, K1A 0S5  
Ph: 819-956-3930  
Fax: 819-956-5650  
[michael.rancourt@tpsgc-pwgsc.gc.ca](mailto:michael.rancourt@tpsgc-pwgsc.gc.ca)

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Buyer ID - Id de l'acheteur  
101qf

CCC No./N° CCC - FMS No/ N° VME

## Draft RFP Document List Status

Item	Document	Release Status
1	NRWS Draft RFP Solicitation document - Terms & Conditions and Resulting Contract Clauses	Will not be released with RFI
2	Draft RFP Annex A - Security Requirements Check List	Released under Original RFI Posting
3	Draft RFP Annex B - Acquisition Statement of Work	Released under Amendment 3
4	Appendix 1 to Annex B - Contract Data Requirements List (CDRL)	Released under Amendment 3
5	Appendix 2 to Annex B - Data Item Descriptions (DID)	Released under Amendment 3
6	Appendix 3 to Annex B - Technical Statement of Requirements (TSOR)	Released under Original RFI Posting
7	Appendix 4 to Annex B - Installation Guidance Package	Released under Original RFI Posting
8	Appendix 5 to Annex B - Computer Based Trainer Specification	Released under Amendment 3
9	Draft RFP Annex C - Repair and Overhaul Technical Statement of Work	Released under Amendment 3
10	Appendix 1 to Annex C - Repair and Overhaul Logistics Statement of Work	Released under Amendment 3
11	*Draft RFP Annex G - Evaluation Procedures and Basis of Selection	Released under Amendment 5
12	Draft RFP Annex D - Bid Evaluation Plan ( <i>Excluding Value Proposition</i> )	Released under Amendment 5
13	Appendix 1 to Annex D - Compliance Matrix	Released under Amendment 5
14	Draft RFP Annex E - Federal Contractors program	
15	Draft RFP Annex F - PWGSC Progress Claim 1111	
16	Industry Canada Package with Questions on Value Proposition	Released under Amendment 2

\* A new draft RFP document introduced into the process.

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**The following Documents are attached herein:**

- a. Annex G - Evaluation Procedures and Basis of Selection;
- b. Annex D - Bid Evaluation Plan; and
- c. Appendix 1 to Annex D - Compliance Matrix

## ANNEX G

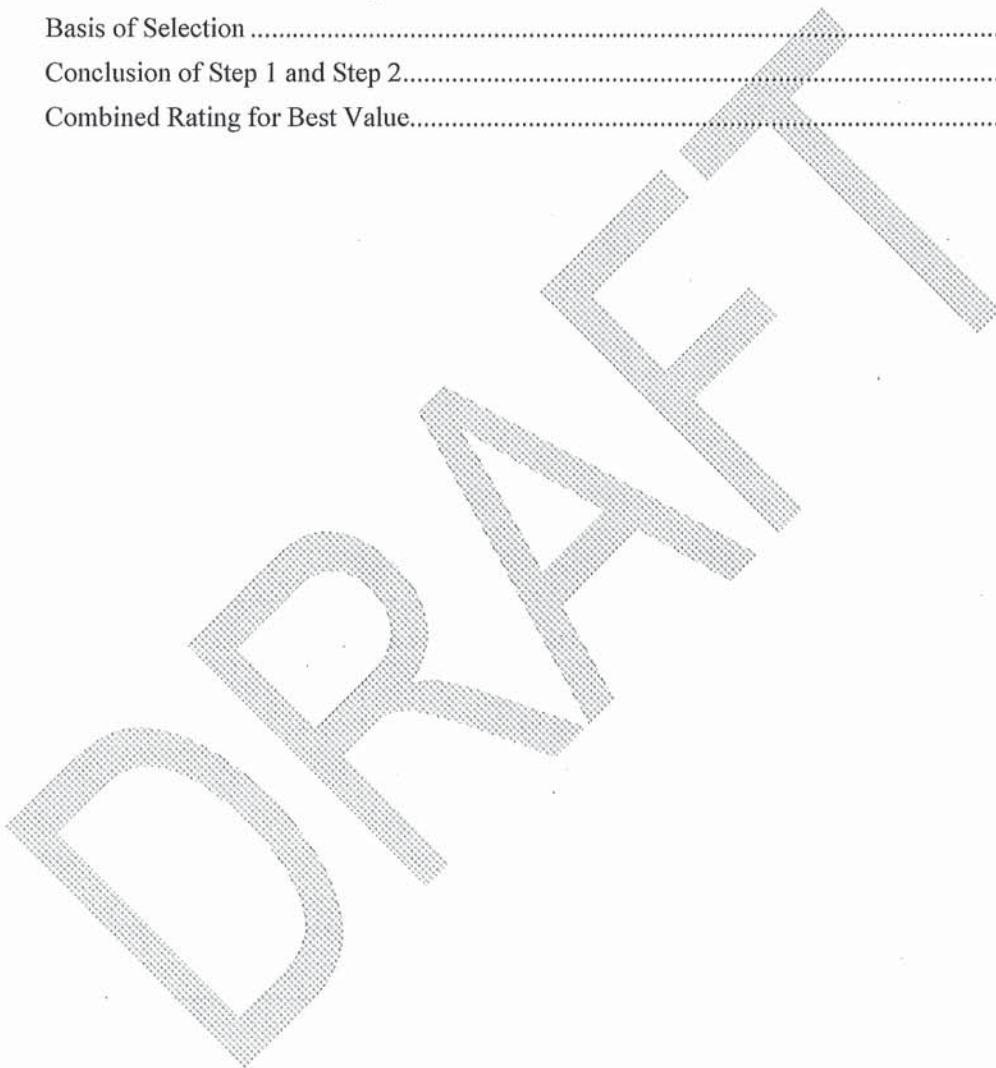
**W8472-1252389/B**  
**Evaluation Procedures and**  
**Basis of Selection**

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## 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, management, financial, ITB and the VP evaluation criteria. For the purposes of this solicitation, Canada will utilize a two-step evaluation process as more fully described herein.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### 1.1 Evaluation Overview and Underlying Principles

- (a) Canada is conducting a two-step bid evaluation process for this requirement. Step 1 consists of an evaluation of certain sections of a Bidder's bid and, if necessary, the release of a Preliminary Evaluation Report to some or all Bidders. Step 2 consists of an evaluation of the remaining bid sections and, if issued, Bidders responses to the Preliminary Evaluation Report. Only those bids deemed to be responsive at the completion of Step 1 will be evaluated at Step 2.
- (b) Notwithstanding the limited review which Canada may conduct for certain parts of the solicitation during Step 1, Bidders are and will remain solely responsible for the accuracy and completeness of their bids and Canada does not undertake, by reason of this review, any obligations or responsibility for identifying errors or omissions in bids submitted nor does Canada undertake to identify any or all such errors or omissions.  
**BIDDERS ARE AND WILL REMAIN SOLELY RESPONSIBLE FOR ENSURING CONSISTENCY OF THE INFORMATION SUBMITTED IN THEIR BIDS AT ALL TIMES. WITHOUT LIMITING THE FOREGOING, BIDDERS ARE AND WILL REMAIN SOLELY RESPONSIBLE FOR ENSURING THAT ANY INFORMATION PROVIDED IN RESPONSE TO A PRELIMINARY EVALUATION REPORT IS CONSISTENT WITH ANY OTHER INFORMATION ORIGINALLY SUBMITTED IN THEIR BID IN RESPONSE TO OTHER REQUIREMENTS. FAILURE TO DO SO MAY PREJUDICE THE EVALUATION OF PREVIOUSLY SUBMITTED INFORMATION AND/OR RENDER THE BID NON-RESPONSIVE.**
- (c) Notwithstanding that this solicitation divides the bid into two parts (Part A: NRWS Acquisition and Part B: NRWS Repair and Overhaul), Canada may consider information submitted for one part in its evaluation of the other part. It is the Bidder's responsibility to ensure consistency amongst all parts of its bid.
- (d) This two-step bid evaluation process shall not limit Canada's rights under *SACC 2003 (2014-03-01) Standard instructions – Goods or Services – Competitive Requirements* nor Canada's right to request or accept any information during the solicitation period or after bid solicitation closing in circumstances where the bid solicitation expressly provides for this right.

#### 1.2 Bid Evaluation: Step 1

##### 1.2.1 Canada will conduct an initial review of each Section as described below.

- (i) Section I: Technical and Management Bid (Acquisition and Repair and Overhaul)

Bidder responses to the following solicitation requirement documents will be reviewed:

- a) Annex B and all Appendices;
- b) Annex C and all Appendices; and
- c) Annex D and all Appendices

Review Parameters:

Canada will conduct a full review and evaluation of all mandatory requirements and point-rated requirements in accordance with the procedures of Annex D to:

1. Determine if a Bidder's submission in respect of mandatory requirements having a pass/fail is considered by Canada to be responsive. A bid will be considered by Canada to be non-responsive if the bid fails to achieve a "pass" rating on a mandatory pass/fail requirement.
2. Determine the Bidder's score for all point-rated requirements.
3. Determine if a Bidder's submission in respect of point-rated requirements having a minimum pass standard is considered by Canada to be responsive. A bid will be considered by Canada to be non-responsive if the bid fails to achieve the mandatory minimum pass standard.

The mandatory minimum pass standards for this Solicitation, and an example of the calculation to be used, are set out in the Table below:

Table	Annex /SOW	Minimum Pass	Sample calculation
1	Mandatory NRWS Project Bid Requirements	Pass/Fail	Will be indicated by "yes" or "no" in the Compliant column
2	Point-Rated NRWS Project Requirements – Area 1 Bidder Experience	16 of 40 available points	Points awarded will be indicated in the "Points Awarded" column
3	Point-Rated NRWS Project Requirements - Area 2, SOW Section 3.0, Project Management	24 of 61 available points	Points awarded will be indicated in the "Points Awarded" column
4	Point-Rated NRWS Project Requirements - Area 3, SOW Section 4.0, System Engineering	18 of 46 available points	Points awarded will be indicated in the "Points Awarded" column

Table	Annex /SOW	Minimum Pass	Sample calculation

5	Point-Rated NRWS Project Requirements - Area 4, SOW Section 5.0, Integrated Logistic Support	9 of 22 available points	Points awarded will be indicated in the "Points Awarded" column
6	Point-Rated NRWS Project Requirements - Area 5, TSOR Requirements	73 of 182 available points	Points awarded will be indicated in the "Points Awarded" column
7	Point-Rated NRWS Project Requirements - Area 6, Embedded Trainer Specification Requirements	No Minimum Pass Standard	Points awarded will be indicated in the "Points Awarded" column

4. Identify any instances where a Bidder has failed to submit a required certification or proof of compliance or where a submitted document lacks the requisite signature(s) **only** for the above-noted documents and those documents which must otherwise be submitted with the Technical Bid.

(ii) Section II: Financial Bid

Bidder responses to the following solicitation requirement documents will be reviewed:

- a) Schedule 1, NRWS Pricing

Review Parameters:

A full review of the Financial Bid is not conducted at Step 1. Canada's initial review will be limited to identifying whether required data is missing from the bid or whether GST/HST amounts are not shown separately. In instances where a different price for the same item is provided in more than one location within the Financial Bid, Canada will identify this discrepancy and the Bidder must confirm which price applies.

Where a required line item has been left blank, only the missing information may be added to the Financial Bid for Step 2, except that, in those instances where the addition of such information will necessarily result in a change to other pricing or cost information previously submitted as a result of calculations required by the solicitation (for example, the calculation to determine a total price), such necessary adjustments shall be identified by the Bidder and only these adjustments shall be made. **Any other changes to the Bid shall be considered to be new information and will be disregarded.**

Canada will also identify any instances where a Bidder has failed to submit a required certification or proof of compliance or where a submitted document lacks the requisite signature(s) **only** for the above-noted documents and those documents which must otherwise be submitted with the Financial Bid.

(iii) Section III: Certifications

Canada will identify any instances where a Bidder has failed to submit a required certification or proof of compliance or where a submitted document lacks the requisite signature(s) **only** for the certifications required to be submitted with the bid. The Bidder remain responsible for ensuring that any certifications which are required to be submitted prior to the close of the solicitation period or at any other time, are submitted as required.

(iv) Section IV: Industry Technological Benefits Bid

Bidder responses to the following solicitation requirement documents will be reviewed:

Review Parameters To Be Determined and Released Under a Future RFI Amendment

Canada will determine if a Bidder's submission in respect of mandatory requirements having a pass/fail is considered by Canada to be responsive. A bid will be considered by Canada to be non-responsive if the bid fails to achieve a "pass" rating on a mandatory pass/fail requirement.

(v) Section V: Value Proposition (VP) Plan

Review Parameters To Be Determined and Released Under a Future RFI Amendment

Canada will determine if a Bidder's submission in respect of mandatory requirements having a pass/fail is considered by Canada to be responsive. A bid will be considered by Canada to be non-responsive if the bid fails to achieve a "pass" rating on a mandatory pass/fail requirement.

- 1.2.2 After this initial review, if any bid is determined to be non-responsive in accordance with the review parameters noted above, the Contracting Authority will provide each Bidder with a "Preliminary Evaluation Report" (or "Report") listing only the instances where the bid is non-responsive to the requirements of the bid solicitation (and, for mandatory point-rated requirements, the score for such requirement) and the applicable solicitation references.
- 1.2.3 Bidders whose bids are considered to be non-responsive will be invited by the Contracting Authority to submit additional or different information to demonstrate to Canada, in accordance with the solicitation, that the bid is compliant with the solicitation requirements. Except as expressly permitted above, information submitted for any other line item or category will not be considered nor will submitted information be used to evaluate any other section of a Bidder's bid or the solicitation requirement.
- 1.2.4 For Bidders whose bids are considered to be responsive, the Report will only identify that they are responsive for the mandatory requirements evaluated; scores will not be provided.
- 1.2.5 All Bidders are requested to provide written confirmation of receipt of the Report to the Contracting Authority. Bidders who do not confirm receipt will be deemed to have received the Report as of the date issued by Canada.
- 1.2.6 Only non-responsive Bidders must submit further information in response to the Report.
- 1.2.7 Submitted information must be based on the NRWS solution proposed by the Bidder at bid closing. A Bidder responding to a request for information must not modify, alter or substitute any of the proposed hardware or software to correct a non-responsive issue. All submitted information must otherwise comply with the requirements of this solicitation. Failure to comply with these requirements will result in the additional or different information being returned to the Bidder without further consideration.
- 1.2.8 Information submitted by non-responsive Bidders in response to the Report and accepted by Canada will be deemed to replace, in full, only the non-responsive information or response in the

Bidder's original bid as identified in the Report and will be used for the remainder of the bid evaluation process.

- 1.2.9 **The Bidder's response to the Report must follow the Bid Preparation Instructions (such as, for example, separating financial information from other information as required).** Canada requests that Bidders clearly indicate, for each response, which non-responsive requirement identified in the Report is being responded to.
  - 1.2.10 Responses to the Report must be submitted to the Bid Receiving Unit on or before the date and time specified in the Report. Failure to do so will result in the bid being deemed non-responsive and the bid will receive no further consideration.
  - 1.2.11 Any adjustments to a non-responsive bid are at the Bidder's sole discretion and will be made solely by the Bidder. Canada will not provide information about any other bid or any information as to how a Bidder should complete its response, if any, to the Report. **Bidders are and will remain solely responsible for the accuracy and completeness of their bids and Canada does not undertake, by reason of this review, any obligations or responsibility for identifying errors or omissions in bids submitted nor does Canada undertake to identify any or all such errors or omissions. BIDDERS ARE AND WILL REMAIN SOLELY RESPONSIBLE FOR ENSURING CONSISTENCY OF THE INFORMATION SUBMITTED IN THEIR BIDS AT ALL TIMES. WITHOUT LIMITING THE FOREGOING, BIDDERS ARE AND WILL REMAIN SOLELY RESPONSIBLE FOR ENSURING THAT ANY INFORMATION PROVIDED IN RESPONSE TO A PRELIMINARY EVALUATION REPORT IS CONSISTENT WITH ANY OTHER INFORMATION ORIGINALLY SUBMITTED IN THEIR BID IN RESPONSE TO OTHER REQUIREMENTS. FAILURE TO DO SO MAY PREJUDICE THE EVALUATION OF PREVIOUSLY SUBMITTED INFORMATION AND/OR RENDER THE BID NON-RESPONSIVE.**
  - 1.2.12 For those instances where a Bidder chooses not to submit additional or different information for a requirement identified as non-responsive in the Report, the Bidder must submit a response indicating "No Change" for such requirement and the original response for that item will continue to apply. If a Bidder does not respond to a requirement identified as non-responsive, the Bidder will be deemed to have provided a "No Change" response and the original response for that item will continue to apply.
  - 1.2.13 If all bids are determined to be responsive, no Preliminary Evaluation Reports will be issued and the Contracting Authority will complete the full bid evaluation, including the Financial Bid evaluation, using the original bid documents submitted.
- 1.3 Preliminary Evaluation Report : Step 1
- If a Preliminary Evaluation Report is issued:
- (a) Canada will conduct a final review of the non-responsive requirements listed in the "Preliminary Evaluation Report" provided to each Bidder, taking into account the additional or different information submitted, to determine if these requirements have been met as required in the solicitation. Should one or more of the requirements initially evaluated as non-responsive continue to be evaluated as non-responsive after review of the additional or different information, the bid will be deemed non-responsive and will not be given any further consideration. The bid will also be evaluated as non-responsive if the additional or different information submitted renders non-responsive any other mandatory requirements, including point rated criteria having a minimum pass standard.

- (b) Bids that have demonstrated responsiveness at the conclusion of the final review of all mandatory requirements, including point rated criteria having a minimum pass standard, will continue to be evaluated at Step 2. For point rated criteria having a minimum pass standard, if the additional or different information provided by a Bidder renders the criteria responsive, those criteria will be deemed responsive; however, the original score received will not be changed and shall remain the final score for the bid.

#### 1.4 Financial Bid Evaluation: Step 2

Canada will conduct a full review and evaluation of the Financial Bids for those Bidders whose bids that have demonstrated responsiveness at the conclusion of the final review of all mandatory requirements, including point rated criteria having a minimum pass standard.

### 2. Basis of Selection

#### 2.1 Conclusion of Step 1 and Step 2

To be declared responsive at the conclusion of Step 1 and Step 2 a bid must:

- a) comply with all the requirements of the bid solicitation; and
- b) meet all mandatory criteria; and
- c) achieve the minimum pass standard for point rated criteria having a minimum pass standard;
- d) meet all Industrial Technological Benefits requirements; and
- e) meet all Value Proposition requirements.

Bids not meeting all of the foregoing requirements will be declared non-responsive, and receive no further consideration.

#### 2.2 Combined Rating for Best Value

- a) Best Value is defined as the optimal combination of price, technical merit, quality, and the balance of overall benefits to the Crown and the Canadian people as set out in the bid solicitation evaluation criteria.

For each responsive bid, the best value calculation will be determined as follows:

$$\frac{\text{Lowest Compliant Bid Price}}{\text{Bidder's Bid Price}} \times 60 + \frac{\text{Technical Point Rated Score}}{\text{Maximum Score Available for Bid}} \times 40 + \frac{\text{Value Proposition Point Rated Score}}{\text{Maximum Score Available for Bid}} \times (\text{TBD})$$

= Total Weighted Score

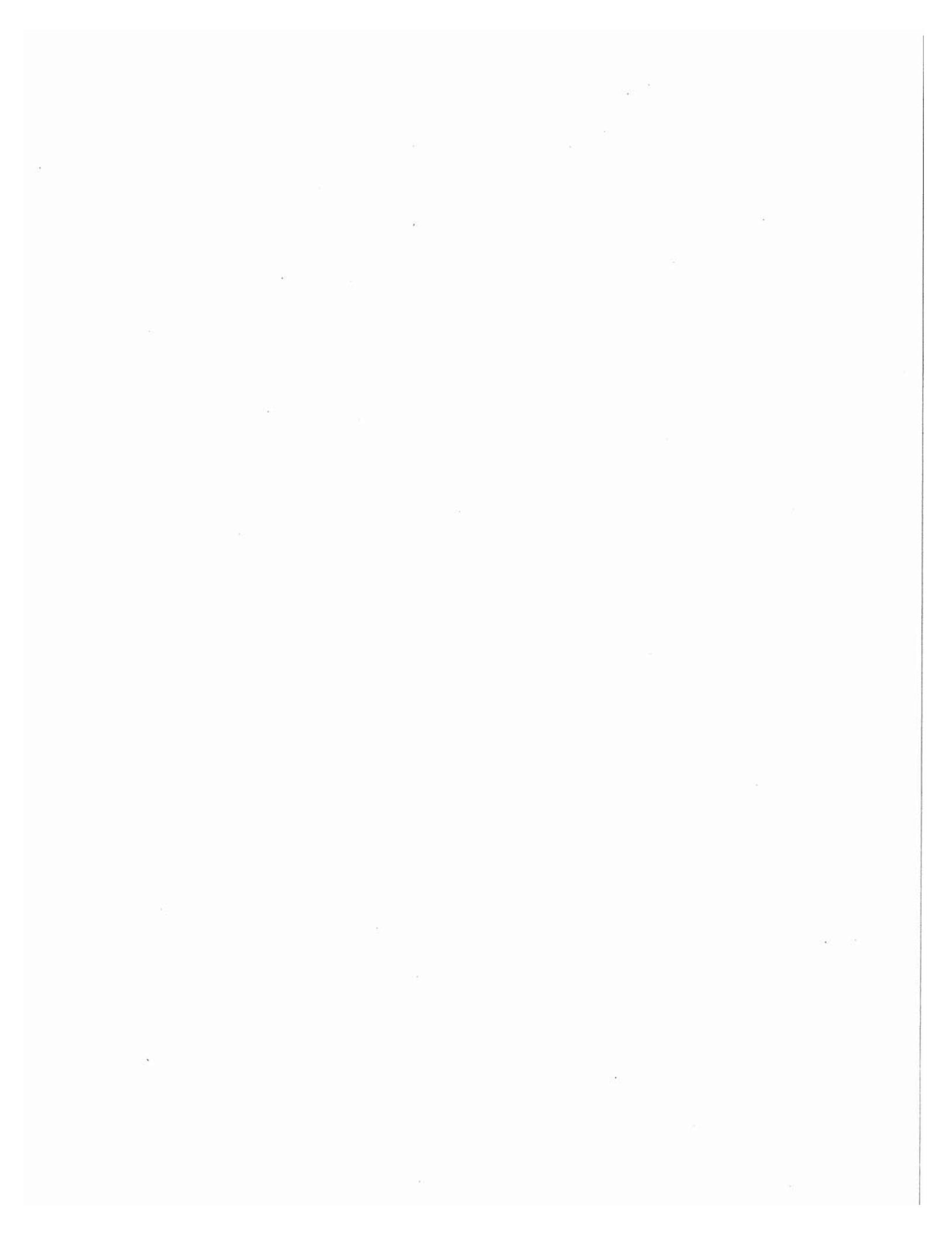
*\*Once the Value Proposition weighting is determined, the Pricing and Technical weightings will be adjusted accordingly.*

- b) When a calculation includes a decimal answer, calculations will be rounded to the nearest tenth place value.

Example:

- (i) 7.254 to the nearest tenth = 7.25
- (ii) 7.255 to the nearest tenth = 7.26
- c) Following the completion of the evaluations in Step 1 and Step 2, the compliant Bidder with the highest overall Total Weighted Score (Best Value) for both the NRWS Acquisition and the NRWS Repair and Overhaul will be recommended for the award of both contracts.







**ANNEX D**

**Bid Evaluation Plan (BEP)**

**Naval Remote Weapon Station System**

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## **1. INTRODUCTION**

1.1 This document identifies the procedure by which bids for the Naval Remote Weapon Station (NRWS) will be evaluated by Canada.

1.2 This document forms a part of the Request for Proposal (RFP) for the NRWS Project.

## **2. BID COMPLETENESS**

2.1 It is the sole responsibility of the Bidders to provide sufficient information to allow an adequate assessment of their bid in accordance with this Bid Evaluation Plan.

2.2 The Bidders are to enter references to where their bid's compliance information can be found under the Bidder's Response column of Tables 1 to 7 prior to submitting the bid.

## **3. EVALUATION PROCESS**

3.1 The evaluation process will be conducted by the Bid Evaluation Team as follows:

- a. A review of bids to ensure compliance with all mandatory requirements of Table 1 will be conducted. The Bid Evaluation Team will identify where demonstration of compliance with mandatory requirements has been provided in a bid, assess this information for compliance, and enter the results in the Evaluation of Bidder's Response column of Table 1. Compliance or non-compliance will be indicated in the last 2 columns of Table 1.
- b. For the evaluation of the bidder's response to all Tables the definition of "Proven Experience" for each project shall include as a minimum:
  - (1) Project name
  - (2) Description of project
  - (3) Scope of work demonstrating the requirement is met
  - (4) Date of completion of project
  - (5) Duration of project
  - (6) Customer name & contact information, including project manager name, phone number, company address
- c. The bids will be scored with respect to each point-rated requirements of Tables 2 to 7. The Bid Evaluation Team will use the provided Bidder's Response column to acquire where point-rated information has been provided in the bid. Each point-rated requirement will be assessed and

scored by the Bid Evaluation Team in accordance with the Rating Method column in Tables 2 to 7. The scores will be input into the Points Awarded column in Tables 2 to 7 by the Bid Evaluation Team. For some SOW requirements, the level of information provided will be evaluated as follows:

- (1) Exceptional: The proposal fully demonstrates that the Bidder would meet this requirement in a comprehensive manner. The proposal includes at least one example of previous project experience which details how the area being evaluated was addressed in that project. The requirement is fully understood and clearly demonstrates an understanding of the difference between mandatory scope of work and performance above the mandatory. There are no apparent weaknesses that would affect the achievement of the work associated with this requirement.
- (2) Reasonable: The proposal reasonably demonstrates that the Bidder would meet this requirement. It appears that the requirement is understood; however, there are weaknesses for which a risk must be raised, which should not impact the accomplishment of the requirement, however, these weaknesses may adversely affect project schedule, cost or scope.

For some Specification requirements, the level of information provided will be evaluated as follows:

- (1) Theory: An explanation, detailed description, or functional description of the proposed functionality to address the point rated requirement. (For example: (i) An explanation is generic description of the area being evaluated. (ii) A detailed description is a generic description of the area being evaluated including details of specific functionality. (iii) Functional specification is a generic description of the area being evaluated including details of specific functionality and behaviour of the area being evaluated.)
  - (2) Simulation: A textual description of the results of a simulation which has been performed to demonstrate the proposed functionality of the point rated requirement.
  - (3) Application: A textual description of how the point rated requirement has been used successfully in a real world scenario. The application is to be supported by data, which includes tests/trials (plans, procedures, results) or 3rd party report certification.
- d. Comments will be provided in the Evaluation of Bidder's Response column. The point-rated requirements are based on management and

technical features of the bid that are beyond the minimum mandatory requirements stated in the SOW, TSOR and CBT Specification. These features are assessed and scored to determine the bid's added value above the minimum mandatory requirements;

- e. The Points Awarded within each evaluation Area of Tables 2 to 6 must meet the Minimum Allowable Points for each Area. Any bid that does not achieve the Minimum Allowable Points in each evaluation Area of Tables 2 to 6 will not be considered further. Evaluation Area 6 (Embedded Trainer Specification Requirements) of Table 7 does not have a minimum requirement;
- f. The Points Awarded will be summed within each of the six evaluation areas of Tables 2 to 7, and the Area Percent Score will be calculated with respect to the maximum points available for each respective area, specifically:

$$\frac{\text{Points Awarded for Area}}{\text{Maximum Points Available for Area}} \times 100 = \text{Area Percent Score (\%)}$$

- g. The Area Percent Scores of each area will then be inputted into Table 8 and weighted according to the Area Weighting factors listed in Table 8.
- h. The Weighted Area Percent Scores of areas 1 to 6 will be summed to provide a Total Technical Score for Bid which will be inputted into Table 8.

**Table 1: Mandatory NRWS Project Bid Requirements**

No.	Requirement	RFP Applicable Section	Bidder's Response	Evaluation of Bidder's Response	Compliant Yes      No
1	Bidder has provided a completed Compliance Matrix, found in Annex D Appendix 1, which illustrates compliance with each mandatory SOW and Specification requirement.	Annex D Appendix 1			
2	Bidder agrees not to introduce new or third party software that would limit the rights of Canada to use the NRWS System, except where this software has been authorized by the Contracting Authority following contract award.	TSOR Section 6.5 , SACC Reference 4003			
3	Bidder has demonstrated they have Proven Experience in a minimum of one project, of similar complexity to this scope of work, managed as the prime contractor, with successful equipment installation in a marine environment in the 10 year period prior to the date of the close of the solicitation period.	SOW Section 4.5			
4	Bidder has demonstrated they have Proven Experience in a minimum of one project, with successful design, development, integration, and implementation of naval fire control solutions in the 5 year period prior to the date of the close of the solicitation period.	SOW Section 4			
5	Bidder has demonstrated they have Proven Experience in a minimum of one project, with successful integration of infra-red cameras, optical cameras, laser range finders, tracking algorithms, and fire control solutions in the 5 year period prior to the date of the close of the solicitation period.	SOW Section 4			

**Table 2: Point-Rated NRWS Project Requirements – Area 1 Bidder Experience**

No.	Requirement	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
1	Number of projects, of similar complexity to this scope of work, managed as the prime contractor, with successful equipment installation in a marine environment in the 10 year period prior to the date of the close of the solicitation period..		0 Points – Proven Experience in 1 project; 3 Points – Proven Experience in 2 to 3 projects; 9 Points – Proven Experience in 4 to 6 projects; or 15 Points – Proven Experience in 7 or more projects.		
2	Number of projects, of similar complexity to this scope of work, managed as the prime contractor, with successful equipment installation in a marine environment for the Canadian Government in the 10 year period prior to the date of the close of the solicitation period..		3 Points – Proven Experience in 1 project; 9 Points – Proven Experience in 2 to 3 projects; or 15 Points – Proven Experience in 4 or more projects.		
3	Number of successful design, development, integration, and installations of naval gun systems in the 20 year period prior to the date of the close of the solicitation period..		0 Points – Proven Experience in completion of 1 installation configuration; 2 Point – Proven Experience in completion of 2 to 3 installation configuration; 6 Points – Proven Experience in completion of 4 to 6 installation configuration; or 10 Points – Proven Experience in completion of 7 or more installation configuration.		Area 1 Total Maximum Available Points: 40 Minimum Allowable Points: 16

Table 3: Point-Rated NRWS Project Requirements - Area 2, SOW Section 3.0, Project Management						
No.	Requirement	SOW Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
<b>3.1 Project Manager</b>						
4	The Contractor shall implement and maintain a team, headed by a single Project Manager (PM), to carry out the work required in this SOW.	3.1.1		3 Points – Resume of PM demonstrates a minimum of 5 years of Proven Experience as the PM in similar projects in the last 10 years; 3 Point – The Bid includes copy of valid Project Management Institute (PMI) Project Management Professional (PMP) certificate for the PM; or 9 Points – Resume of PM meets both rating criteria above.		
<b>3.3 Scope Schedule and Budget Management</b>						
5	The Contractor shall implement the scope of the work specified in this SOW in accordance with the project management processes of the PMP and IMS Authorized by Canada.(Scope evaluation only)	3.3.1		Approach to Scope Management and in scope unforeseen work in providing all deliverables in accordance with SOW requirements.  2 Points – Reasonable; or 6 Points – Exceptional.		
	The Contractor shall implement all Authorized in scope unforeseen work to this SOW in accordance with any corresponding schedule and plan changes Authorized by Canada. (Scope evaluation only)	3.3.2				

**Table 3: Point-Rated NRWS Project Requirements - Area 2, SOW Section 3.0, Project Management**

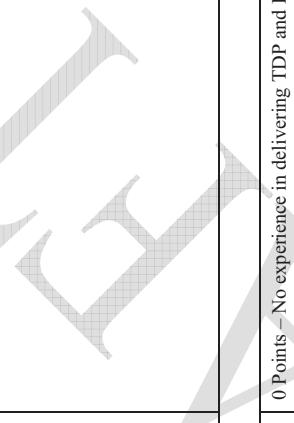
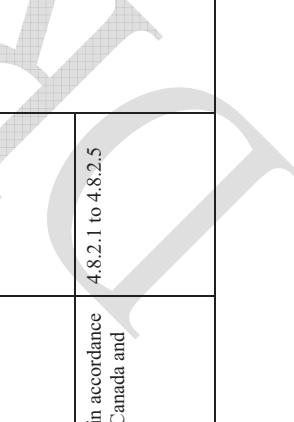
No.	Requirement	SOW Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
6	The Contractor shall implement the scope of the work specified in this SOW in accordance with the project management processes of the PMP and IMS Authorized by Canada. (Schedule evaluation only)	3.3.1		Approach to Schedule Management and Schedule Change Management in providing all required deliverables according to the SOW prerequisites and events.  2 Point – Reasonable; or 6 Points – Exceptional.		
	The Contractor shall implement all Authorized in-scope changes to this SOW in accordance with any corresponding schedule and plan changes Authorized by Canada. (Schedule evaluation only)	3.3.2				
7	The Contractor shall meet all the scheduling requirements of Paragraphs 3.3.5, 3.3.8, and 3.3.9 of the SOW.	3.3.5, 3.3.8, 3.3.9		IMS schedule requirements are addressed, and all activities defined, sequenced, scheduled, and resources assigned to provide deliverables in accordance with the SOW prerequisites and events.  4 Points – Reasonable; or 12 Points – Exceptional.		
<b>3.4 Quality Management</b>						
8	The Contractor shall implement a Quality Management Program in accordance with the PMP of CDRL NRWS-PM-001 for the Work specified in this SOW.	3.4.1		The degree to which the bidder and sub-contractors are certified under ISO 9001-2008.  0 Points – No ISO9001-2008 certification; 5 Points – Bidder is certified under ISO 9001-2008 but not all sub-contractors are certified; or 10 Points – Both bidder and all sub-contractors are certified under ISO 9001-2008.		

Table 3: Point-Rated NRWS Project Requirements - Area 2, SOW Section 3.0, Project Management						
No.	Requirement	SOW Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
<b>3.5 Risk Management</b>						
9	The Contractor shall implement a Risk Management Program in accordance with the PMP of CDRL NRWS-PM-001 for Work specified in this SOW. (Risk Management process evaluation only)	3.5.1		Approach to Risk Management and identifying, prioritizing and mitigating risk.  2 Point – Reasonable; or 6 Points – Exceptional.		
10	The Contractor shall implement a Risk Management Program in accordance with the PMP of CDRL NRWS-PM-001, for all Work specified in this SOW.	3.5.1		The bid demonstrates identification, prioritization and mitigation of risk(s) associated with installation of the NRWS System for HALIFAX Class ships.  3 Point – Reasonable; or 9 Points – Exceptional.		
<b>3.7 Documentation Deliverables</b>						
11	The Contractor shall deliver all documentation to Canada on the SDE in Microsoft Office 2010 or Adobe Portable Document Format.	3.6.1.2		Proven Experience with delivering documentation using a SDE in the 5 year period prior to the date of the close of the solicitation period.  1 Point – Bidder has setup and maintained a SDE in at least 1 project; or 3 Points – Bidder has setup and maintained a SDE in at least 1 project with the Government of Canada.		
						Area 2 Total Maximum Available Points: 61 Minimum Allowable Points: 24

**Table 4: Point-Rated NRWS Project Requirements - Area 3, SOW Section 4.0, System Engineering**

No.	Requirement	SOW Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
<b>4.2 Requirement Management</b>						
12	The Contractor shall prepare and deliver a Verification Cross Reference Matrix in accordance with CDRL NRWS-SE-003, that shall identify for each requirement in the TSOR what verification method(s) will be used by the Contractor to verify compliance of the NRWS System and all associated deliverable material, documents, and services within the TSOR	4.2.6		Bidder provides details on the use of a mature and automated process in Requirements Management in previous projects. Details are to include Requirement Management software used, and how long the process has been used by the Bidder.	0 Points – No information, or maturity of proposed automated processes not demonstrated; 3 Point – Automated process not used, but maturity of the requirement management process is demonstrated, and its compliance with the SOW Section 4.2 is demonstrated; or 6 Points – Automated process used, application in other projects and its compliance with the SOW Section 4.2 is demonstrated.	
<b>4.3 Design Reviews</b>						
13	The Contractor shall convene a PDR with Canada to explain and validate the design of the proposed NRWS System with respect to this SOW  AND  The Contractor shall prepare and deliver a draft PDR Documentation package in accordance with Paragraph 4.3.1.2 of the SOW.	4.3.1.1, 4.3.1.2		Bidder provides copy of valid Capability Maturity Model Integration (CMMI) certification.	0 Points – No demonstration of maturity level processes; 3 Point – Demonstrated use of CMMI-like processes; 6 Points – Certified to maturity level 3 or 4; or 9 Points – Certified to maturity level 5.	

<b>Table 4: Point-Rated NRWS Project Requirements - Area 3, SOW Section 4.0, System Engineering</b>						
No.	Requirement	SOW Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
	The Contractor shall convene a CDR with Canada to explain and validate the design of the proposed NRWS System with respect to this SOW. AND The Contractor shall prepare and deliver a draft CDR Documentation package in accordance with Paragraph 4.3.2.2 of the SOW.	4.3.2.1, 4.3.2.2				
	<b>4.5 Delivery, Installation, and STW</b>					
14	The Contractor shall install each NRWS System in each ship listed in Table 2 in accordance with the Authorized NRWS HFX Class Engineering Change (EC) Specification generated from ECGP of CDRL NRWS-TD-001.	4.5.2.2		The bid demonstrates how the NRWS System will be installed in HALIFAX Class ships, including use of subcontractors, shipyards, and/or other resources.  3 Point – Reasonable; or 9 Points – Exceptional.		
	<b>4.7 Configuration Management</b>					
15	The Contractor shall implement the CM Process to manage the configuration of the NRWS System and associated deliverables in accordance with the Authorized CM Plan.	4.7.1.2		Bidder provides details on the use of a mature and automated process in Configuration Management in previous projects.  Details are to include Configuration Management software used, and how long the process has been used by the Bidder.		
				0 Points – No information, or maturity of proposed automated process not demonstrated; 3 Points – Automated process not used, but maturity of the configuration management process demonstrated, and its compliance with the SOW Section 4.7 is illustrated; or		

<b>Table 4: Point-Rated NRWS Project Requirements - Area 3, SOW Section 4.0, System Engineering</b>						
No.	Requirement	SOW Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
16	The Contractor shall prepare and deliver an ECGP in accordance with CDRL NRWS TD-001 to assist in defining all changes required to HFX Class ships to accommodate the NRWS System.	4.8.1.1	 <p>6 Points – Automated process used, application in other projects and its compliance with the SOW Section 4.7 illustrated.</p>			
<b>4.8 Technical Documentation</b>						
	The Contractor shall prepare and deliver the TDP in accordance with CDRL NRWS TD-002 for Authorization by Canada and with Paragraphs 4.8.2.1 to 4.8.2.5 of the SOW.	4.8.2.1 to 4.8.2.5	 <p>0 Points – No experience in delivering TDP and ECGP demonstrated;</p> <p>8 Points – Proven Experience in delivering TDP and ECGP for at least 2 projects for Government of Canada of similar complexity to the scope of work of the NRWS System in the past 10 years from the date of bid closing; or</p> <p>16 Points – Proven Experience in delivering TDP and ECGP for at least 2 projects for Government of Canada of similar complexity to the scope of work of the NRWS System, of which one project must have been for the Royal Canadian Navy, in the past 10 years from the date of bid closing.</p>			
						Area 3 Total Maximum Available Points: 46 Minimum Allowable Points: 18

**Table 5: Point-Rated NRWS Project Requirements - Area 4, SOW Section 5.0, Integrated Logistic Support**

No.	Requirement	SOW Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
<b>5.2 ILS Planning</b>						
17	The Contractor shall prepare and deliver an ILS Plan in accordance with CDRL NRWS-ILS-001 to define how the ILS requirements of the SOW will be addressed for Authorization by Canada.	5.2.1.1		IUS requirements of the SOW addressed in CDRL NRWS-ILS-001 3 Points – Reasonable; or 6 Points – Exceptional.		
<b>5.2.2 Logistic Support Analysis</b>						
18	The Contractor shall conduct a Logistic Support Analysis (LSA) on the NRWS System in accordance with the ILS Plan.	5.2.2.1		The bid describes how LSA will be performed in accordance with Section 5 of the SOW requirements.  2 Points – Reasonable; or 4 Points – Exceptional.		
<b>5.5 Initial Cadre Training</b>						
19	The Contractor shall conduct two (2) sessions of Operator ICT, one (1) at CFFSE and one(1) at CFNES, based upon the Authorized ICT package, for a minimum of 10 to a maximum of 15 students, at locations designated by Canada.	5.5.4		0 Points – No information provided in bid; 4 Point – Proven Experience in a past project providing remote weapon station training to military operators and maintenance personnel; or 12 Points – Proven Experience in a past project providing remote weapon station training to military operators and maintenance personnel and experience providing training to Canadian Military operators and maintenance personnel.		
	The Contractor shall conduct two (2) session of Maintainer ICT, one (1) on each coast, based upon the Authorized ICT package, for a minimum of 10 to a maximum of 15 students, at locations designated by Canada.	5.5.5				
Area 4 Total Maximum Available Points: 22 Minimum Allowable Points: 9						

**Table 6: Point-Rated NRWS Project Requirements - Area 5, TSOR Requirements**

No.	Requirement	Specification Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
<b>3.2 Surveillance</b>						
20	The Contractor shall provide an NRWS System capable of fulfilling the requirements of surveillance capability defined in Section 3.2 of the TSOR.	3.2			The bid demonstrates how the proposed NRWS System complies with the capabilities and requirements defined in Section 3.2 of the TSOR.  2 Points – Theory; 4 Points – Simulation; or 6 Points – Application.	
21	Each NRWS mount shall be provided with an Electro-Optical (EO) sensor suite that enables surveillance of the threats listed in Table 1 at a range of 2,000 metres.	3.2.1			1 Point – Surveillance Range of all threats increased by at least 1 000 metres beyond the mandatory 2000 metres; or 3 Points – Surveillance Range of all threats increased by at least 2 000 metres beyond the mandatory 2000 metres.	
22	The NRWS TIC shall have a Wide Horizontal Field of View (FOV) of no less than 10 degrees.	3.2.4.3			1 Point – Wide Horizontal FOV greater than 11 but less than 13; or 3 Points – Wide Horizontal FOV of 13 degrees or more.	
23	The NRWS TIC shall have a Narrow Horizontal FOV of no more than 4 degrees.	3.2.4.4			1 Point – Narrow Horizontal FOV ranging from 3 degrees to less than 4 degrees; or 3 Points – Narrow Horizontal FOV ranging from 2 degrees to less than 3 degrees.	

**Table 6: Point-Rated NRWS Project Requirements - Area 5, TSOR Requirements**

No.	Requirement	Specification Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
24	The NRWS low-light camera optical zoom shall perform in the ranges of horizontal FOV of no more than 3 degrees to no less than 40 degrees.	3.2.5.3		1 Point – Optical zoom ranges of horizontal FOV of no more than 2 degrees.		
25	The NRWS low-light camera optical zoom shall perform in the ranges of horizontal FOV of no more than 3 degrees to no less than 40 degrees.	3.2.5.3		1 Point – Optical zoom ranges of horizontal FOV of no less than 45 degrees; or 3 Points – Optical zoom ranges of horizontal FOV of no less than 50 degrees.		
<b>3.3 Acquisition and Tracking</b>						
26	The Contractor shall provide an NRWS System capable of fulfilling the requirements and capabilities defined in Section 3.3 of the TSOR.	3.3		The bid demonstrates how the proposed NRWS System is capable of complying with the capabilities defined in Section 3.3 of the TSOR.  2 Points – Theory 6 Points – Simulation 10 Points – Application		
27	The NRWS System shall acquire and track the threats listed in Table 1 at all ranges from 50 metres or less to 1,000 metres.	3.3.8		3 Points – Tracking Range of all threats increased by at least 500 metres beyond the mandatory 1000 metres; or 5 Points – Tracking Range of all threats increased by at least 1000 metres beyond the mandatory 1000 metres.		
28	The NRWS System shall automatically re-acquire and track dynamic threats, in the event that the threat has been obstructed for up to and including 5 seconds.	3.3.11		The bid demonstrates how the proposed NRWS System re-acquires and tracks dynamic threats, in the event that the threat has been obstructed.  3 Points – Theory; 9 Points – Simulation; or 15 Points – Application.		

**Table 6: Point-Rated NRWS Project Requirements - Area 5, TSOR Requirements**

No.	Requirement	Specification Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
<b>3.4 Fire Control and Engagement</b>						
29	The Contractor shall provide an NRWS System capable of fulfilling the requirements and capabilities defined in Section 3.4 of the TSOR.	3.4			The bid demonstrates how the proposed NRWS System complies with the Fire Control requirements defined in Sections 3.4 of the TSOR. 2 Points – Theory; 6 Points – Simulation; or 10 Points – Application.	
30	The NRWS System shall produce a fire control solution on the threats listed in Table 1 while the threats are manoeuvring at all ranges from 200 metres or less to 1,000 metres.	3.4.2			3 Point – Fire control solution increased by at least 500 metres beyond the mandatory 1000 metres; or 5 Points – Fire control solution increased by at least 1000 metres beyond the mandatory 1000 metres.	
<b>3.5 Weapon Effectiveness</b>						
31	The Contractor shall provide an NRWS System capable of fulfilling the requirements and capabilities defined in Section 3.5 of the TSOR.	3.5			The bid demonstrates how both Pkill and Phit of the proposed NRWS System complies with the weapon effectiveness defined in Sections 3.5 of the TSOR. 2 Points – Theory; 6 Points – Simulation; or 10 Points – Application.	
32	The NRWS System shall achieve a single shot Probability of Hit (Phit) of not less than 0.5 (50%) in accordance with Section 3.5.4 of the TSOR.	3.5.4			The bid demonstrates how a Phit greater than 50% is achieved with the proposed NRWS System. 6 Points – Phit of 60% or more achieved through Application at sea; or 10 Points - Phit of 70% or more achieved through Application at sea.	

**Table 6: Point-Rated NRWS Project Requirements - Area 5, TSOR Requirements**

No.	Requirement	Specification Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
<b>3.6 Power and Stabilisation</b>						
33	The NRWS System shall operate in full compliance with the TSOR for not less than 10 minutes without ships power.	3.6.3		1 Point – Operate for not less than 15 min without ships power; or 3 Points - Operate for not less than 20 min without ships power.		
34	The NRWS System stabilization shall compensate for ship roll, ship pitch and ship yaw in sea conditions up to and including Sea State 5 as defined in the World Meteorological Organization (WMO) code tables.	3.6.5		4 Points – Theory; 12 Points – Simulation; or 20 Points – Application.		
<b>3.9 Operator Console</b>						
35	The Contractor shall provide an NRWS System capable of fulfilling the requirements and capabilities defined in Section 3.9 of the TSOR.	3.9		The bid provides examples of the proposed NRWS System Operator Console which meets the requirements of Section 3.9 of the TSOR.  6 Points – Theory; or 10 Points – Application.		
<b>3.10 Initialization and Built-In Test</b>						
36	The Contractor shall provide an NRWS System capable of fulfilling the requirements and capabilities defined in Section 3.10 of the TSOR.	3.10		The bid demonstrates that the proposed NRWS System complies with the BIT requirements defined in Sections 3.10 of the TSOR.  2 Point – Theory; 4 Points – Simulation; or 6 Points – Application.		

**Table 6: Point-Rated NRWS Project Requirements - Area 5, TSOR Requirements**

No.	Requirement	Specification Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
37	The NRWS System shall initialise from a shutdown state to full functionality in accordance with the TSOR in less than 5 minutes when designated by the Operator.	3.10.1		1 Point – Initialise in less than 3 minutes; or 3 Points – Initialise in less than 1 minute.		
38	The NRWS System shall automatically re-initialise from an abnormal shutdown to full functionality in accordance with the TSOR in less than 8 minutes.	3.10.2		1 Point – Re-initialise in less than 6 minutes; or 3 Points – Re-initialise in less than 4 minutes.		
<b>4. Physical Requirement</b>						
39	The Contractor shall provide an NRWS System capable of fulfilling the requirements and capabilities defined in Section 4 of the TSOR.	4.0		The bid provides details on how the proposed physical installation of the proposed NRWS System meets the requirements of Section 4 of the TSOR.  6 Points – Theory; or 10 Points – Application.		
<b>6. Specialty Engineering Requirements</b>						
40	The Contractor shall provide an NRWS System capable of fulfilling the Availability requirements and capabilities defined in Section 6.2 of the TSOR.	6.2		The bid provides details on how the proposed NRWS System availability requirements are achieved.  1 Point – Theory; 2 Points – Simulation; or 3 Points – Application.		
41	The Contractor shall provide an NRWS System capable of fulfilling the Maintainability requirements and capabilities defined in Section 6.4 of the TSOR.	6.4		The bid provides details on how the proposed NRWS System maintainability requirements are achieved.  2 Points – Theory; 4 Points – Simulation; or 6 Points – Application.		

**Table 6: Point-Rated NRWS Project Requirements - Area 5, TSOR Requirements**

No.	Requirement	Specification Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
42	The Contractor shall provide an NRWS System capable of fulfilling the Software requirements and capabilities defined in Section 6.5 of the TSOR.	6.5		The bid describes the proposed NRWS System software architecture.  1 Point – Theory; 2 Points – Simulation; or 3 Points – Application.		
<b>7. Environmental Requirements</b>						
43	The Contractor shall provide an NRWS System capable of fulfilling the Mechanical Shock requirements and capabilities defined in Section 7.2 of the TSOR.	7.2		The bid provides details on how the proposed NRWS System meets the requirements of Section 7.2 of the TSOR.  1 Point – Theory; 3 Points – Simulation; or 5 Points – Application.		
44	The Contractor shall provide an NRWS System capable of fulfilling the Vibration requirements and capabilities defined in Section 7.3 of the TSOR.	7.3		The bid provides details on how the proposed NRWS System meets the requirements of Section 7.3 of the TSOR.  1 Point – Theory; 3 Points – Simulation; or 5 Points – Application.		
45	The Contractor shall provide an NRWS System capable of fulfilling the ice requirements and capabilities defined in Section 7.8 of the TSOR.	7.8		The bid provides details on how the proposed NRWS System meets the requirements of Section 7.8 of the TSOR.  1 Point – Theory; 3 Points – Simulation; or 5 Points – Application.		

**Table 6: Point-Rated NRWS Project Requirements - Area 5, TSOR Requirements**

No.	Requirement	Specification Requirement Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
46	The Contractor shall provide an NRWS System capable of fulfilling the Corrosion and Salt Fog requirements and capabilities defined in Section 7.9 of the TSOR.	7.9		The bid provides details on how the proposed NRWS System meets the requirements of Section 7.9 of the TSOR.  1 Point – Theory; 3 Points – Simulation; or 5 Points – Application.		
<b>8. Supportability</b>						
47	The NRWS System shall have an operational life expectancy of not less than 1.5 years.	8.1		2 Points – The bid demonstrates how the proposed NRWS System shall have an operational life expectancy of 20 years or more; or 6 Points - The bid demonstrates how the proposed NRWS System shall have an operational life expectancy of 25 years or more.		
48	The NRWS System shall accommodate the facilitation of new technologies, including, but not limited to, the upgrade of individual sensors, without having to replace other components.	8.2		1 Point – Theory; 3 Points – Simulation; or 5 Points – Application.		
Area 5 Total						Maximum Available Points: 182 Minimum Allowable Points: 73

**Table 7: Point-Rated NRWS Project Requirements - Area 6, Embedded Trainer Specification Requirements**

No.	Requirement	Specification Reference	Bidder's Response	Rating Method	Evaluation of Bidder's Response	Points Awarded
<b>3.11 Embedded Trainer</b>						
49	If the NRWS System is equipped with an embedded trainer, it shall meet all the requirements in Section 3.11 and Paragraph 3.7.5 of the TSOR.	3.11, 3.7.5		0 Points - No Embedded Trainer; or 5 Point – Embedded trainer included, meets all requirements specified in Section 3.11 and Paragraph 3.7.5 of the TSOR.		
50	If the NRWS System has an embedded trainer, the NRWS System embedded trainer shall include not less than 5 pre-programmed naval combat scenarios.	3.11.5		0 Points - No Embedded Trainer; or 1 Point – 10 scenarios or more with varying complexity.		
51	If the NRWS System has an embedded trainer, the NRWS System embedded trainer combat scenarios shall vary in level of complexity.	3.11.6		0 Points - No Embedded Trainer; 1 Point – Editable training combat scenarios; or 2 Points – Embedded trainer software is as provided for Computer Based Trainer.		
Area 6 Total					Maximum Available Points: 8 Minimum Allowable Points: 0	

**Table 8: Technical Score Area Summary**

<b>Area No.</b>	<b>Area Percent Score</b>	<b>Weight Scale for Area</b>	<b>Total Weighted Score Awarded</b>	<b>Max Score Possible</b>
1		1.5		150
2		1.5		150
3		1.75		175
4		1		100
5		4		400
6		0.25		25
<b>Total Technical Score for Bid:</b>				1000



**ANNEX D**  
**Appendix 1**  
**Compliance Matrix**  
**Naval Remote Weapon Station System**



## **1. INTRODUCTION**

1.1 This document identifies the procedure by which proposals for the Naval Remote Weapon System (NRWS) will be evaluated by Canada with respect to the mandatory Request For Proposal (RFP) requirements of Annex B Statement of Work (SOW), Annex B, Appendix 3 Technical Statement of Requirements (TSOR), and Annex B, Appendix 5 Computer Based Trainer Specification.

1.1.1 Bidders must complete and submit this Compliance Matrix with their proposals in order to be given consideration in the bid evaluation process.

## **2. MANDATORY REQUIREMENTS**

2.1 All SOW, TSOR and Computer Based Trainer Specification requirements are mandatory. For all requirements itemized in Tables 1,2, and 3 respectively, the Bidder shall indicate whether the proposed solution to the requirement is compliant or non-compliant by placing an ‘X’ in the appropriate ‘Yes’ or ‘No’ cell under the “Compliant” column.

2.2 The Bidder should not place the indications required by Paragraph 2.1 in any cells that are on the same row as SOW, TSOR, and Computer Based Trainer Specification headings, sub-headings, and sub-sub-headings in Tables 1,2, and 3. Where a Bidder has erroneously made an indication in one of the precluded rows, the evaluation team will only consider responses to requirements for which a Compliance Method has been specified by Canada.

2.3 The Bidder shall reference where proof of compliance may be found in their bid, and indicate this reference in the “Bidder’s Response” column of Tables 1, 2, and 3 for each mandatory requirement.

2.4 Tables 1, 2, and 3 each contain columns titled “Compliance Method” that indicates the minimum required for demonstrating compliance with a mandatory requirement. Only the following methods are acceptable for supporting a Bidder’s claim of compliancy for each of the mandatory requirements:

a. Table 1:

- (1) A – Compliance statement to clearly agree that the stated work will be completed;
- (2) B – Provision of details as to how the stated work will be undertaken ;
- (3) W – Provision of identified DID with the bid;

b. Table 2 and 3:

- (1) C – A compliance statement which clearly demonstrates that the solution proposed for NRWS use fully complies with the requirement;
- (2) D – Product specifications, manuals, or other published documentation that demonstrates that the solution proposed for NRWS use fully complies with the requirement;
- (3) E – Analysis predicting the performance of solution(s) proposed for NRWS use, which demonstrates full compliance with the requirement;
- (4) F – Test results or documented performance of existing equipment proposed for NRWS use, which demonstrates full compliance with the requirement.

### **3. POINT-RATED REQUIREMENTS**

- 3.1 In addition to mandatory requirements, bids will be evaluated on a point-rated basis with respect to certain SOW, TSOR, and Computer Based Trainer Specification requirements in accordance with Annex D Bid Evaluation Plan Tables 2-7. In order to be awarded points in accordance with Annex D Bid Evaluation Plan Tables 2-7, information must be indicated in Tables 1, 2, and 3 below, and provided with proposals.

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response		Compliant
		Yes	No	
<b>3.1 Project Manager</b>				
3.1.1 The Contractor shall implement and maintain a team, headed by a single Project Manager (PM), to carry out the Work required in this SOW.	A			
<b>3.2 Project Management Plans</b>				
3.2.1 The Contractor shall prepare, deliver and maintain a Project Management Plan (PMP) in accordance with Contract Data Requirements List (CDRL) NRWS-PM-001 for Authorization by Canada.	A,W			
3.2.2 The Contractor shall prepare, deliver and maintain an Integrated Master Schedule (IMS) in accordance with CDRL NRWS-PM-002 for Authorization by Canada.	A,W			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>3.3 Scope and Schedule Management</b>				
3.3.1 The Contractor shall implement the scope of the Work specified in this SOW in accordance with the project management processes of the PMP and IMS Authorized by Canada.	A,B			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response		Compliant
		Yes	No	
3.3.5 The Contractor shall prepare, deliver and maintain all project deliverables in accordance with:	A			
A. The CDRL and associated Data Item Descriptions (DID); and				
B. Hardware and software deliverables in accordance with the Technical Statement Of Requirements (TSOR).	A			
3.3.7 The Contractor shall use the IMS as a baseline against which project progress shall be controlled and measured, and against which project changes shall be evaluated.				
3.3.8 The Contractor shall address the following schedule requirements for HFX NRWS Systems in project planning:	A,B			
a. Plan long-term schedules for installation and STW as applicable to ships listed in Table 2;	A,B			
b. Plan long-term schedules to accommodate First Article NRWS System installation and STW;	A,B			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response		Compliant Yes      No
		Yes	No	
c. Plan long-term schedules for subsequent shipboard installations and STW assuming that they will be uniformly distributed throughout the year as indicated by Table 2;	A,B			
d. Consult Canada on the second Monday of April of each year to Contract completion to acquire an updated schedule for proposed ship availability;	A			
e. Plan and execute all Contractor activities in ships to accommodate a minimum of one month notice from Canada regarding the final availability dates for each ship;	A			
f. Plan and execute all Contractor activities in ships to accommodate a minimum of one month notice from Canada, for the substitution of any ship listed in Table 2, with any other ship in the same region; and	A			
g. Plan and execute all Contractor activities in Canada's ships in conjunction with existing ship programs.	A			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.3.9 The Contractor shall address the following schedule requirements for JSS NRWS Systems in project planning:	A,B			
a. Plan long-term schedules for delivery in accordance with Table 2	A,B			
b. Consult Canada on the second Monday of April of each year to Contract Completion to acquire an updated schedule for proposed JSS availability; an	A			
c. Deliver each JSS NRWS System no sooner than 60 business days and no later than 40 business days prior to the installation dates specified by Canada on the second Monday of April of each year.	A			
<b>3.4 Quality Management</b>				
3.4.1 The Contractor shall implement a Quality Management Program in accordance with the PMP of CDRRL NRWS-PM-001 for the Work specified in this SOW.	A,B,W			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>3.5 Risk Management</b>				
3.5.1 The Contractor shall implement a Risk Management Program in accordance with the PMP of CDRRL NRWS-PM-001 for all Work specified in this SOW.	A,B,W			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>3.6 Documentation Deliverables</b>				
<b>3.6.1 Shared Data Environment</b>				

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.6.1.1 The Contractor shall implement a web-based Shared Data Environment (SDE) that will enable:  a. Only personnel Authorized by Canada to access the SDE;  b. Canada and the Contractor to store, exchange and share information;  c. Canada and the Contractor to render documents as read-only, and to edit documents via password protection;  d. Canada and the Contractor to amend and add comments to deliverable documentation via password protection;  e. Canada and the Contractor to track all amendments and comments to deliverables, including the identification of individual editor or commenters; and  f. All data in the SDE to be maintained in accordance with Section 4.7.	A,B			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>4.0 SYSTEM ENGINEERING</b>				
<b>4.1 General</b>				
4.1.2 The Contractor shall prepare and deliver a System Engineering Management Plan in accordance with CDRRL NRWS-SE-001.	A,W			
4.1.3 The Contractor shall conduct system engineering in accordance with the System Engineering Management Plan and the requirements of this SOW.	A,B			
4.1.4 The Contractor shall conduct system engineering to ensure that all proper approvals for International Trade in Arms Regulations (ITAR) are obtained for the NRWS System and all associated deliverables.	A			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response		Compliant
		Yes	No	
<b>4.2 Requirement Management</b>				
4.2.4 The Contractor shall prepare and deliver a final System Specification in accordance with CDRL NRWS-SE-002 that will become the Functional Baseline when Authorized by Canada.	A			
4.2.5 The Contractor shall design the NRWS System following Authorization of the System Specification and SRR Minutes by Canada, and in accordance with all other Event Prerequisites of Table 1.	A,B			
4.2.6 The Contractor shall prepare and deliver a Verification Cross Reference Matrix in accordance with CDRL NRWS-SE-003, that shall identify for each requirement in the TSOR what verification method(s) will be used by the Contractor to verify compliance of the NRWS System and all associated deliverable material, documents, and services with the TSOR.	A			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response		Compliant
		Yes	No	
<b>4.4 Safety Management</b>				
4.4.1 The Contractor shall prepare, deliver, and maintain a Safety Control Plan in accordance with CDRL NRWS-SE-006.	A			
<b>4.5 Delivery, Installation, and STW</b>				
<b>4.5.1 HFX Class NRWS System Delivery</b>				
4.5.1.1 The Contractor shall deliver each NRWS System to the locations specified in Table 2, in accordance with the IMS.	A			
4.5.1.2 The Contractor shall store each NRWS System until each component is installed.	A			
<b>4.5.2 HAL Class NRWS System Installation</b>				
4.5.2.1 The Contractor's ECGP prepared in accordance with Section 4.8.1 shall include the installation requirements listed in this section.	A			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
4.5.2.2 The Contractor shall install each NRWS System in each ship listed in Table 2 in accordance with the Authorized NRWS HFX Class Engineering Change (EC) Specification generated from ECGP of CDRL NRWS-TD-001.	A,B			
4.5.2.3 The Contractor shall install four NRWS mounts at the locations described in Table 3.	A,B			
4.5.2.4 The Contractor shall install four NRWS operator consoles in the locations outlined in Table 3.	A,B			
4.5.2.5 The Contractor's installation of each NRWS System shall not cause any physical interference with existing ships weapons and sensors.	A,B			
4.5.2.6 The Contractor's installation of each NRWS System shall not cause any operational interference with existing ships weapons and sensors.	A,B			
4.5.2.7 The Contractor's installation of each NRWS System shall not cause any interference with flight operations.	A,B			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>4.6 Acceptance Process</b>				
<b>4.6.1 System Acceptance</b>				
4.6.1.1 The Contractor shall provide Objective Evidence (OE) of NRWS System and associated deliverable compliance with all requirements of this SOW for Acceptance by Canada via the Acceptance Program in accordance with CDRL NRWS-SE-009.	A,W			
<b>4.6.2 Test and Evaluation Master Plan</b>				
4.6.2.1 The Contractor shall prepare, deliver, and maintain a TEMP in accordance with CDRL NRWS-SE-009 for Authorization by Canada, to define the entire process by which compliance of the proposed NRWS System and associated deliverables will be demonstrated with respect to this SOW.	A,W			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response		Compliant
		Yes	No	
<b>4.7 Configuration Management</b>				
<b>4.7.1 General</b>				
4.7.1.1 The Contractor shall prepare, deliver for Authorization and maintain a Configuration Management (CM) Plan in accordance with CDRL NRWS-CM-001.	A,W			
4.7.1.2 The Contractor shall implement the CM Process to manage the configuration of the NRWS System and associated deliverables in accordance with the Authorized CM Plan.	A,B			
<b>4.7.3 Configuration Audits</b>				
4.7.3.1 The Contractor shall support Canada as required in conducting Functional Audit and PCA following Acceptance of the FAT Test Reports for each First Article NRWS System configuration variant.	A,B			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>4.8 Technical Documentation</b>				
<b>4.8.1 Engineering Change Guidance Package</b>				
4.8.1.1 The Contractor shall prepare and deliver an ECGP in accordance with CDRL NRWS-TD-001 to assist in defining all changes required to HFX Class ships to accommodate the NRWS System.	A,B			
4.8.1.2 The Contractor shall prepare the ECGP based on the Hull and Cabling information outlined in the Installation Guidance Package found in Annex B, Appendix 4.	A			
4.8.1.6 The Contractor shall conduct an on-site survey of each HAL Class vessel using the NRWS HAL Class EC Specification.	A,B			
4.8.1.8 If configuration deviations are identified during the on-site survey, that will impact the NRWS System installation, the Contractor shall particularize the NRWS HFX Class EC Specification, for the surveyed HFX Class ship and deliver it to Canada for Authorization.	A			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response		Compliant
		Yes	No	
<b>5.0 INTEGRATED LOGISTIC SUPPORT</b>				
<b>5.1 General</b>				
5.1.2 The Contractor shall undertake all ILS that may be required to implement and maintain each NRWS and its associated deliverables until final Acceptance of each NRWS deliverable by Canada.	A,B			
5.1.3 The Contractor shall conduct NRWS ILS to ensure that all implemented NRWS System and all associated deliverables are not subject to ITAR.	A			
<b>5.2 Integrated Logistic Support Planning</b>				
<b>5.2.1 Logistic Support Planning</b>				
5.2.1.1 The Contractor shall prepare and deliver an ILS Plan in accordance with CDRL NRWS-ILS-001 to define how the ILS requirements of this SOW will be addressed for Authorization by Canada.	A,W			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response		Compliant
		Yes	No	
<b>5.2.2 Logistic Support Analysis</b>				
5.2.2.1 The Contractor shall conduct a Logistic Support Analysis (LSA) on the NRWS System in accordance with the ILS Plan.	A,B			
<b>5.3 Initial Provisioning</b>				
<b>5.3.1 Sparing</b>				
5.3.1.1 The Contractor shall provide quantities of initial Level 1 and 2 spares as follows:	A			
a. To support each NRWS System that will be implemented in the units itemized in Table 2;				
b. To support each in-service NRWS System for the first two (2) years of operation;				
5.3.1.2 The Contractor shall deliver each set of Level 1 spares and Special Tools and Test Equipment prior to each NRWS System STW.	A			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
5.3.1.3 The Contractor shall deliver all Level 2 spares and Special Tools and Test Equipment prior to First Article SAT.	A			
<b>5.3.2 Long Lead Time Initial Provisioning Conference</b>				
5.3.2.4 The Contractor shall define the proposed LLTIP processes and each materiel item at the LLTIP Conference in accordance with the LLTIP Conference Documentation Package of Paragraph 5.3.2.3.	A,B			
<b>5.3.3 Initial Provisioning Conference</b>				
5.3.3.3 The Contractor shall define the proposed NRWS IP processes and each materiel item at the IP Conference in accordance with the IP Conference Documentation Package of Paragraph 5.3.3.2.	A,B			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>5.4 Training Development Program</b>				
5.4.1 The Contractor shall create a Training Development Program that addresses each of the requirements specified in this SOW and is consistent with the Canadian Forces Individual Training and Education System (CFITES) principles.	A,B			
5.4.2 The Contractor shall consult Canada for information on occupations, positions, training and work environments that will be affected by the acquisition of the NRWS System.	A			
5.4.3 The Contractor shall create a Task List for operators and maintainers, identifying operator and maintenance tasks for system, sub-system, and integrated system.	A,B			
5.4.4 The Contractor shall identify Performance Objectives for each Task List created.	A,B			
5.4.5 The Contractor shall create Enabling Objectives to address the new skills and knowledge required for the Training Development Program.	A,B			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
5.4.6 The Contractor shall create a summary of the recommended training materials, aids, and equipment required for the Training Development Program.	A,B			
<b>5.5 Initial Cadre Training</b>				
5.5.1 The Contractor shall prepare and deliver an Operator ICT Package in accordance with CDRL NRWS-ILS-006 that addresses each NRWS System configuration variant, based upon the Authorized Training Development Program Report.	A			
5.5.2 The Contractor shall prepare and deliver a Maintainer ICT Package in accordance with CDRL NRWS-ILS-006 that addresses each NRWS System configuration variant, based upon the Authorized Training Development Program Report.	A			
5.5.3 The Contractor shall structure Operator and Maintainer training around the conventional, classroom, instructor-led format, with provision for "hands-on" time with an NRWS System to exercise the required Operator and Maintainer skills.	A,B			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
5.5.4 The Contractor shall conduct two (2) sessions of Operator ICT, one (1) at CFFSE and one (1) at CFNES, based upon the Authorized ICT package, for a minimum of 10 to a maximum of 15 students, at locations designated by Canada.	A			
5.5.5 The Contractor shall conduct two (2) sessions of Maintainer ICT, one (1) on each coast, based upon the Authorized ICT package, for a minimum of 10 to a maximum of 15 students, at locations designated by Canada.	A			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response		Compliant
		Yes	No	
<b>5.6 Manuals</b>				
5.6.1 The Contractor shall prepare, and deliver the following manuals:	A			
		a. Installation and Set-To-Work Manual in accordance with CDRL NRWS-TD-003;		
		b. System User Manual in accordance with CDRL NRWS-TD-004;		
		c. Illustrated Parts Breakdown in accordance with CDRL NRWS-TD-005; and		
		d. Maintenance Manual in accordance with CDRL NRWS-TD-006.		
<b>5.7 Computer Based Trainers</b>				
5.7.1 The Contractor shall supply Computer Based Trainers to train the NRWS Operators on how to use the NRWS System.	A,B			

**Table 1 – Mandatory NRWS Project SOW Requirements**

SOW Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
5.7.2 The Contractor shall meet all requirements contained in the Computer Based Trainer Specification found in Annex B, Appendix 5.	A,B			
5.7.3 The Contractor shall deliver Computer Based Trainers to CFFSE.	A			
5.7.4 The Contractor shall deliver Computer Based Trainers to CFNES.	A			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>3. PERFORMANCE REQUIREMENTS</b>				
<b>3.1 Threats</b>				
3.1.1 The NRWS System shall defend against the threats listed in Table 1.	C			
3.1.2 The NRWS System shall perform at a minimum:	C			
a. surveillance, day or night, of the threats listed in Table 1 at a range of 2,000 metres;	C			
b. acquisition, automatic tracking and manual tracking, day or night, of the threats listed in Table 1 at a range of 2,000 metres;	C			
c. identification, day or night, of the threats listed in Table 1 at a range of 1,800 metres;	C			
d. computing a fire control solution, day or night, on the threats listed in Table 1 at a range of 1,000 metres;	C			
e. engagement of the threat, day or night, at a range of 600 metres; and	C			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
f. observation of the effectiveness of the engagement and to observe the fall of shot, day or night.	C			
<b>3.2 Surveillance</b>				
3.2.1 Each NRWS mount shall be provided with an Electro-Optical (EO) sensor suite that enables surveillance of the threats listed in Table 1 at a range of 2,000 metres.	C, and D or E or F			
3.2.2 The NRWS EO sensor suite shall enable the Operator to conduct threat battle damage assessment following an engagement on a 2 metre x 1 metre surface target at a range of 1,000 metres.	C,D			
3.2.3 The NRWS EO sensor suite shall enable the Operator to conduct fall of shot observation at a range of 1,000 metres.	C,D			
3.2.4 The NRWS EO sensor suite shall include a Thermal Imaging Camera (TIC).	C,D			
3.2.4.1 The NRWS TIC shall be located on the NRWS Mount.	C			
3.2.4.2 The NRWS TIC shall have a variable field of view.	C,D			
3.2.4.3 The NRWS TIC shall have a Wide Horizontal Field of View (FOV) of no less than 10 degrees.	C,D			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response		Compliant	
		Yes	No	Yes	No
3.2.4.4 The NRWS TIC shall have a Narrow Horizontal FOV of no more than 4 degrees.	C,D				
3.2.5 The NRWS EO sensor suite shall include a low-light camera.	C,D				
3.2.5.1 The NRWS low-light camera shall be located on NRWS Mount.	C				
3.2.5.2 The NRWS low-light camera shall have a variable optical zoom.	C,D				
3.2.5.3 The NRWS low-light camera optical zoom shall perform in the ranges of horizontal FOV of no more than 3 degrees to no less than 40 degrees.	C,D				
3.2.5.4 The NRWS low-light camera shall have a colour mode.	C,D				
3.2.5.5 The NRWS low-light camera shall have a black and white mode.	C,D				
3.2.6 The NRWS EO sensor suite shall include a Class 1 laser range finder (LRF).	C,D				
3.2.6.1 The NRWS LRF shall measure range of the threats listed in Table 1 at 2,000 metres.	C, and D or E or F				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.2.6.2 The NRWS LRF shall measure range with an accuracy of +/-3 metres against the threats listed in Table 1 when the threats are in the range of 200 metres to 1,000 metres.	C, and D or E or F			
<b>3.3 Acquisition and Tracking</b>				
3.3.1 The NRWS System shall be a real-time system such that the response to a selected function must be at such a rate that there is no delay discernible by the Operator.	C			
3.3.2 The NRWS System shall have mount velocities and accelerations, in order to track the threats listed in Table 1 on closing, crossing, and manoeuvring courses at ranges of no more than 50 metres.	C,D			
3.3.3 The NRWS System shall enable the Operator to select a threat for automatic tracking.	C,D			
3.3.4 The NRWS System shall automatically acquire and track the threat that has been designated by the Operator in day conditions.	C,D			
3.3.5 The NRWS System shall automatically acquire and track the threat that has been designated by the Operator in night conditions.	C,D			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.3.6      The NRWS System shall enable the Operator to manually acquire and track threats.	C,D			
3.3.7      The NRWS System shall stabilize the aiming of the weapon when the Operator is manually tracking threats.	C			
3.3.8      The NRWS System shall acquire and track the threats listed in Table 1 at all ranges from 50 metres or less to 1,000 metres.	C, and E or F			
3.3.9      The NRWS System shall acquire and track the targets listed in Table 2.	C			
3.3.10     The NRWS System shall automatically re-acquire and track stationary threats, in the event that the threat has been obstructed for up to and including 5 seconds.	C, and E or F			
3.3.11     The NRWS System shall automatically re-acquire and track dynamic threats, in the event that the threat has been obstructed for up to and including 5 seconds.	C, and E or F			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>3.4 Fire Control and Engagement</b>				
3.4.1 The NRWS System shall produce a fire control solution on the threats listed in Table 1 while the threats are stationary at all ranges from 200 metres or less to 1,000 metres.	C, and D,E or F			
3.4.2 The NRWS System shall produce a fire control solution on the threats listed in Table 1 while the threats are manoeuvring at all ranges from 200 metres or less to 1,000 metres.	C, and D,E or F			
3.4.3 The NRWS System shall produce a fire control solution on the targets listed in Table 2 while the targets are stationary at all ranges from 200 metres or less to 1,000 metres.	C, and D,E or F			
3.4.4 The NRWS System shall produce a fire control solution on the targets listed in Table 2 while the targets are manoeuvring at all ranges from 200 metres or less to 1,000 metres.	C, and D,E or F			
3.4.5 The NRWS System shall, when provided with a surface threat range and surface threat bearing anywhere within its weapon arc, produce a fire control solution within 16 seconds or less on threats listed in Table 1.	C, and D,E or F			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.4.9 The NRWS System warning shot offset shall be adjustable by the Operator.	C,D			
3.4.12 The NRWS Operator Console shall enable the Operator to manually train and elevate the weapon without stabilization.	C,D			
3.4.13 The NRWS Operator Console shall enable the Operator to manually train and elevate the weapon with stabilization.	C,D			
3.4.15 The NRWS System shall enable the Operator to override remote functions for full local operation of the gun.	C			
3.4.16 The NRWS System shall conduct non-disabling and disabling fire against the targets in Table 2 up to a range of 1,000 metres when designated by the Operator.	C			
3.4.17 The NRWS System shall engage the threats listed in Table 1 up to a range of 600 metres when designated by the Operator.	C			
<b>3.5 Weapon Effectiveness</b>				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response		Compliant	
		Yes	No	Yes	No
3.5.1 The NRWS System shall achieve a cumulative Probability of Kill ( $P_k$ ) against a surface target of not less than 0.9 (90%) within 16 seconds or less of obtaining a fire control solution where:	C, and E or F				
a. the $P_k$ given a hit is equal to 0.3 (30%);	C, and E or F				
b. the target presents a vulnerable area of 2 square metres;	C, and E or F				
c. the surface target is closing the NRWS Mount at a speed through the water of 25 metres per second while conducting a continuous narrow weave;	C, and E or F				
d. not more than 50 rounds are expended;	C, and E or F				
e. the engagement starts at 600 metres; and	C, and E or F				
f. the FN M2 0.50 Calibre HMG is mounted.	C, and E or F				
3.5.2 The NRWS System shall achieve a cumulative $P_k$ against an air target of not less than 0.9 (90%) within 16 seconds or less of obtaining a fire control solution where:	C, and E or F				
a. the $P_k$ given a hit is equal to 0.3 (30%);	C, and E or F				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response		Compliant	
		Yes	No	Yes	No
b. the target presents a vulnerable area of 2 square metres;	C, and E or F				
c. the airborne target is closing the NRWS Mount at an airspeed of 64 metres per second, without evasive manoeuvres;	C, and E or F				
d. not more than 100 rounds are expended;	C, and E or F				
e. the engagement starts at 600 metres; and	C, and E or F				
f. the FN M2 0.50 Calibre HMG is mounted.	C, and E or F				
3.5.3 The NRWS System shall achieve a single shot Probability of Hit (Phit) of not less than 0.5 (50%) where:	C, and E or F				
a. the target is a rectangle measuring 1 metre horizontally and 1.5 metres vertically;	C, and E or F				
b. the target is perpendicular to the line of fire;	C, and E or F				
c. the target is at a constant range of 450 to 550 metres;	C, and E or F				
d. the salvo size is 1;	C, and E or F				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response		Compliant	
		Yes	No	Yes	No
e. the sample size is not less than 100 rounds;	C, and E or F				
f. Phit is defined as the number of hits divided by the number of rounds fired;	C, and E or F				
g. rounds fired for alignment/calibration are not scored or counted in the sample; and	C, and E or F				
h. the FN M2 0.50 Calibre HMG is mounted.	C, and E or F				
3.5.4 The NRWS System shall achieve the cumulative Pk requirement by a successful kill where:	C, and E or F				
a. the target is a Hammerhead Uninhabited Surface Vessel (Target) (USV (T)) or equivalent;	C, and E or F				
b. the target is closing the NRWS Mount at its maximum speed through the water or 25 metres per second, whichever is less;	C, and E or F				
c. the target is conducting a continuous narrow weave;	C, and E or F				
d. not more than 50 rounds are expended;	C, and E or F				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
e. the engagement ceases not more than 16 seconds after firing is started or when the target closes to 200 metres of the NRWS Mount, whichever is earlier;	C, and E or F			
f. a kill is scored if:	C, and E or F			
		(1) the USV (T) is rendered inoperable by hits on the fuel, propulsion or control systems;		
		(2) the USV (T) is rendered incapable of manoeuvre due to hits on the hull or steering system;		
		(3) the USV (T) burns; or		
		(4) it can be demonstrated that 3 or more rounds penetrated the hull of the USV (T) forward of the engine and exited the hull or transom aft of the engine (crew/payload kill).		

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>3.6 Power and Stabilization</b>				
3.6.3 The NRWS System shall operate in full compliance with this TSOR for not less than 10 minutes without ships power.	C			
3.6.4 The NRWS mount shall be capable of being aimed locally, by physically removing or overriding any drive system and manually firing the weapon.	C, D			
3.6.5 The NRWS System stabilization shall compensate for ship roll, ship pitch and ship yaw in sea conditions up to and including Sea State 5 as defined in the World Meteorological Organization (WMO) code Tables.	C, D			
3.6.6 The NRWS System stabilization shall assist in achieving the probability of hit and kill requirements as described in this TSOR.	C, and E or F			
<b>3.7 Weapon Aiming and Firing Limitation</b>				
3.7.1 Each NRWS mount shall incorporate two (2) firing veto switches.	C,D			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.7.2 Each NRWS mount shall incorporate a firing enable key.	C,D			
3.7.3 Each NRWS mount shall have a readily accessible manual override function located on the NRWS mount.	C,D			
3.7.4 The NRWS System shall have safety interlocks that will disable weapon laying and firing functions in the event that the NRWS mount has not been prepared in a manner necessary to conduct safe firing operations.	C,D			
3.7.5 If the NRWS System has an embedded trainer, the NRWS System embedded trainer shall incorporate software and hardware inhibits to prevent operation of the NRWS mounted weapon.	C,D			
3.7.6 The NRWS System shall have adjustable mechanical firing cut-outs to ensure the weapon cannot be elevated/depressed/trained into the ships contour.	C,D			
3.7.7 The NRWS System shall have adjustable firing cut-outs in software to ensure the weapon cannot be fired within a distance of the ships silhouette (2.5 calibres (32 millimetres) from ship's hard obstructions and more for antennas).	C,D			
<b>3.8 Ammunition Handling</b>				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.8.1 The NRWS mount ammunition box shall accommodate not less than 200 rounds of linked 12.7 millimetre ammunition when FN M2 0.50 Calibre HMG is mounted and not less than 400 rounds of linked 7.62 millimetre ammunition when C6 machine gun is mounted.	C,D			
3.8.2 The NRWS mount shall divert all casings, rounds and links ejected from the weapon to not less than one container of equal or greater size than the ammunition box.	C,D			
3.8.3 The NRWS mount ammunition box shall be located on the NRWS mount, without requiring access below deck.	C,D			
<b>3.9 Operator Console</b>				
3.9.6 The NRWS Operator Console shall incorporate a selector switch to allow operation of any available NRWS mount as designated by the Operator.	C			
3.9.7 The NRWS Operator Console shall only control the NRWS mount that has been selected by the selector switch.	C			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.9.8 The NRWS Operator Console shall comply with MIL-STD-1472G section 5.10.3.2, section 5.10.3.4.4, section 5.10.3.7 and section 5.10.4.	C,D			
3.9.9 The NRWS Operator Console shall incorporate an Operator chair.	C,D			
3.9.9.1 The NRWS Operator chair shall comply with MIL-STD-1472G section 5.10.3.2.4.	C,D			
3.9.9.2 The NRWS Operator chair shall accommodate both male and female Operators whose seated body dimensions span between the 5 <sup>th</sup> percentile to the 95 <sup>th</sup> percentile for seated body dimensions as described in the MIL-STD-1742G, Appendix B, Table B-IV.	C,D			
3.9.9.4 The NRWS Operator chair shall have a lap belt to secure the Operator for safe control of the NRWS under conditions up to and including Sea State 5 as defined in the WMO code Tables.	C			
3.9.10 The NRWS Operator Console shall have an operator display.	C,D			
3.9.10.1 The NRWS Operator display shall have a display resolution of not less than 1280 x 1024 pixels.	C			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.9.10.14 The NRWS Operator display shall provide an exact replication of what is being displayed on the operator display to an output source for viewing from a remote monitor.	C			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
3.9.11 The NRWS System Operator Console shall incorporate operator controls.	C,D			
3.9.12 The NRWS System shall have an event recorder.	C,D			
<b>3.10 Initialization and Built-In Test</b>				
3.10.1 The NRWS shall initialise from a shutdown state to full functionality in accordance with this TSOR in less than 5 minutes when designated by the Operator.	C, and D or F			
3.10.2 The NRWS shall automatically re-initialise from an abnormal shutdown to full functionality in accordance with this TSOR in less than 8 minutes.	C, and D or F			
3.10.3 The NRWS shall perform a controlled shut down when designated by the Operator.	C,D			
3.10.4 The NRWS System shall gracefully degrade in the event of a critical failure.	C,D			
3.10.5 The NRWS System Built-In Test (BIT) shall automatically detect faults.	C,D			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>3.11 Embedded Trainer</b>				
3.11.1 If the NRWS System has an embedded trainer, when the NRWS System embedded trainer is active, the NRWS System shall display this mode on the NRWS Operator display.	C,D *if Embedded Trainer Included			
3.11.2 If the NRWS System has an embedded trainer, when the NRWS System embedded trainer is active, the NRWS System shall simulate the firing of the mounted weapon.	C,D *if Embedded Trainer Included			
3.11.3 If the NRWS System has an embedded trainer, the NRWS System embedded trainer shall simulate the firing of NRWS without ammunition being present on the mount.	C,D *if Embedded Trainer Included			
3.11.4 If the NRWS System has an embedded trainer, the NRWS System embedded trainer shall simulate the firing of NRWS without a weapon being present on the mount.	C,D *if Embedded Trainer Included			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response		Compliant	
		Yes	No	Yes	No
3.11.5 If the NRWS System has an embedded trainer, the NRWS System embedded trainer shall include not less than 5 pre-programmed naval combat scenarios.	C,D *if Embedded Trainer Included				
3.11.6 If the NRWS System has an embedded trainer, the NRWS System embedded trainer combat scenarios shall vary in level of complexity.	C,D *if Embedded Trainer Included				
3.11.7 If the NRWS System has an embedded trainer, the NRWS System embedded trainer shall include a control to exit the embedded trainer in not more than two Operator actions.	C,D *if Embedded Trainer Included				
<b>4. PHYSICAL REQUIREMENTS</b>					
<b>4.1 Equipment</b>					
4.1.2 The NRWS System shall provide a means to mount one of the FN M2 0.50 Calibre HMG or 7.62 millimetre C6 machine gun.	C,D				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
4.1.3 The NRWS System shall provide a means to mount the FN M2 0.50 Calibre HMG and 7.62 millimetre C6 machine gun without modification to the current configuration of these weapons held by Canada.	C,D			
4.1.4 The NRWS System shall have a cover to protect functional components of the mounted weapon.	C,D			
4.1.6 The NRWS System shall have a means to align the EO sensor suite and the mounted weapon to a common reference point on the ship.	C,D			
4.1.7 The NRWS System shall have a means to align the EO sensor suite and the mounted weapon to a common reference point at the maximum effective range of the NRWS System.	C,D			
4.1.8 The NRWS EO sensor suite shall incorporate an Operator controlled mechanical wash system to clean any debris impeding functionality of the EO sensor suite optics.	C,D			
4.1.9 The NRWS EO sensor suite shall incorporate an Operator controlled de-icing system to melt any ice accumulation impeding functionality of the EO sensor suite.	C,D			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
<b>4.2 Equipment Configuration</b>				
4.2.1 The NRWS System shall have a continuous 360 degree arc of coverage around the ship.	C, and E or F			
4.2.2 Each NRWS mount arc of coverage shall overlap the arc of coverage of adjacent NRWS mounts when unobstructed by the ship's structure..	C, and E or F			
4.2.3 If design considerations preclude overlapping arcs of coverage directly ahead, the NRWS mounts shall be positioned to have a continuous arc of coverage from directly ahead to at least 45 degrees abaft of the beam.	C, and E or F			
4.2.4 If design considerations preclude overlapping arcs of coverage directly astern, the NRWS mounts shall be positioned to have a continuous arc of coverage from directly astern to at least 45 degrees forward of the beam.	C, and E or F			
4.2.5 The NRWS System shall engage the surface threats listed in Table 1 at a minimum range of no more than 50 metres, even when factoring in ship motion.	C,D			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response		Compliant	
		Yes	No	Yes	No
4.2.6 The NRWS System shall engage the air threats listed in Table 1 at a minimum range of no more than 100 metres with an altitude of 60 metres, regardless of ship motion.	C,D				
<b>5. INTERFACE REQUIREMENTS</b>					
<b>5.1 Mechanical Interface Requirements</b>					
5.1.1 The NRWS System equipment shall incorporate the Contractor supplied seats, retention devices, and fasteners in order to mount them to corresponding seats on ship's structure.	C,D				
5.1.2 The NRWS System shall provide all required mechanical interfaces to existing shipboard systems such as cooling water, conditioned air, compressed air, and condensate drains that may be necessary for full operational capability.	C,D				
<b>6. SPECIALTY ENGINEERING REQUIREMENTS</b>					
<b>6.2 Availability</b>					

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
6.2.1 The NRWS System shall have no less than 98% availability, 24 hours a day, seven days a week, throughout a deployed period of no less than 90 days.	C, and D, E or F			
6.2.2 The NRWS System shall be available for no less than 250 days per calendar year.	C, and D, E or F			
<b>6.3 Survivability</b>				
6.3.1 The NRWS System shall withstand exposure to conditions up to and including Sea State 6 as defined in the WMO code tables.	C, and D, E, or F			
<b>6.4 Maintainability</b>				
6.4.1 The NRWS System preventative maintenance shall be less than 30 minutes in total in a 24 hour period.	C, and E or F			
6.4.2 The NRWS System mean time to repair shall be less than 1 hour for corrective maintenance repair functions.	C, and E or F			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
6.4.3 The NRWS System mean time to repair shall be less than 1 hour for corrective maintenance repair functions which includes combined diagnostic and LRU replacement time but does not include time associated with provisioning the LRU.	C, and E or F			
6.4.4 The NRWS System shall enable an Operator to install the NRWS mountable weapons while standing on the deck beside the NRWS mount or on inboard platforms that are provided with the NRWS System.	C, D			
6.4.5 The NRWS System shall enable an Operator to load the NRWS mounted weapon with ammunition while standing on the deck beside the NRWS mount or on inboard platforms that are provided with the NRWS System.	C, D			
6.4.6 The NRWS System shall enable an Operator to empty the spent cartridges/casings/links container(s) while standing on the deck beside the NRWS mount or on inboard platforms that are provided with the NRWS System.	C,D			
6.4.7 The NRWS System shall enable an Operator to clear ammunition jams while standing on the deck beside the NRWS mount or on inboard platforms that are provided with the NRWS System.	C,D			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
6.4.8 The NRWS System shall enable a maintainer to change gun barrels while standing on the deck beside the NRWS mount or on inboard platforms that are provided with the NRWS System.	C,D			
<b>6.5 Software</b>				
6.5.1 The NRWS System shall use military off-the-shelf software which has been modified to meet the requirements in this TSOR.	C			
<b>7. ENVIRONMENTAL REQUIREMENTS</b>				
<b>7.1 Ship's Motion and Sea State</b>				
7.1.1 The NRWS System shall operate in accordance with this TSOR while the ship has a permanent list within the range of -20 to +20 degrees.	C, and D,E or F			
7.1.2 The NRWS System shall operate in accordance with this TSOR while the ship has a permanent trim of 5 degrees.	C, and D, E or F			
7.1.3 The NRWS System shall operate in accordance with this TSOR while the ship is rolling within the range of -40 to +40 degrees.	C, and D, E or F			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
7.1.4 The NRWS System above deck equipment shall operate in accordance with this TSOR when immersed in a mean green water load of 42 kilopascals.	C, and D,E or F			
7.1.5 The NRWS System shall perform in accordance with this TSOR in conditions up to and including Sea State 5 as defined in the WMO code tables.	C, and D,E or F			
<b>7.2 Mechanical Shock</b>				
7.2.1 The NRWS System equipment enclosures, mounts, and retention devices shall prevent equipment deflection that could be hazardous to personnel or other shipboard equipment under exposure to shock conditions specified in D-03-003-007/SF-000 Grade 1 Type A, Section 6.	C,D			
7.2.2 The NRWS System equipment shall have restraints fitted that preclude equipment from becoming projectiles; remain fully intact, and in their normal operational positions, under exposure to shock conditions specified in D-03-003-007/SF-000 Grade 1 Type A, Section 6.	C,D			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response		Compliant	
		Yes	No	Yes	No
7.2.3 The NRWS System equipment shall operate in accordance with this TSOR following exposure to shock conditions specified in D-03-003-007/SF-000 Grade 1 Type A, Section 6.	C,D				
<b>7.3 Vibration</b>					
7.3.1 The NRWS System equipment enclosures, mounts, and retention devices shall remain fully intact, and in their normal operational positions, when excited by Type 1 environmental vibration levels up to and including 33Hz as specified in MIL-STD-167-1A.	C,D				
7.3.2 The NRWS System equipment shall operate in accordance with this TSOR when excited by Type 1 environmental vibration levels up to and including 33Hz as specified in MIL-STD-167-1A.	C,D				
<b>7.4 Electromagnetic Effects</b>					
7.4.1 The NRWS System shall operate in accordance with this TSOR when subjected to the ship board electromagnetic environments specified by MIL-STD-461F, Section 5, requirements CE101, CE102, RE101, and RE102.	C,D				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
7.4.2 The NRWS System shall not generate an electromagnetic environment that exceeds the standards described in MIL-STD-461F, Section 5, requirements CS101, CS114, CS116, RS101, and RS103.	C,D			
<b>7.5 Temperature, Humidity, and Solar Radiation</b>				
7.5.1 The NRWS System equipment not exposed to the weather shall operate in accordance with this TSOR in temperatures ranging from 0 to 40 degrees Celsius.	C, and D or F			
7.5.2 The NRWS System equipment exposed to the weather shall operate in accordance with this TSOR in temperatures ranging from -32 to 40 degrees Celsius.	C, and D or F			
7.5.3 The NRWS System equipment shall withstand the storage and transit conditions specified for Categories M1, M2, and M3 of STANAG 2895.	C,D			
7.5.4 The NRWS System equipment shall operate in accordance with this TSOR in 95% humidity condensing environment.	C, and D or F			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
7.5.5 The NRWS System equipment exposed to the weather shall operate in accordance with this TSOR when exposed to the solar environment described in MIL-STD-810F, method 505 Procedure II.	C,D			
<b>7.6 Wind</b>				
7.6.1 The NRWS System equipment exposed to the weather shall operate in accordance with this TSOR under the sustained winds, plus gusts as described in STANAG 2895 Table 26.	C,D			
<b>7.7 Rainfall, Dust, and Spray</b>				
7.7.1 The NRWS System equipment exposed to the weather shall operate in accordance with this TSOR under rainfall conditions of 0.8 millimetres/minute.	C, and D or F			
7.7.2 The NRWS System equipment exposed to the weather shall operate in accordance with this TSOR under dust concentrations of 1g/m <sup>3</sup> .	C, and D or F			
7.7.3 The NRWS System equipment located in a sheltered environment shall operate in accordance with this TSOR when in a drip environment as identified in MIL-STD-810, method 506, Procedure III.	C,D			

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
7.7.4 The NRWS System electrical equipment exposed to the weather shall be watertight, spraytight, and dust proof in accordance with MIL-STD-108E.	C,D			
<b>7.8 Ice</b>				
7.8.1 The NRWS System equipment exposed to the weather shall operate in accordance with this TSOR when subjected to conditions which produce icing loads of up to and including 20 kilograms per square metre.	C, and D or F			
7.8.2 The NRWS System equipment exposed to the weather shall not be damaged by an icing load of up to and including 37 kilograms per square metre except as otherwise specified in TSOR requirement 7.8.3.	C, and D or F			
7.8.3 The NRWS System equipment exposed to the weather shall not be damaged by an icing load of up to and including 180 kilograms per square metre if located in the forward one-third of the ship and below a line parallel to and 12.2 m above the Halifax Class vessels design waterline.	C, and D, E or F			
<b>7.9 Corrosion and Salt Fog</b>				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response		Compliant	
		Yes	No	Yes	No
7.9.1 The NRWS System above deck components shall be constructed from galvanic compatible materials.	C				
7.9.2 The NRWS System above deck components exposed to the weather shall be constructed from materials with surface treatments in order to preclude failure due to oxidation and corrosion.	C,D				
7.9.4 The NRWS System shall be resistant to the effects of salt deposits on the physical aspects of materiel when subjected to the test described in method 509 of MIL-STD-810.	C,D				
7.9.5 The NRWS System shall be resistant to the effects of salt deposits on the electrical aspects of materiel when subjected to the test described in method 509 of MIL-STD-810.	C,D				
<b>8. SUPPORTABILITY</b>					
8.1 The NRWS System shall have an operational life expectancy of not less than 15 years.	C, and D or E				

**Table 2 – Mandatory NRWS Project TSOR Requirements**

TSOR Requirement	Compliance Method	Bidder's Response	Compliant
			Yes      No
8.2 The NRWS System shall accommodate the facilitation of new technologies, including, but not limited to, the upgrade of individual sensors without having to replace other components.	C,D		
8.3 The NRWS System hardware architecture shall be an open architecture format.	C,D		
8.4 The NRWS System design shall minimize maintenance procedures and durations.	C,D		

**Table 3 – Mandatory NRWS Project Computer Based Trainer Specification Requirements**

Computer Based Trainer Specification Requirement	Compliance Method	Bidder's Response	Compliant
			Yes      No

**Table 3 – Mandatory NRWS Project Computer Based Trainer Specification Requirements**

Computer Based Trainer Specification Requirement	Compliance Method	Bidder's Response		Compliant		
		Yes	No	Yes	No	
<b>2. TECHNICAL REQUIREMENTS</b>						
<b>2.1 General Requirements</b>						
2.1.1 The Computer Based Trainer shall have an Operator Trainer Mode.	C					
2.1.2 The Computer Based Trainer shall have an Instructor Trainer Mode.	C					
2.1.3 The Computer Based Trainer shall operate in either the Operator Trainer Mode or the Instructor Trainer Mode as selected by the user.	C					
2.1.4 The Computer Based Trainer Controls shall have a Physical Fidelity level of not less than 4 in accordance with Table 1.	C,D					
2.1.5 The Computer Based Trainer Display shall have a Physical Fidelity level of not less than 3 in accordance with Table 1.	C,D					
2.1.6 The Computer Based Trainer Software shall have a Functional Fidelity level of not less than 4 in accordance with Table 2.	C,D					

**Table 3 – Mandatory NRWS Project Computer Based Trainer Specification Requirements**

Computer Based Trainer Specification Requirement	Compliance Method	Bidder's Response	Compliant	
			Yes	No
2.1.7 The Computer Based Trainer shall include not less than 10 pre-programmed Combat Scenarios.	C,D			
<b>2.2 Combat Scenarios</b>				
2.2.1 The Combat Scenarios shall vary in levels of complexity.	C,D			
2.2.2 The Combat Scenarios shall simulate each threat and target types as specified in the NRWS System TSOR, Tables 1 and 2.	C			
<b>2.4 Instructor Trainer Mode</b>				
2.4.1 The Instructor Trainer Mode shall allow the instructor to create Combat Scenarios.	C,D			
2.4.2 The Instructor Trainer Mode shall allow the instructor to edit Combat Scenarios.	C,D			