



**RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving - PWGSC / Réception des  
soumissions - TPSGC**  
Place du Portage, Phase III  
Core 0B2 / Noyau 0B2  
11 Laurier St./11, rue Laurier  
Gatineau  
Québec  
K1A 0S5  
Bid Fax: (819) 997-9776

**REQUEST FOR PROPOSAL  
DEMANDE DE PROPOSITION**

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

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

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

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

**Comments - Commentaires**

|   |   |
|---|---|
| <b>Title - Sujet</b> SMMS<br>SAR Mission Management System  |   |
| <b>Solicitation No. - N° de l'invitation</b><br>W8474-218069/C  | <b>Date</b><br>2021-08-26                   |
| <b>Client Reference No. - N° de référence du client</b><br>W8474-218069   |   |
| <b>GETS Reference No. - N° de référence de SEAG</b><br>PW-\$\$XL-111-39864  |   |
| <b>File No. - N° de dossier</b><br>111xl.W8474-218069   | <b>CCC No./N° CCC - FMS No./N° VME</b>      |
| <b>Solicitation Closes - L'invitation prend fin</b><br><b>at - à 02:00 PM</b> Eastern Daylight Saving Time EDT<br><b>on - le 2021-09-21</b> Heure Avancée de l'Est HAE        |   |
| <b>F.O.B. - F.A.B.</b><br><b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>   |   |
| <b>Address Enquiries to: - Adresser toutes questions à:</b><br>Hansen, Cendrella  | <b>Buyer Id - Id de l'acheteur</b><br>111xl |
| <b>Telephone No. - N° de téléphone</b><br>(343) 551-5221 ( )  | <b>FAX No. - N° de FAX</b><br>( ) -         |
| <b>Destination - of Goods, Services, and Construction:</b><br><b>Destination - des biens, services et construction:</b><br><br>Specified Herein<br>Précisé dans les présentes |   |

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Shared Systems Division (XL)/Division des systèmes  
partagés (XL)  
Terrasses de la Chaudière  
4th Floor, 10 Wellington Street  
4th etage, 10, rue Wellington  
Gatineau  
Québec  
K1A 0S5

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

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**BID SOLICITATION**

**SEARCH AND RESCUE MISSION MANAGEMENT SYSTEM**

**FOR**

**THE DEPARTMENT OF NATIONAL DEFENCE**

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**Forms:**

- Form 1 - Bid Submission Form
- Form 2 - Software Publisher Certification Form
- Form 3 - Software Publisher Authorization Form
- Form 4 - Electronic Payment Instruments
- Form 5 - Federal Contractors Program for Employment Equity – Certification
- Form 6 - Declaration Form
- Form 7 - List of Names Form

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# BID SOLICITATION

## SEARCH AND RESCUE MISSION MANAGEMENT SYSTEM

### FOR

## THE DEPARTMENT OF NATIONAL DEFENCE

### PART 1 - GENERAL INFORMATION

#### 1.1 Introduction

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

- Part 1** General Information: provides a general description of the requirement;
- Part 2** Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3** Bid Preparation Instructions: provides Bidders with instructions on how to prepare their bid;
- Part 4** Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, if applicable, and the basis of selection;
- Part 5** Certifications and Additional Information: includes the certifications and additional information to be provided;
- Part 6** Security, Financial and Other Requirements: includes specific requirements that must be addressed by Bidders; and
- Part 7** Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The annexes include the Statement of Work and any other annexes.

#### 1.2 Summary

- (a) This bid solicitation is being issued to satisfy the requirement of the Department of National Defence (the "**Client**") for a Search and Rescue (SAR) Mission Management System (SMMS) application to conduct command, control, and logging of SAR activities. It is intended to result in the award of a contract for two years, plus eight one-year irrevocable options allowing Canada to extend the term of the contract.
- (b) There are security requirements associated with this requirement. For additional information, consult Part 6 - Security, Financial and Other Requirements, and Part 7 - Resulting Contract Clauses. For more information on personnel and organizational security screening or security clauses, Bidders should refer to the *Contract Security Program* of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.

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- (c) The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the Canada-Honduras Free Trade Agreement (CHFTA), the Canada-Korea Free Trade Agreement (CKFTA), the Canada-Chile Free Trade Agreement (CCFTA), the Canada-Peru Free Trade Agreement (CPFTA), the Canada-Colombia Free Trade Agreement (CColFTA), the Canada-Panama Free Trade Agreement (CPanFTA), *the Canada-European Union Comprehensive Economic and Trade Agreement (CETA)* if it is in force, and the Canadian Free Trade Agreement (CFTA).
- (d) The Federal Contractors Program (FCP) for employment equity applies to this procurement: refer to Part 5 - Certifications, Part 7 - Resulting Contract Clauses and the form titled "Federal Contractors Program for Employment Equity - Certification".

### 1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders can request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing can be provided in writing, by telephone, by videoconference (virtual), or in person.

## PART 2 - BIDDER INSTRUCTIONS

### 2.1 Standard Instructions, Clauses and Conditions

- (a) All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.
- (b) Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.
- (c) The 2003 (2020-05-28) (Standard Instructions - Goods or Services - Competitive Requirements), are incorporated by reference into and form part of the bid solicitation.
- (d) "Subsection 3 a) of Section 01, Integrity Provisions - Bid of Standard Instructions incorporated by reference above is deleted in its entirety and replaced with the following:
  - a) at the time of submitting a bid under the Request for Proposal (RFP), the Bidder has already provided a list of names, as requested under the *Ineligibility and Suspension Policy*. During this procurement process, the Bidder must immediately inform Canada in writing of any changes affecting the list of names.
- (e) Subsection 5(4) of 2003, Standard Instructions - Goods or Services - Competitive Requirements is amended as follows:
  - (i) Delete: 60 days
  - (ii) Insert: 365 days

### 2.2 Submission of Bids

- (a) Bids must be submitted only to Public Works and Government Services Canada PWGSC Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

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- (b) Due to the nature of the bid solicitation, bids transmitted by facsimile to PWGSC will not be accepted.

### 2.3 Former Public Servant

- (a) Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

(b) **Definitions**

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

- (i) an individual;
- (ii) an individual who has incorporated;
- (iii) a partnership made of former public servants; or
- (iv) a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

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

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

(c) **Former Public Servant in Receipt of a Pension**

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

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

- (i) name of former public servant; and
- (ii) date of termination of employment or retirement from the Public Service.

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

(d) **Work Force Adjustment Directive**

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

If Yes, the Bidder must provide the following information:

- (i) name of former public servant;
- (ii) conditions of the lump sum payment incentive;
- (iii) date of termination of employment;
- (iv) amount of lump sum payment;
- (v) rate of pay on which lump sum payment is based;
- (vi) period of lump sum payment including start date, end date and number of weeks;
- (vii) number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

**2.4 Enquiries - Bid Solicitation**

- (a) All enquiries must be submitted in writing to the Contracting Authority no later than 7 calendar days before the bid closing date. Enquiries received after that time may not be answered.
- (b) Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered with copies to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

**2.5 Applicable Laws**

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

**Note to Bidders:** Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or

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territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidder.

## 2.6 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reasons for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority in accordance with the article entitled "Enquiries - Bid Solicitation". Canada will have the right to accept or reject any or all suggestions.

## 2.7 Non-Disclosure Agreement

By submitting a response, the Bidder agrees to the terms of the non-disclosure agreement below (the "**Non-Disclosure Agreement**"):

1. The Bidder agrees to keep confidential any information it receives from Canada regarding Canada's assessment of the Bidder's Supply Chain Security Information (the "**Sensitive Information**") including, but not limited to, which aspect of the Supply Chain Security Information is subject to concern, and the reasons for Canada's concerns.
2. Sensitive Information includes, but is not limited to, any documents, instructions, guidelines, data, material, advice or any other information whether received orally, in printed form or otherwise and whether or not that information is labeled as classified, proprietary or sensitive.
3. The Bidder agrees that it will not reproduce, copy, divulge, release or disclose, in whole or in part, in whatever way or form any Sensitive Information to any person other than a person employed by the Bidder who has a security clearance commensurate with the level of Sensitive Information being accessed, without the prior written consent of the Contracting Authority. The Bidder agrees to immediately notify the Contracting Authority if any person, other than those permitted by this Article, accesses the Sensitive Information at any time.
4. All Sensitive Information will remain the property of Canada and must be returned to the Contracting Authority or destroyed, at the option of the Contracting Authority, if requested by the Contracting Authority, within 30 days following that request.
5. The Bidder agrees that a breach of this Non-Disclosure Agreement may result in disqualification of the Bidder at RFP stage, or immediate termination of the resulting Contract. The Bidder also acknowledges that a breach of this Non-Disclosure Agreement may result in a review of the Bidder's security clearance and review of the Bidder's status as an eligible bidder for other requirements.
6. This Non-Disclosure Agreement remains in force indefinitely.

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## PART 3 - BID PREPARATION INSTRUCTIONS

### 3.1 Bid Preparation Instructions

(a) Bidders must submit their bid electronically. Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. Bidders must provide their bid in a single transmission. The Canada Post epost Connect service has the capacity to receive multiple documents, up to 1GB per individual attachment.

(b) The bid must be gathered per section and separated as follows:

- (i) Section I: Technical Bid
- (ii) Section II: Financial Bid
- (iii) Section III: Certifications
- (iv) Section IV: Additional Information

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

(c) **Submission of Only One Bid:**

(i) A Bidder, including related entities, will be permitted to submit only one bid in response to this bid solicitation. If a Bidder or any related entities participate in more than one bid (participating means being part of the Bidder, not being a subcontractor), Canada will provide those Bidders with 2 working days to identify the single bid to be considered by Canada. Failure to meet this deadline will result in Canada choosing in its discretion which bid to consider.

(ii) For the purposes of this Article, regardless of the jurisdiction where any of the entities concerned is incorporated or otherwise formed as a matter of law (whether that entity is a natural person, corporation, partnership, etc.), an entity will be considered to be "**related**" to a Bidder if:

- (A) they are the same legal entity (i.e., the same natural person, corporation, partnership, limited liability partnership, etc.);
- (B) they are "related persons" or "affiliated persons" according to the *Canada Income Tax Act*;
- (C) the entities have now or in the two years before bid closing had a fiduciary relationship with one another (either as a result of an agency arrangement or any other form of fiduciary relationship); or
- (D) the entities otherwise do not deal with one another at arm's length, or each of them does not deal at arm's length with the same third party.

(iii) Individual members of a joint venture cannot participate in another bid, either by submitting a bid alone or by participating in another joint venture.

(d) **Joint Venture Experience:**

(i) Where the Bidder is a joint venture with existing experience as that joint venture, it may submit the experience that it has obtained as that joint venture.

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Example: A bidder is a joint venture consisting of members L and O. A bid solicitation requires that the bidder demonstrate experience providing maintenance and help desk services for a period of 24 months to a customer with at least 10,000 users. As a joint venture (consisting of members L and O), the bidder has previously done the work. This bidder can use this experience to meet the requirement. If member L obtained this experience while in a joint venture with a third party N, however, that experience cannot be used because the third party N is not part of the joint venture that is bidding.

- (ii) A joint venture bidder may rely on the experience of one of its members to meet any given technical criterion of this bid solicitation.

Example: A bidder is a joint venture consisting of members X, Y and Z. If a solicitation requires: (a) that the bidder have 3 years of experience providing maintenance service, and (b) that the bidder have 2 years of experience integrating hardware with complex networks, then each of these two requirements can be met by a different member of the joint venture. However, for a single criterion, such as the requirement for 3 years of experience providing maintenance services, the bidder cannot indicate that each of members X, Y and Z has one year of experience, totaling 3 years. Such a response would be declared non-responsive.

- (iii) Joint venture members cannot pool their abilities with other joint venture members to satisfy a single technical criterion of this bid solicitation. However, a joint venture member can pool its individual experience with the experience of the joint venture itself. Wherever substantiation of a criterion is required, the Bidder is requested to indicate which joint venture member satisfies the requirement. If the Bidder has not identified which joint venture member satisfies the requirement, the Contracting Authority will provide an opportunity to the Bidder to submit this information during the evaluation period. If the Bidder does not submit this information within the period set by the Contracting Authority, its bid will be declared non-responsive.

Example: A bidder is a joint venture consisting of members A and B. If a bid solicitation requires that the bidder demonstrate experience providing resources for a minimum number of 100 billable days, the bidder may demonstrate that experience by submitting either:

- Contracts all signed by A;
- Contracts all signed by B; or
- Contracts all signed by A and B in joint venture, or
- Contracts signed by A and contracts signed by A and B in joint venture, or
- Contracts signed by B and contracts signed by A and B in joint venture.

That show in total 100 billable days.

- (iv) Any Bidder with questions regarding the way in which a joint venture bid will be evaluated should raise such questions through the Enquiries process as early as possible during the bid solicitation period.

### 3.2 Section I: Technical Bid

- (a) In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability for carrying out the work in a thorough, concise and clear manner.
- (b) The technical bid must address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement

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contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

- (c) The technical bid consists of the following:
- (i) **Bid Submission Form:** Bidders are requested to include the Bid Submission Form with their bids. It provides a common form in which bidders can provide information required for evaluation and contract award, such as a contact name and the Bidder's Procurement Business Number, etc. Using the form to provide this information is not mandatory, but it is recommended. If Canada determines that the information required by the Bid Submission Form is incomplete or requires correction, Canada will provide the Bidder with an opportunity to do so.
  - (ii) **Written Response to the Proposal-Based Evaluation portion of the Technical Capability Evaluation:** The technical bid must include substantiation of compliance on a per-requirement basis with the Proposal-Based Evaluation portions (First and Second passes) of the Technical Capability Evaluation as described in Annex E. The Bidder may also describe any other information it considers relevant.
  - (iii) **System Implementation Plan:** The Bidder must include a System Implementation Plan that describes key technical information related to the proposed application and its deployment to the hosting environment. The System Implementation Plan must, at a minimum:
    - (A) Provide an overview of the proposed Software Solution's technical architecture;
    - (B) Provide a high-level System Architecture design;
    - (C) Describe the name and the version number of each component of the Licensed Software required for the proposed solution;
    - (D) Describe deployment of the application to a hosting environment to support SAR operations;
    - (E) Describe deployment of the application to a hosting environment to support SAR training;
    - (F) Provide requirements and specifications necessary to configure the hosting environment to support SAR operations and training;
    - (G) Describe the roles and responsibilities of all stakeholders involved in the deployment of the application to a hosting environment; and
    - (H) Describe the technical support that the Bidder would include in the Work and provide to Canada to enable Canada's technical team to deploy the application to the hosting environment.

The Bidder may also describe any other information it considers relevant.
  - (iv) **Description of the Bidder's Interim In-Service Support (ISS) Program:** The Bidder must include a description of how it will meet all the mandatory requirements for the Interim In-Service Support (ISS) for the Interim SMMS Core Application, which must be

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consistent with all the requirements described in the Resulting Contract Clauses, including the Statement of Work. At a minimum, the Bidder must describe its:

- (A) Scope of the Interim ISS Program;
- (B) Organization structure of the Bidder's Interim ISS team;
- (C) Problem reporting and response procedures;
- (D) Escalation procedures;
- (E) Support availability;
- (F) Software update and patch management;
- (G) Anticipated service level provided by the Interim ISS program; and
- (H) Any enhancements to the basic requirements that the Bidder is offering.

The Bidder may also describe any other information it considers relevant.

(v) **SMMS Replacement Project Questionnaire to International SAR Operators:**

- (A) In accordance with the evaluation of M36 as described in the Technical Capability Evaluation (Annex E), bidders must provide a description of which nations already use the proposed solution, with one or more duly signed questionnaires that each identify the signatory's position and contact information. Additional requirements and information regarding this questionnaire are in Annex E.
- (B) For each customer reference, the Bidder must, at a minimum, provide the name and the e-mail address for a contact person.
- (C) In conducting its evaluation of the bids, Canada may, but will have no obligation to, consult the contacts identified for submitted questionnaires to confirm the statements therein.

It is the sole responsibility of the Bidder to ensure that the contacts provided for each questionnaire are knowledgeable about the services/capabilities the Bidder has provided to its customer and who is willing to act as a customer reference. Crown references will be accepted.

### 3.3 Section II: Financial Bid

- (a) **Pricing:** Bidders must submit their financial bid in accordance with the Basis of Payment in Annex B. Unless otherwise indicated, bidders must include a single, firm, all-inclusive price quoted in Canadian dollars in each cell requiring an entry in the pricing tables.
- (b) **Electronic Payment of Invoices – Bid:**

If the Bidder is willing to accept payment of invoices by Electronic Payment Instruments, complete Form 5 Electronic Payment Instruments, to identify which ones are accepted.

If Form 5 Electronic Payment instruments is not completed, then it is assumed that Electronic Payment Instruments will not be accepted for payment of invoices by the Bidder.

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

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- (c) **All Costs to be Included:** The financial bid must include all costs for the requirement described in the bid solicitation for the entire Contract Period, including any option to extend the Contract Period. The identification of all necessary equipment, software, peripherals, cabling and components required to meet the requirements of the bid solicitation and the associated costs of these items is the sole responsibility of the Bidder.
- (d) **Rough Order of Magnitude estimate for Phase 2:** In addition, it is requested that Bidders include separately a Rough Order of Magnitude (ROM) estimation for the cost of developing and implementing the aspirational capabilities described for the Full SMMS Core application as described in the SOW at ID SOW-1025 (Section 6) to the extent possible given the information provided. This information will not be used for evaluation purposes, but will allow Canada to plan the estimated costs of the project over the long term. **Bidders are not to include this ROM estimate in the pricing requested in paragraph 3.3(a) above.**
- (e) **Blank Prices:** Bidders are requested to insert "\$0.00" for any item for which it does not intend to charge or for items that are already included in other prices set out in the tables. If the Bidder leaves any price blank, Canada will treat the price as "\$0.00" for evaluation purposes and may request that the Bidder confirm that the price is, in fact, \$0.00. No bidder will be permitted to add or change a price as part of this confirmation. Any bidder who does not confirm that the price for a blank item is \$0.00 will be declared non-responsive.
- (f) **Exchange Rate Fluctuation**
  - (i) C3010T (2014-11-27), Exchange Rate Fluctuation Risk Mitigation

### 3.4 Section III: Certifications

It is a requirement that bidders submit the certifications and additional information required under Part 5.

### 3.5 Section IV: Additional Information

#### (a) Bidder's Proposed Sites or Premises Requiring Safeguarding Measures

As indicated in Part 6 under Security Requirements, the Bidder must provide the full addresses of the Bidder's and proposed individuals' sites or premises for which safeguarding measures are required for Work Performance.

Street Number / Street Name, Unit / Suite / Apartment Number  
City, Province, Territory / State  
Postal Code / Zip Code  
Country

The Company Security Officer must ensure through the Contract Security Program that the Bidder and proposal individuals hold a valid security clearance at the required level, as indicated in Part 6 – Security, Financial and Other Requirements.

Bidders are requested to indicate this information on their Bid Submission Form.

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## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria. There are several steps in the evaluation process, which are described below. Even though the evaluation and selection will be conducted in steps, the fact that Canada has proceeded to a later step does not mean that Canada has conclusively determined that the Bidder has successfully passed all the previous steps. Canada may conduct steps of the evaluation in parallel.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.
- (c) In addition to any other time periods established in the bid solicitation:
- (i) **Requests for Clarifications:** If Canada seeks clarification or verification from the Bidder about its bid, the Bidder will have 2 working days to provide the necessary information to Canada. Failure to meet this deadline will result in the bid being declared non-responsive.
  - (ii) **Requests for Further Information:** If Canada requires additional information in order to do any of the following pursuant to the Section entitled "Conduct of Evaluation" in 2003, Standard Instructions - Goods or Services - Competitive Requirements:
    - (A) verify any or all information provided by the Bidder in its bid; or
    - (B) contact any or all references supplied by the Bidder to verify and validate any information submitted by the Bidder,

the Bidder must provide the information requested by Canada within 2 working days of a request by the Contracting Authority.
  - (iii) **Extension of Time:** If additional time is required by the Bidder, the Contracting Authority may grant an extension in their sole discretion.
- (d) Overall, the evaluation of bids is summarized for information purposes in Figure 1 below.

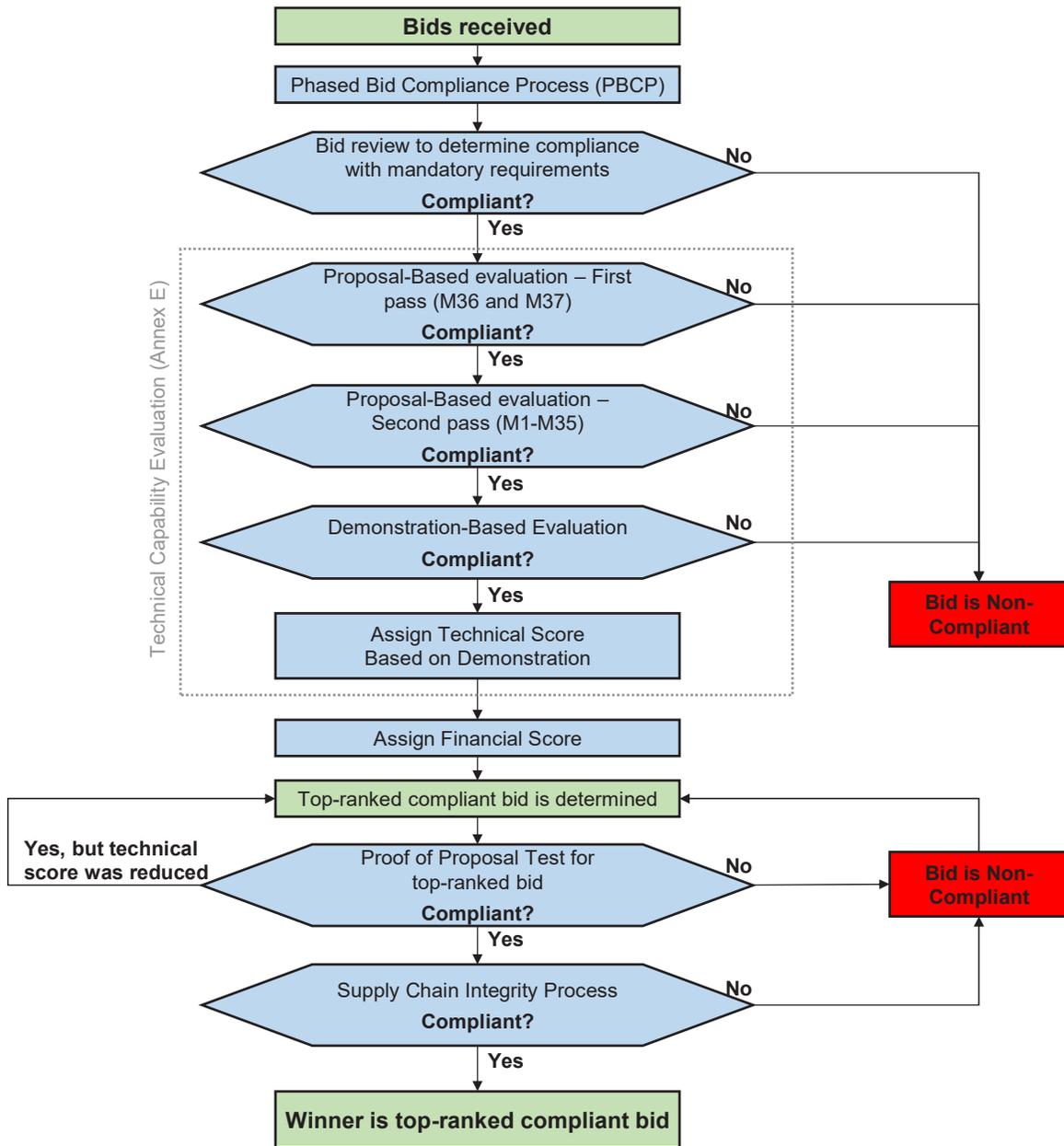


Figure 1: Summary of Bid Evaluation Process

## 4.2 Phased Bid Compliance Process (PBCP)

### 4.2.1 General

- a) Canada will conduct the PBCP described below for this requirement. Notwithstanding any review by Canada at Phase I or II of the PBCP, Bidders are and will remain solely responsible for the accuracy, consistency and completeness of their Bids and Canada does not undertake, by reason of this review, any obligations or responsibility for identifying any or all errors or omissions in Bids or in responses by a Bidder to any communication from Canada.

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THE BIDDER ACKNOWLEDGES THAT THE REVIEWS IN PHASE I AND II OF THIS PBCP ARE PRELIMINARY AND DO NOT PRECLUDE A FINDING IN PHASE III THAT THE BID IS NON-RESPONSIVE, EVEN FOR MANDATORY REQUIREMENTS WHICH WERE SUBJECT TO REVIEW IN PHASE I OR II AND NOTWITHSTANDING THAT THE BID HAD BEEN FOUND RESPONSIVE IN SUCH EARLIER PHASE. CANADA MAY DEEM A BID TO BE NON-RESPONSIVE TO A MANDATORY REQUIREMENT AT ANY PHASE.

THE BIDDER ALSO ACKNOWLEDGES THAT ITS RESPONSE TO A NOTICE OR A COMPLIANCE ASSESSMENT REPORT (CAR) (EACH DEFINED BELOW) IN PHASE I OR II MAY NOT BE SUCCESSFUL IN RENDERING ITS BID RESPONSIVE TO THE MANDATORY REQUIREMENTS THAT ARE THE SUBJECT OF THE NOTICE OR CAR, AND MAY RENDER ITS BID NON-RESPONSIVE TO OTHER MANDATORY REQUIREMENTS.

- b) Canada may, in its discretion, request and accept at any time from a Bidder and consider as part of the Bid, any information to correct errors or deficiencies in the Bid that are clerical or administrative, such as, without limitation, failure to sign the Bid or any part or to checkmark a box in a form, or other failure of format or form or failure to acknowledge; failure to provide a procurement business number or contact information such as names, addresses and telephone numbers; inadvertent errors in numbers or calculations that do not change the amount the Bidder has specified as the price or of any component thereof that is subject to evaluation. This shall not limit Canada's right to request or accept any information after the bid solicitation closing in circumstances where the bid solicitation expressly provides for this right. The Bidder will have the time period specified in writing by Canada to provide the necessary documentation. Failure to meet this deadline will result in the Bid being declared non-responsive.
- c) The PBCP does not limit Canada's rights under Standard Acquisition Clauses and Conditions (SACC) 2003 (2019-03-04) 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, or in the circumstances described in subsection (d).
- d) Canada will send any Notice or CAR by any method Canada chooses, in its absolute discretion. The Bidder must submit its response by the method stipulated in the Notice or CAR. Responses are deemed to be received by Canada at the date and time they are delivered to Canada by the method and at the address specified in the Notice or CAR. An email response permitted by the Notice or CAR is deemed received by Canada on the date and time it is received in Canada's email inbox at Canada's email address specified in the Notice or CAR. A Notice or CAR sent by Canada to the Bidder at any address provided by the Bidder in or pursuant to the Bid is deemed received by the Bidder on the date it is sent by Canada. Canada is not responsible for late receipt by Canada of a response, however caused.

#### 4.2.2 Phase I: Financial Bid

- (a) After the closing date and time of this bid solicitation, Canada will examine the Bid to determine whether it includes a Financial Bid and whether any Financial Bid includes all information required by the solicitation. Canada's review in Phase I will be limited to identifying whether any information that is required under the bid solicitation to be included in the Financial Bid is missing from the Financial Bid. This review will not assess whether the Financial Bid meets any standard or is responsive to all solicitation requirements.
- (b) Canada's review in Phase I will be performed by officials of the Department of Public Services and Procurement Canada.
- (c) If Canada determines, in its absolute discretion that there is no Financial Bid or that the Financial Bid is missing all of the information required by the bid solicitation to be included in the Financial Bid, then the Bid will be considered non-responsive and will be given no further consideration.
- (d) For Bids other than those described in c), Canada will send a written notice to the Bidder ("Notice") identifying where the Financial Bid is missing information. A Bidder, whose Financial Bid has been

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found responsive to the requirements that are reviewed at Phase I, will not receive a Notice. Such Bidders shall not be entitled to submit any additional information in respect of their Financial Bid.

- (e) The Bidders who have been sent a Notice shall have the time period specified in the Notice (the "Remedy Period") to remedy the matters identified in the Notice by providing to Canada, in writing, additional information or clarification in response to the Notice. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the Notice.
- (f) In its response to the Notice, the Bidder will be entitled to remedy only that part of its Financial Bid which is identified in the Notice. For instance, where the Notice states that a required line item has been left blank, only the missing information may be added to the Financial Bid, except that, in those instances where the addition of such information will necessarily result in a change to other calculations previously submitted in its Financial Bid, (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. All submitted information must comply with the requirements of this solicitation.
- (g) Any other changes to the Financial Bid submitted by the Bidder will be considered to be new information and will be disregarded. There will be no change permitted to any other Section of the Bidder's Bid. Information submitted in accordance with the requirements of this solicitation in response to the Notice will replace, in full, **only** that part of the original Financial Bid as is permitted above, and will be used for the remainder of the bid evaluation process.
- (h) Canada will determine whether the Financial Bid is responsive to the requirements reviewed at Phase I, considering such additional information or clarification as may have been provided by the Bidder in accordance with this Section. If the Financial Bid is not found responsive for the requirements reviewed at Phase I to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.
- (i) Only Bids found responsive to the requirements reviewed in Phase I to the satisfaction of Canada, will receive a Phase II review.

#### 4.2.3 Phase II: Technical Bid

Canada's review at Phase II will be limited to a review of the Technical Bid to identify any instances where the Bidder has failed to meet any Eligible Mandatory Criterion. This review will not assess whether the Technical Bid meets any standard or is responsive to all solicitation requirements. Eligible Mandatory Criteria are all mandatory technical criteria that are identified in this solicitation as being subject to the PBCP. Mandatory technical criteria that are not identified in the solicitation as being subject to the PBCP, will not be evaluated until Phase III.

Canada will send a written notice to the Bidder a CAR identifying any Eligible Mandatory Criteria that the Bid has failed to meet. A Bidder whose Bid has been found responsive to the requirements that are reviewed at Phase II will receive a CAR that states that its Bid has been found responsive to the requirements reviewed at Phase II. Such Bidder shall not be entitled to submit any response to the CAR.

A Bidder shall have the period specified in the CAR (the "Remedy Period") to remedy the failure to meet any Eligible Mandatory Criterion identified in the CAR by providing to Canada in writing additional or different information or clarification in response to the CAR. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the CAR.

The Bidder's response must address only the Eligible Mandatory Criteria listed in the CAR as not having been achieved, and must include only such information as is necessary to achieve such compliance. Any additional information provided by the Bidder which is not necessary to achieve such compliance will not be considered by Canada, except that, in those instances where such a response to the Eligible Mandatory Criteria specified in the CAR will necessarily result in a

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consequential change to other parts of the Bid, the Bidder shall identify such additional changes, provided that its response must not include any change to the Financial Bid.

The Bidder's response to the CAR should identify in each case the Eligible Mandatory Criterion in the CAR to which it is responding, including identifying in the corresponding section of the original Bid, the wording of the proposed change to that section, and the wording and location in the Bid of any other consequential changes that necessarily result from such change. In respect of any such consequential change, the Bidder must include a rationale explaining why such consequential change is a necessary result of the change proposed to meet the Eligible Mandatory Criterion. It is not up to Canada to revise the Bidder's Bid, and failure of the Bidder to do so in accordance with this subparagraph is at the Bidder's own risk. All submitted information must comply with the requirements of this solicitation.

Any changes to the Bid submitted by the Bidder other than as permitted in this solicitation, will be considered to be new information and will be disregarded. Information submitted in accordance with the requirements of this solicitation in response to the CAR will replace, in full, **only** that part of the original Bid as is permitted in this Section.

Additional or different information submitted during Phase II permitted by this section will be considered as included in the Bid, but will be considered by Canada in the evaluation of the Bid at Phase II only for the purpose of determining whether the Bid meets the Eligible Mandatory Criteria. It will not be used at any Phase of the evaluation to increase any score that the original Bid would achieve without the benefit of such additional or different information. For instance, an Eligible Mandatory Criterion that requires a mandatory minimum number of points to achieve compliance will be assessed at Phase II to determine whether such mandatory minimum score would be achieved with such additional or different information submitted by the Bidder in response to the CAR. If so, the Bid will be considered responsive in respect of such Eligible Mandatory Criterion, and the additional or different information submitted by the Bidder shall bind the Bidder as part of its Bid, but the Bidder's original score, which was less than the mandatory minimum for such Eligible Mandatory Criterion, will not change, and it will be that original score that is used to calculate any score for the Bid.

Canada will determine whether the Bid is responsive for the requirements reviewed at Phase II, considering such additional or different information or clarification as may have been provided by the Bidder in accordance with this Section. If the Bid is not found responsive for the requirements reviewed at Phase II to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.

Only Bids found responsive to the requirements reviewed in Phase II to the satisfaction of Canada, will receive a Phase III evaluation.

#### 4.2.4 Phase III: Final Evaluation of the Bid

- (a) In Phase III, Canada will complete the evaluation of all Bids found responsive to the requirements reviewed at Phase II. Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.

A Bid is non-responsive and will receive no further consideration if it does not meet all mandatory evaluation criteria of the solicitation after all the above stated processes have been followed.

### 4.3 Supply Chain Integrity Process

#### A. Definitions

- 4.3.1 The following words and expressions used in this Supply Chain Integrity Process have the following meaning: "**OEM Name**" means the name of the original equipment manufacturer (OEM) of the product that is being ordered.

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- 4.3.1.2 **“OEM DUNS Number”** means the Data Universal Numbering System (DUNS). It is a unique nine-digit number assigned to each physical location of a business. It is a worldwide standard and is used to determine the credit score of a company. If the company does not have a DUNS number, or you are unable to find one, please fill out the requested information on "C - Ownership Information". Ownership information consists of the top 5, by percentage, investors and owners of the company. The names provided for investors and owners should be those found in investment or ownership documents for the company in question.
- 4.3.1.3 **Product Name** means the OEM's name for the product.
- 4.3.1.4 **Model Number** means the OEM's model and/or version number of the product.
- 4.3.1.5 **Vulnerability Information** means the information concerning the last 5 security issues that were reported about the product. If the OEM posts this information to the CVE website, list the CVE numbers **separated by semi-colons (;)**. If the OEM does not post this information to the CVE website, you will need to ask the OEM directly for security vulnerability information and provide this information to the Canadian Centre for Cyber Security. If this is the case for a particular product, enter "see attached information" in the relevant field(s)..
- 4.3.1.6 **Supplier Name** means the name of the supplier (i.e. sub-contractors, re-seller, distributor, sub-processors, etc.) of the product that is being ordered. This includes any business entity involved in producing products or services to help complete the bidding requirements.
- 4.3.1.7 **Supplier DUNS Number** is already explained.
- 4.3.1.8 **Supplier URL** means the URL of the supplier's webpage for the product.
- 4.3.1.9 **Ownership** means the top 5, by percentage, owners of the OEM or Supplier. The names provided for owners should be those found in ownership documents for the company in question.
- 4.3.1.10 **Investors** means the top 5, by percentage, investor in the OEM or Supplier. The names provided for owners should be those found in investment documents for the company in question.
- 4.3.1.11 **Executives** means the executives and members of the board of directors for the company in question.
- 4.3.1.12 **Country / Nationality** means the country which an individual listed has their primary nationality or the country in which a corporate entity is registered.
- 4.3.1.13 **Corporate website link** means for each of OEM or Supplier name, Ownership, Investors, and Executives listed above provide a URI / URL to the information that supports the claims listed in each of the fields.
- 4.3.1.14 **Supply Chain Security Information** means any information that Canada requires a Bidder or Contractor to submit to conduct a complete security assessment of the SCSi as a part of the SCSi Assessment process.

## B. Mandatory Qualification Submission Requirements

Bidders must submit, with their Response on the RFP closing date, the following SCSi:

- 4.3.2 **IT Product List:** Bidders must identify the Products over which Canada's Data would be transmitted and/or on which Canada's Data would be stored, or that would be used and/or installed by the Bidder or any of its subcontractors to perform any part of the Work, together with the following information regarding each Product:
- 4.3.2.1 **OEM Name;**
- 4.3.2.2 **OEM DUNS Number;**

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- 4.3.2.3 **Product Name;**
- 4.3.2.4 **Model Number;**
- 4.3.2.5 **Vulnerability Information;**

Bidders are requested to provide the IT Product information for their proposed Solution on *Page B – IT Product List*. Bidders are also requested to insert a separate row for each Product. Bidders are requested not to repeat multiple iterations of the same Product (e.g. if the serial number and/or color is the only difference between two products, they are considered the same Product within the confines of the SCI Assessment Process).

4.3.3 Ownership Information: "It is only necessary to fill out entries in ""C- Ownership Information"" if a DUNS number cannot be supplied for the OEM and/or supplier.

- 4.3.3.1 Supplier Name
- 4.3.3.2 Supplier DUNS Number;
- 4.3.3.3 Supplier URL;
- 4.3.3.4 Ownership;
- 4.3.3.5 Investors;
- 4.3.3.6 Executives;
- 4.3.3.7 Country / Nationality;
- 4.3.3.8 Corporate website link.

### C. Assessment of Supply Chain Security Information

Following determination of the top-ranked bidder (considering technical and financial scores) and conduct of the Proof of Proposal, Canada will assess whether, in its opinion, the Supply Chain Security Information creates the possibility that the Bidder's solution could compromise or be used to compromise the security of Canada's equipment, firmware, software, systems or information.

In conducting its assessment:

- (a) Canada may request from the Bidder any additional information that Canada requires to conduct a complete security assessment of the Supply Chain Security Information. The Bidder will have 2 working days (or a longer period if specified in writing by the Contracting Authority) to provide the necessary information to Canada. Failure to meet this deadline will result in the response being disqualified.
- (b) Canada may use any government resources or consultants to conduct the assessment and may contact third parties to obtain further information. Canada may use any information, whether it is included in the response or comes from another source, that Canada considers advisable to conduct a comprehensive assessment of the Supply Chain Security Information.

If, in Canada's opinion, any aspect of the Supply Chain Security Information, if used in a solution, creates the possibility that the Bidder's solution could compromise or be used to compromise the security of Canada's equipment, firmware, software, systems or information:

- (a) Canada will notify the Bidder in writing (sent by email) and identify which aspect(s) of the Supply Chain Security Information is subject to concern(s) or cannot be assessed (for example, proposed future releases of products cannot be assessed). Any further information that Canada might be able to provide to the Bidder regarding its concerns will be determined based on the nature of the concerns. In some situations, for reasons of national security, it may not be possible for Canada to provide further information to the Bidder; therefore, in some circumstances, the Bidder will not know the underlying reasons for

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Canada's concerns with respect to a product, subcontractor or other aspect of the Bidder's Supply Chain Security Information.

- (b) The notice will provide the Bidder with one opportunity to submit revised Supply Chain Security Information within the 10 calendar days following the day on which Canada's written notification is sent to the Bidder, (or a longer period specified in writing by the Contracting Authority).
- (c) If the Bidder submits revised Supply Chain Security Information within the allotted time, Canada will perform a second assessment. If Canada determines that any aspect of the Bidder's revised Supply Chain Security Information could compromise or be used to compromise the security of Canada's equipment, firmware, software, systems or information, Canada may – in its sole discretion – provide one or more additional opportunities to revise the Supply Chain Security Information; otherwise, no further opportunities to revise the Supply Chain Security Information will be provided and the response will be disqualified.

By participating in this process, the Bidder acknowledges that the nature of information technology is such that new vulnerabilities, including security vulnerabilities, are constantly being identified. Also, the Bidder acknowledges that Canada's security assessment does not involve the assessment of a proposed solution. As a result:

- (a) qualification pursuant to this RFP does not constitute an approval that the products or other information included as part of the Supply Chain Security Information will meet the requirements of the subsequent bid solicitation or any resulting contract or other instrument that may be awarded as a result of any subsequent bid solicitation;
- (b) qualification pursuant to this RFP does not mean that the same or similar Supply Chain Security Information will be assessed in the same way for future requirements;
- (c) at any time during the subsequent bid solicitation process, Canada may advise a Bidder that some aspect(s) of its Supply Chain Security Information has become the subject of security concerns. At that point, Canada will notify the Respondent and provide the Bidder with an opportunity to revise its Supply Chain Security Information, using the same process described above.
- (d) during the performance of a subsequent contract, if Canada has concerns regarding certain products, designs or subcontractors originally included in the Supply Chain Security Information, the terms and conditions of that contract will govern the process for addressing those concerns.

The Bidder will be notified in writing regarding whether or not they have qualified under this RFP to proceed to the next stage of the procurement process.

Any Bidder that has qualified under this RFP will be required, when responding to any subsequent bid solicitation under this solicitation process, to propose a solution consistent with the final version of the Supply Chain Security Information it submitted with its response to this RFP (subject to revision only pursuant to the paragraph below). Except pursuant to the paragraph below, no alternative or additional Products or subcontractors may be proposed in the Bidder's solution. This is a mandatory requirement of this solicitation process. The proposed solution during any subsequent bid solicitation does not need to contain all the Products within the final Supply Chain Security Information.

Once a Bidder has been qualified in response to this RFP, no modifications are permitted to the Supply Chain Security Information except under exceptional circumstances, as determined by Canada. Given that not all the exceptional circumstances can be foreseen, whether changes may be made and the process governing those changes will be determined by Canada on a case-by-case basis.

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#### 4.4 Technical Evaluation - Mandatory Technical Criteria

- a) The Phased Bid Compliance Process (PBCP) will apply to all mandatory technical criteria in the First and Second passes of the Proposal-Based Evaluation described in Annex E.
- b) Following the PBCP, each bid will be reviewed to determine whether it meets the mandatory requirements of the bid solicitation. Any element of the bid solicitation identified with the words "must" or "mandatory" is a mandatory requirement. Bids that do not comply with each and every mandatory requirement will be declared non-responsive and be disqualified.
- c) After the bid review, the Technical Capability Evaluation (further elaborated in Annex E) will be conducted; this is the process by which key technical requirements will be assessed. In summary, it consists of:
  - (i) A Proposal-Based evaluation, which will assess the content of the Bidder's proposal to determine if the bidder has clearly demonstrated that the capability exists. This assessment is focused on the presence of each capability, while the usability of the capabilities for operators will be assessed in the Demonstration-Based evaluation (see below). Compliance to all requirements assessed through the Proposal-Based evaluation is a pre-condition to proceeding to a Demonstration-Based evaluation. Requirements M36 and M37 will be assessed in a first pass, and only if the Bidder's proposal is compliant to both M36 and M37 will the remainder of the requirements be assessed in a second pass; and
  - (ii) A Demonstration-Based evaluation, which assesses the solution as demonstrated by the Bidder (refer to "Demonstration" below), will determine whether the capability would be effectively usable by operators to conduct SAR mission coordination in accordance with Canada's requirements, and will assign scores where applicable. For the demonstration, the Bidder will be required to execute the three (3) scenarios included in Appendix A of Annex E.
- d) Claims in a bid that a future upgrade or release of any of product included in the bid will meet the mandatory requirements of the bid solicitation, where the upgrade or release is not available at bid closing, will not be considered.
- e) **Demonstration**
  - (i) If the bid review up until the Proposal-Based evaluation concludes that it meets the mandatory requirements of the bid solicitation, Canada will require that the Bidder demonstrate all features, functionalities, and capabilities that are necessary to meet the requirements identified in the Technical Capability Evaluation (Annex E). The Bidder must prepare, configure, and host the proposed application within their own cloud environment. The demonstration must be conducted, at no cost to Canada, virtually (i.e., via videoconference with screen sharing) or at a location in Canada agreed to by the Contracting Authority.
  - (ii) Canada will provide no fewer than 5 working days of notice before the scheduled date for the demonstration. Once the demonstration has begun, it must be completed within 8 consecutive hours during normal business hours, to be determined by the Contracting Authority. Canada will pay its own costs, if any, associated with attending any demonstration.
  - (iii) Despite the written bid, if Canada determines during the demonstration that the Bidder's proposed solution does not meet the mandatory requirements of this bid solicitation, the bid will be declared non-responsive. For bids that meet the mandatory requirements of

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this bid solicitation, Canada will also use the demonstration to assign scores for the point-rated criteria identified in the Technical Capability Evaluation (Annex E) using the evaluation criteria identified therein.

- (iv) Additional requirements and information regarding the demonstration are provided in the Technical Capability Evaluation (Annex E).

**f) Proof of Proposal Test for Top-Ranked Bid:**

- (i) Through the Proof of Proposal (PoP) test, Canada will test the solution proposed in the top-ranked bid (identified after the technical and financial evaluations) to confirm both that it will function as described in the bid and that it meets the technical functionality requirements described in the Statement of Work (Annex A). The PoP test will take place remotely, during which time up to five (5) users from Canada will be accessing the proposed application hosted in the Bidders' own cloud environment. The Bidder must prepare, configure, and host the proposed application for the PoP test within their own cloud environment and support the PoP test for the entire duration at no cost to Canada.
- (ii) Representative(s) named in the bid to provide technical support during the PoP test should be available by telephone for technical advice and clarification during the PoP test; however, Canada is not required to delay the PoP test if an individual is unavailable. Once the PoP test has begun, it will be completed within five (5) consecutive working days, and the named representative(s) should be available during normal working hours for the entire duration.
- (iii) Canada will document the results of the PoP Test. If Canada determines that the proposed solution does not meet any mandatory requirement of the bid solicitation, the bid will fail the PoP Test and the bid will be disqualified. Canada may, as a result of the PoP test, reduce the score of the Bidder on any rated requirement, if the PoP test indicates that the score provided to the Bidder on the basis of the demonstration is not validated by the PoP test. The Bidder's score will not be increased as a result of the PoP test. If the Bidder's score is reduced as a result of the PoP test, Canada will reassess the ranking of all bidders.
- (iv) In connection with the PoP testing, the Bidder grants to Canada a limited-time license to use the Bidder's proposed solution for testing and evaluation purposes.

**4.5 Financial Evaluation**

- (a) The financial evaluation will be conducted by calculating the Total Bid Price using the Pricing Tables completed by the bidders.

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| TABLE A - TOTAL BID PRICE (TBP) FOR EVALUATION PURPOSES |   |                               |                 |
|---|---|-------------------------------|-----------------|
| ITEM NO.  | DESCRIPTION   | FORMULA                       | TOTAL PRICE (A) |
| 1   | INITIAL REQUIREMENT FOR IMPLEMENTATION SERVICES                 | Total from Table 1 of Annex B | \$              |
| 2   | ANNUAL IN-SERVICE SUPPORT – INITIAL AND OPTIONAL YEARS          | Total from Table 2 of Annex B | \$              |
| 3   | INITIAL REQUIREMENT FOR LICENSED SOFTWARE SUBSCRIPTION          | Total from Table 3 of Annex B | \$              |
| 4   | IRREVOCABLE OPTION YEARS FOR LICENSED SOFTWARE SUBSCRIPTION     | Total from Table 4 of Annex B | \$              |
| 5   | IRREVOCABLE OPTIONAL ADDITIONAL LICENSED SOFTWARE SUBSCRIPTIONS | Total from Table 5 of Annex B | \$              |
| 6   | OPTIONAL PROFESSIONAL SERVICES                                  | Total from Table 6 of Annex B | \$              |
| <b>Total Bid Price (TBP) - (sum of Column A):</b>       |   |                               | \$              |

(i) SACC Manual Clause A0222T (2014-06-26 ), Evaluation of Price

**(b) Formulae in Pricing Tables**

If the pricing tables provided to bidders include any formulae, Canada may re-input the prices provided by bidders into a fresh table, if Canada believes that the formulae may no longer be functioning properly in the version submitted by a Bidder.

**(c) Substantiation of Professional Services Rates**

In Canada's experience, bidders will from time to time propose rates at the time of bidding for one or more categories of resources that they later refuse to honour, on the basis that these rates do not allow them to recover their own costs and/or make a profit. When evaluating the rates bid for professional services, Canada may, but will have no obligation to, require price support in accordance with this Article. If Canada requests price support, it will be requested from all otherwise responsive bidders who have proposed a rate that is at least 20% lower than the median rate bid by all responsive bidders for the relevant resource category or categories. If Canada requests price support, the Bidder must provide the following information:

(i) an invoice (referencing a contract serial number or other unique contract identifier) that shows that the Bidder has provided and invoiced a customer (with whom the Bidder deals at arm's length) for services performed for that customer similar to the services that would be provided in the relevant resource category, where those services were

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provided for at least three months within the twelve months before the bid solicitation closing date, and the fees charged were equal to or less than the rate offered to Canada;

- (ii) in relation to the invoice in (i), evidence from the Bidder's customer that the services identified in the invoice include at least 50% of the tasks listed in the Statement of Work for the category of resource being assessed for an unreasonably low rate. This evidence must consist of either a copy of the contract (which must describe the services to be provided and demonstrate that at least 50% of the tasks to be performed are the same as those to be performed under the Statement of Work in this bid solicitation) or the customer's signed certification that the services subject to the charges in the invoice included at least 50% of the same tasks to be performed under the Statement of Work in this bid solicitation;
- (iii) in respect of each contract for which an invoice is submitted as substantiation, a résumé for the resource that provided the services under that contract that demonstrates that, in relation to the resource category for which the rates are being substantiated, the resource would meet the mandatory requirements and achieve any required pass mark for any rated criteria; and
- (iv) the name, telephone number and, if available, e-mail address of a contact person at the customer who received each invoice submitted under (i), so that Canada may verify any information provided by the Bidder.

Once Canada requests substantiation of the rates bid for any resource category, it is the sole responsibility of the Bidder to submit information (as described above and as otherwise may be requested by Canada, including information that would allow Canada to verify information with the resource proposed) that will allow Canada to determine whether it can rely, with confidence, on the Bidder's ability to provide the required services at the rates bid. If Canada determines that the information provided by the Bidder does not adequately substantiate the unreasonably low rates, the bid will be declared non-responsive.

#### 4.6 Basis of Selection

- a) To be declared responsive, a bid must:
  - (i) comply with all the mandatory requirements of the bid solicitation;
  - (ii) meet all mandatory technical evaluation criteria; and
  - (iii) obtain the required minimum scores for the Demonstration-Based Evaluation described in Section 2.3 of Annex E.
- b) Subject to the Phased Bid Compliance Process, Bids not meeting (i) or (ii) or (iii) will be declared non-responsive.
- c) The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 60% for the technical merit and 40% for the price.
- d) To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 60%.
- e) To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 40%.
- f) For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.

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- g) Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The Overall Score is based on 60% Technical and 40% Financial, as follows:

$$Total\ 1 = \frac{Overall\ Technical\ Score\ earned\ by\ Bidder}{Maximum\ Technical\ Score} \times 60$$

$$Total\ 2 = \frac{TBP\ of\ Lowest\ Priced\ of\ all\ Responsive\ Proposals}{Bidder's\ TBP} \times 40$$

$$Overall\ Score = Total\ 1 + Total\ 2$$

Where:

*Overall Technical Score earned by Bidder* is in accordance with Section 2.4 of Annex E;  
*Maximum Technical Score* is 50, in accordance with Section 2.4 of Annex E; and  
*TBP* is Total Bid Price.

The table below illustrates a fictitious example where all three bids are responsive and the selection of the contractor is determined by a 60/40 ratio of technical merit and price, respectively. The total available points equals 135 and the lowest evaluated TBP is \$45,000 (45).

| Basis of Selection - Highest Combined Rating Technical Merit (60%) and Price (40%) |                              |                      |                     |                     |
|--|------------------------------|----------------------|---------------------|---------------------|
|  |                              | Bidder 1             | Bidder 2            | Bidder 3            |
| <b>Overall Technical Score</b>   |                              | 115/135              | 89/135              | 92/135              |
| <b>Bid Evaluated Price</b>   |                              | \$55,000.00          | \$50,000.00         | \$45,000.00         |
| <b>Calculations</b>  | <b>Technical Merit Score</b> | 115/135 x 60 = 51.11 | 89/135 x 60 = 39.56 | 92/135 x 60 = 40.89 |
|  | <b>Pricing Score</b>         | 45/55 x 40 = 32.73   | 45/50 x 40 = 36.00  | 45/45 x 40 = 40     |
| <b>Combined Rating</b>   |                              | 83.84                | 75.56               | 80.89               |
| <b>Overall Rating</b>  |                              | 1st                  | 3rd                 | 2nd                 |

Bidders should note that all contract awards are subject to Canada's internal approvals process, which includes a requirement to approve funding in the amount of any proposed contract. Despite the fact that the Bidder may have been recommended for contract award, a contract will only be awarded if internal approval is granted according to Canada's internal policies. If approval is not granted, no contract will be awarded.

If more than one bidder is ranked first because of identical overall scores, then the bidder with the best technical score will become the top-ranked bidder.

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## PART 5 -CERTIFICATIONS AND ADDITIONAL INFORMATION

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

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

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

### 5.1 Certifications Required with Bid

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

#### (a) Integrity Provisions - Declaration of Convicted Offences

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

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

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

#### (a) Integrity Provisions – Required Documentation

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

#### (b) Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the Employment and Social Development Canada (ESDC) - Labour's website. (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html>).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list during the period of the Contract.

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The Bidder must provide the Contracting Authority with a completed Form titled Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

(c) **Bidder Certifies that All Equipment and Software is "Off-the-Shelf"**

Any software bid to meet this requirement must be "off-the-shelf" (unless otherwise stated in this bid solicitation), meaning that each item of software is commercially available and requires no further research or development and is part of an existing product line with a field-proven operational history (that is, it has not simply been tested in a laboratory or experimental environment). By submitting a bid, the Bidder is certifying that all the equipment and software bid is off-the-shelf.

(d) **Software Publisher Certification and Software Publisher Authorization**

(i) If the Bidder is the Software Publisher for any of the proprietary software products it bids, Canada requires that the Bidder confirm in writing that it is the Software Publisher. Bidders are requested to use the Software Publisher Certification Form included with the bid solicitation. Although all the contents of the Software Publisher Certification Form are required, using the form itself to provide this information is not mandatory. For bidders who use an alternate form, it is in Canada's sole discretion to determine whether all the required information has been provided. Alterations to the statements in the form may result in the bid being declared non-responsive.

(ii) Any Bidder that is not the Software Publisher of all the proprietary software products proposed in its bid is required to submit proof of the Software Publisher's authorization, which must be signed by the Software Publisher (not the Bidder). No Contract will be awarded to a Bidder who is not the Software Publisher of all of the proprietary software it proposes to supply to Canada, unless proof of this authorization has been provided to Canada. If the proprietary software proposed by the Bidder originates with multiple Software Publishers, authorization is required from each Software Publisher. Bidders are requested to use the Software Publisher Authorization Form included with the bid solicitation. Although all the contents of the Software Publisher Authorization Form are required, using the form itself to provide this information is not mandatory. For Bidders/Software Publishers who use an alternate form, it is in Canada's sole discretion to determine whether all the required information has been provided. Alterations to the statements in the form may result in the bid being declared non-responsive.

(iii) In this bid solicitation, "Software Publisher" means the owner of the copyright in any software products proposed in the bid, who has the right to license (and authorize others to license/sub-license) its software products.

(e) **Certification of Language - English Essential**

By submitting a bid, the Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual that will interact with Canada will be fluent in English, unless otherwise described in the Contract. The individual(s) must be able to communicate orally and in writing in English without any assistance and with minimal errors.

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## PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

### 6.1 Security Requirement

- (a) At the date of bid closing, the following conditions must be met:
- (i) the Bidder must hold a valid organization security clearance as indicated in Part 7 - Resulting Contract Clauses;
  - (ii) the Bidder's proposed individuals requiring access to classified or protected information, assets or sensitive work sites must meet the security requirements as indicated in Part 7 - Resulting Contract Clauses; and
  - (iii) the Bidder must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites.
  - (iv) the Bidder's proposed location of work performance and document safeguarding must meet the security requirements as indicated in Part 7 - Resulting Contract Clauses;
  - (v) the Bidder must provide the addresses of proposed sites or premises of work performance and document safeguarding as indicated in Part 3 - Section IV Additional Information.
- (b) For additional information on security requirements, Bidders should refer to the Contract Security Program of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.
- (c) In the case of a joint venture bidder, each member of the joint venture must meet the security requirements.

### 6.2 Financial Capability

- (a) SACC Manual clause A9033T (2012-07-16), Financial Capability applies, except that subsection 3 is deleted and replaced with the following: "If the Bidder is a subsidiary of another company, then any financial information required by the Contracting Authority in 1(a) to (f) must also be provided by each level of parent company, up to and including the ultimate parent company. The financial information of a parent company does not satisfy the requirement for the provision of the financial information of the Bidder; however, if the Bidder is a subsidiary of a company and, in the normal course of business, the required financial information is not generated separately for the subsidiary, the financial information of the parent company must be provided. If Canada determines that the Bidder is not financially capable but the parent company is, or if Canada is unable to perform a separate assessment of the Bidder's financial capability because its financial information has been combined with its parent's, Canada may, in its sole discretion, award the contract to the Bidder on the condition that one or more parent companies grant a performance guarantee to Canada."
- (b) In the case of a joint venture bidder, each member of the joint venture must meet the financial capability requirements.

### 6.3 Insurance Requirements

- (a) SACC Manual clause G1005C (2016-01-28) Insurance Requirements.

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## PART 7 -RESULTING CONTRACT CLAUSES

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

### 7.1 Requirement

**7.1.1**      *(To be Determined at Contract Award)* (the "**Contractor**") agrees to supply to the Client the goods and services described in the Contract, including the Statement of Work, in accordance with, and at the prices set out in, the Contract. This includes:

- 7.1.1.1 Implementation and configuration of the Licensed Software (Interim SMMS Core Application) and associated project management activities;
- 7.1.1.2 Delivery of technical documentation, user manuals, and training;
- 7.1.1.3 Delivery of subscription licenses to use the Licensed Software;
- 7.1.1.4 Providing maintenance and support (Interim In-Service Support) for the Licensed Software;
- 7.1.1.5 Providing irrevocable options to acquire additional Licensed Software Subscriptions and additional years of maintenance and support when requested; and,
- 7.1.1.6 Providing professional services, as and when requested by Canada;

**7.1.2 Client:** Under the Contract, the "**Client**" is The Department of National Defence.

**7.1.3 Reorganization of Client:** The Contractor's obligation to perform the Work will not be affected by (and no additional fees will be payable as a result of) the renaming, reorganization, reconfiguration, or restructuring of any Client. The reorganization, reconfiguration and restructuring of the Client includes the privatization of the Client, its merger with another entity, or its dissolution, where that dissolution is followed by the creation of another entity or entities with mandates similar to the original Client. In connection with any form of reorganization, Canada may designate another department or government body as the Contracting Authority or Technical Authority, as required to reflect the new roles and responsibilities associated with the reorganization.

**7.1.4 Defined Terms:** Words and expressions defined in the General Conditions or Supplemental General Conditions and used in the Contract have the meanings given to them in the General Conditions or Supplemental General Conditions. Words and expressions defined in the Glossary (Appendix D to Annex A) and used in the Contract have the meanings given to them therein. Also, the following words and expressions have the following meanings:

- 7.1.4.1 any reference to a "**deliverable**" or "**deliverables**" includes the license to use the Licensed Software (the Licensed Software itself is not a deliverable, because the Licensed Software is only being licensed under the Contract, not sold or transferred).
- 7.1.4.2 "Product" means any hardware that operates at the data link layer of the OSI Model (layer 2) and above, any software and Workplace Technology Devices.
- 7.1.4.3 "Workplace Technology Devices" means desktops, mobile workstations such as laptops and tablets, smartphones, phones, and peripherals and accessories such as monitors, keyboards, computer mouse, audio devices and external and internal storage devices such as USB flash drives, memory cards, external hard drives and writable CD or DVD.
- 7.1.4.4 "Canada's Data" means any data originating from the Work, any data received in contribution to the Work or that is generated as a result of the delivery of security, configuration, operations, administration and management services, and any data that is transported or stored by the contractor or any subcontractor as a result of performing the Work.

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7.1.4.5 "Work" means all the activities, services, goods, equipment, matters and things required to be done, delivered or performed by the Contractor under the resulting contract.

## 7.2 On-going Supply Chain Integrity Process

**7.2.1 Supply Chain Integrity Process:** The Parties acknowledge that a Supply Chain Integrity Process assessment was a key component of the procurement process that resulted in the award of this Contract. In connection with that assessment process, Canada assessed the Contractor's Supply Chain Security Information (SCSI) without identifying any security concerns. The following SCSI was submitted:

7.1.4.6 an IT Product List; and

7.1.4.7 Ownership Information.

This SCSI is included as Annex F. The Parties also acknowledge that security is a critical consideration for Canada with respect to this Contract and that on-going assessment of SCSI will be required throughout the Contract Period. This Article governs that process.

**7.2.2 Assessment of New SCSI:** During the Contract Period, the Contractor may need to modify the SCSI information contained in Annex F. In that regard:

7.2.2.1 The Contractor, starting at contract award, must revise its SCSI at least once a month to show all changes made, as well as all deletions and additions to the SCSI that affect the services under the Contract (including Products deployed by its subcontractors) during that period; the list must be marked to show the changes made during the applicable period. If no changes have been made during the reporting month, the Contractor must advise the Contracting Authority in writing that the existing list is unchanged. Changes made to the IT Product List must be accompanied with revised Network Diagram(s) when applicable.

7.2.2.2 The Contractor agrees that, during the Contract Period, it will periodically (at least once a year) provide the Contracting Authority with updates regarding upcoming new Products that it anticipates deploying in the Work (for example, as it develops its "technology roadmap" or similar plans). This will allow Canada to assess those Products in advance so that any security concerns can be identified prior to the Products being deployed in connection with the services being delivered under the Contract. Canada will endeavour to assess proposed new Products within 30 calendar days, although lengthier lists of Products may take additional time.

7.2.2.3 Canada reserves the right to conduct a complete, independent security assessment of all new SCSI. The Contractor must, if requested by the Contracting Authority, provide any information that Canada requires to perform its assessment.

7.2.2.4 Canada may use any government resources or consultants to conduct the assessment and may contact third parties to obtain further information. Canada may use any information, whether it is provided by the Contractor or comes from another source, that Canada considers advisable to conduct a comprehensive assessment of any proposed new SCSI.

### 7.2.3 Identification of New Security Vulnerabilities in SCSI already assessed by Canada:

7.2.3.1 The Contractor must provide to Canada timely information about any vulnerabilities of which it becomes aware in performing the Work, including any weakness, or design deficiency, identified in any Product used to deliver services that would allow an unauthorized individual to compromise the integrity, confidentiality, access controls, availability, consistency or audit mechanism of the system or the data and applications it hosts.

7.2.3.2 The Contractor acknowledges that the nature of information technology is such that new vulnerabilities, including security vulnerabilities, are constantly being identified and, that being the case, new security vulnerabilities may be identified in SCSI that have already

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been the subject of an SCSi assessment and assessed without security concerns by Canada, either during the procurement process or later during the Contract Period.

#### **7.2.4 Addressing Security Concerns:**

7.2.4.1 If Canada notifies the Contractor of security concerns regarding a Product that has not yet been deployed, the Contractor agrees not to deploy it in connection with this Contract without the consent of the Contracting Authority.

7.2.4.2 At any time during the Contract Period, if Canada notifies the Contractor that, in Canada's opinion, there is a Product that is being used in the Contractor's solution (including use by a subcontractor) that has been assessed as having the potential to compromise or be used to compromise the security of Canada's equipment, firmware, software, systems or information, then the Contractor must:

7.2.4.2.1 provide Canada with any further information requested by the Contracting Authority so that Canada may perform a complete assessment;

7.2.4.2.2 if requested by the Contracting Authority, propose a mitigation plan (including a schedule), within 10 business days, such as migration to an alternative Product. The Contracting Authority will notify the Contractor in writing if Canada approves the mitigation plan, or will otherwise provide comments about concerns or deficiencies with the mitigation plan; and

7.2.4.2.3 implement the mitigation plan approved by Canada.

This process applies both to new Products and to Products that were already assessed pursuant to the Supply Chain Integrity Process assessment by Canada, but for which new security vulnerabilities have since been identified.

7.2.4.3 Despite the previous Sub-article, if Canada determines in its discretion that the identified security concern represents a threat to national security that is both serious and imminent, the Contracting Authority may require that the Contractor immediately cease deploying the identified Product(s) in the Work. For Products that have already been deployed, the Contractor must identify and/or remove (as required by the Contracting Authority) the Product(s) from the Work according to a schedule determined by Canada. However, prior to making a final determination in this regard, Canada will provide the Contractor with the opportunity to make representations within 48 hours of receiving notice from the Contracting Authority. The Contractor may propose, for example, mitigation measures for Canada's consideration. Canada will then make a final determination.

#### **7.2.5 Cost Implications:**

7.2.5.1 Any cost implications related to a demand by Canada to cease deploying or to remove a particular Product or Products will be considered and negotiated in good faith by the Parties on a case-by-case basis and may be the subject of a Contract Amendment. However, despite any such negotiations, the Contractor must cease deploying and/or remove the Product(s) as required by Canada. The negotiations will then continue separately. The Parties agree that, at a minimum, the following factors will be considered in their negotiations, as applicable:

7.2.5.1.1 with respect to Products already assessed without security concerns by Canada pursuant to an SCSi assessment, evidence from the Contractor of how long it has owned the Product;

7.2.5.1.2 with respect to new Products, whether or not the Contractor was reasonably able to provide advance notice to Canada regarding the use of the new Product in connection with the Work;

7.2.5.1.3 evidence from the Contractor of how much it paid for the Product, together with any amount that the Contractor has pre-paid or committed to pay with respect to maintenance and support of that Product;

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- 7.2.5.1.4 the normal useful life of the Product;
  - 7.2.5.1.5 any “end of life” or other announcements from the manufacturer of the Product indicating that the Product is or will no longer be supported;
  - 7.2.5.1.6 the normal useful life of the proposed replacement Product;
  - 7.2.5.1.7 the time remaining in the Contract Period;
  - 7.2.5.1.8 whether or not the existing Product or the replacement Product is or will be used exclusively for Canada or whether the Product is also used to provide services to other customers of the Contractor or its subcontractors;
  - 7.2.5.1.9 whether or not the Product being replaced can be redeployed to other customers;
  - 7.2.5.1.10 any training required for Contractor personnel with respect to the installation, configuration and maintenance of the replacement Products, provided the Contractor can demonstrate that its personnel would not otherwise require that training;
  - 7.2.5.1.11 any developments costs required for the Contractor to integrate the replacement Products into the Service Portal, operations, administration and management systems, if the replacement Products are Products not otherwise deployed anywhere in connection with the Work; and
  - 7.2.5.1.12 the impact of the change on Canada, including the number and type of resources required and the time involved in the migration.
- 7.2.5.2 Additionally, if requested by the Contracting Authority, the Contractor must submit a detailed cost breakdown, once any work to address a security concern identified under this Article has been completed. The cost breakdown must contain an itemized list of all applicable cost elements related to the work required by the Contracting Authority and must be signed and certified as accurate by the Contractor’s most senior financial officer, unless stated otherwise in writing by the Contracting Authority. Canada must consider the supporting information to be sufficiently detailed for each cost element to allow for a complete audit. In no case will any reimbursement of any expenses of the Contractor (or any of its subcontractors) exceed the demonstrated out-of-pocket expenses directly attributable to Canada’s requirement to cease deploying or to remove a particular Product or Products.
- 7.2.5.3 Despite the other provisions of this Article, if the Contractor or any of its subcontractors deploys new Products that Canada has already indicated to the Contractor are the subject of security concerns in the context of the Work, Canada may require that the Contractor or any of its subcontractors immediately cease deploying or remove that Product. In such cases, any costs associated with complying with Canada’s requirement will be borne by the Contractor and/or subcontractor, as negotiated between them. Canada will not be responsible for any such costs.

**7.2.6 General:**

- 7.2.6.1 The process described in this Article may apply to a single Product, to a set of Products, or to all Products manufactured or distributed by a particular supplier.
- 7.2.6.2 The process described in this Article also applies to subcontractors. With respect to cost implications, Canada acknowledges that the cost considerations with respect to concerns about subcontractors (as opposed to Products) may be different and may include factors such as the availability of other subcontractors to complete the work.
- 7.2.6.3 Any service levels that are not met due to a transition to a new Product or subcontractor required by Canada pursuant to this Article will not trigger a Service Credit, nor will a failure in this regard be taken into consideration for overall metric calculations, provided that the Contractor implements the necessary changes in accordance with the migration

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plan approved by Canada or proceeds immediately to implement Canada's requirements if Canada has determined that the threat to national security is both serious and imminent.

7.2.6.4 If the Contractor becomes aware that any subcontractor is deploying Products subject to security concerns in relation to the Work, the Contractor must immediately notify both the Contracting Authority and the Technical Authority and the Contractor must enforce the terms of its contract with its subcontractor. The Contractor acknowledges its obligations pursuant to General Conditions 2030 Subsection 8(3).

7.2.6.5 Any determination made by Canada will constitute a decision with respect to a specific Product or subcontractor and its proposed use under this Contract, and does not mean that the same Product or subcontractor would necessarily be assessed in the same way if proposed to be used for another purpose or in another context.

### 7.3 Subcontracting

7.2.7 Despite the General Conditions, none of the Work may be subcontracted (even to an affiliate of the Contractor) unless the Contracting Authority has first consented in writing. In order to seek the Contracting Authority's consent, the Contractor must provide the following information:

7.2.7.1 the name of the subcontractor;

7.2.7.2 the portion of the Work to be performed by the subcontractor;

7.2.7.3 the Designated Organization Screening or the Facility Security Clearance (FSC) level of the subcontractor;

7.2.7.4 the date of birth, the full name and the security clearance status of individuals employed by the subcontractor who will require access to Canada's facilities;

7.2.7.5 completed sub-SRCL signed by the Contractor's Company Security Officer for CISD completion; and

7.2.7.6 any other information required by the Contracting Authority.

7.2.8 For the purposes of this Article, a "subcontractor" does not include a supplier who deals with the Contractor at arm's length whose only role is to provide telecommunications or other equipment or software that will be used by the Contractor to provide services, including if the equipment will be installed in the backbone or infrastructure of the Contractor.

### 7.4 Change of Control

7.4.1 At any time during the Contract Period, if requested by the Contracting Authority, the Contractor must provide to Canada:

7.4.1.1 an organization chart for the Contractor showing all related corporations and partnerships; for the purposes of this Sub-article, a corporation or partnership will be considered related to another entity if:

7.4.1.1.1 they are "related persons" or "affiliated persons" according to the Canada *Income Tax Act*;

7.4.1.1.2 the entities have now or in the two years before the request for the information had a *fiduciary* relationship with one another (either as a result of an agency arrangement or any other form of fiduciary relationship); or

7.4.1.1.3 the entities otherwise do not deal with one another at arm's length, or *each of them* does not deal at arm's length with the same third party.

7.4.1.2 a list of all the Contractor's shareholders; if the Contractor is a subsidiary, this information must be provided for each parent corporation or parent partnership, up to the ultimate owner; with respect to any publicly traded corporation, Canada anticipates that the circumstances in which it would require a complete list of shareholders would be unusual

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and that any request from Canada for a list of a publicly traded corporation's shareholders would normally be limited to a list of those shareholders who hold at least 1% of the voting shares;

7.4.1.3 a list of all the Contractor's directors and officers, together with each individual's home address, date of birth, birthplace and citizenship(s); if the Contractor is a subsidiary, this information must be provided for each parent corporation or parent partnership, up to the ultimate owner; and

7.4.1.4 any other information related to ownership and control that may be requested by Canada.

If requested by the Contracting Authority, the Contractor must provide this information regarding its subcontractors as well. However, if a subcontractor considers this information to be confidential, the Contractor may meet its obligation by having the subcontractor submit the information directly to the Contracting Authority. Regardless of whether the information is submitted by the Contractor or a subcontractor, Canada agrees to handle this information in accordance with Subsection 22(3) of General Conditions 2030 (General Conditions – Higher Complexity – Services), provided the information has been marked as either confidential or proprietary.

7.4.2 The Contractor must notify the Contracting Authority in writing of:

7.4.2.1 any change of control in the Contractor itself;

7.4.2.2 any change of control in any parent corporation or parent partnership of the Contractor, up to the ultimate owner; and

7.4.2.3 any change of control in any subcontractor performing any part of the Work (including any change of control in any parent corporation or parent partnership of the subcontractor, up to the ultimate owner).

The Contractor must provide this notice by no later than 10 FGWDs after any change of control takes place (or, in the case of a subcontractor, within 15 FGWDs after any change of control takes place). Where possible, Canada requests that the Contractor provide advance notice of any proposed change of control transaction.

7.4.3 In this Article, a "change of control" includes but is not limited to a direct or indirect change in the effective control of the corporation or partnership, whether resulting from a sale, encumbrance, or other disposition of the shares (or any form of partnership units) by any other means. In the case of a joint venture Contractor or subcontractor, this applies to a change of control of any of the joint venture's corporate or partnership members. In the case of a Contractor or subcontractor that is a partnership or limited partnership, this requirement also applies to any corporation or limited partnership that is a partner.

7.4.4 If Canada determines in its sole discretion that a change of control affecting the Contractor (either in the Contractor itself or any of its parents, up to the ultimate owner) may be injurious to national security, Canada may terminate the Contract on a "no-fault" basis by providing notice to the Contractor within 90 days of receiving the notice from the Contractor regarding the change of control. Canada will not be required to provide its reasons for terminating the Contract in relation to the change of control, if Canada determines in its discretion that the disclosure of those reasons could itself be injurious to national security.

7.4.5 If Canada determines in its sole discretion that a change of control affecting a subcontractor (either in the subcontractor itself or any of its parents, up to the ultimate owner) may be injurious to national security, Canada will notify the Contractor in writing of its determination. Canada will not be required to provide the reasons for its determination, if Canada determines in its discretion that the disclosure of those reasons could itself be injurious to national security. The Contractor must, within 90 days of receiving Canada's determination, arrange for another subcontractor, acceptable to Canada, to perform the portion of the Work being performed by the existing subcontractor (or the Contractor must perform this portion of the Work itself). If the Contractor fails to do so within this time period, Canada will be entitled

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to terminate the Contract on a “no-fault” basis by providing notice to the Contractor within 180 days of receiving the original notice from the Contractor regarding the change of control.

7.4.6 In this Article, termination on a “no-fault” basis means that neither party will be liable to the other in connection with the change of control or the resulting termination, and Canada will only be responsible for paying for those services received up to the effective date of the termination.

7.4.7 Despite the foregoing, Canada’s right to terminate on a “no-fault” basis will not apply to circumstances in which there is an internal reorganization that does not affect the ownership of the ultimate parent corporation or parent partnership of the Contractor or subcontractor, as the case may be; that is, Canada does not have a right to terminate the Contract pursuant to this Article where the Contractor or subcontractor continues, at all times, to be controlled, directly or indirectly, by the same ultimate owner. However, in any such case, the notice requirements of this Article still apply.

## 7.5 Optional Goods and Services

7.5.1 The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at Annex B – Basis of Payment of the Contract under the same terms and conditions and at the prices and/or rates stated in the Contract. The option may only be exercised by the Contracting Authority by notice in writing and will be evidenced, for administrative purposes only, through a contract amendment.

7.5.2 The Contracting Authority may exercise the option at any time before the expiry of the Contract by sending a written notice to the Contractor.

## 7.6 Task Authorization

a) **As-and-when-requested Task Authorizations:** The Work or a portion of the Work to be performed under the Contract will be on an "as and when requested basis" using Task Authorizations (TAs). The Work described in each TA must be in accordance with the scope of the Contract. The Contractor must not commence work until a validly issued TA has been issued by Canada and received by the Contractor. The Contractor acknowledges that any work performed before such issuance and receipt will be done at the Contractor's own risk.

In particular, Canada intends for Phase 2, as described in the SOW (Annex A) at ID SOW-1025, to be performed using TAs. Nonetheless, the Contractor must not rely on any assumption that Canada will proceed with any intentions to award work or implement any of the Phase 2 capabilities. Canada will be under no obligation to award any Task Authorizations relating to Phase 2 or any other Work.

b) **Assessment of Resources Proposed at TA Stage:** Processes for issuing, responding to and assessing Task Authorizations are further detailed in Appendices A, B, and C of Annex A.  
**Form and Content of draft Task Authorization:**

- (i) The Technical Authority will provide the Contractor with a description of the task using the "Task Authorization Form for non-DND clients" or "DND 626, Task Authorization Form" or "Task Authorization Form" specified in Annex A.
- (ii) The draft Task Authorization will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The draft TA will also include the applicable basis and method of payment as specified in the Contract.
- (iii) A draft Task Authorization must also contain the following information, if applicable:
  - (A) the contract number;
  - (B) the task number;

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- (C) The date by which the Contractor's response must be received (which will appear in the draft Task Authorization, but not the issued Task Authorization);
- (D) the categories of resources and the number required;
- (E) a description of the work for the task outlining the activities to be performed and identifying any deliverables (such as reports);
- (F) the start and completion dates;
- (G) milestone dates for deliverables and payments (if applicable);
- (H) the number of person-days of effort required;
- (I) whether the work requires on-site activities and the location;
- (J) the language profile of the resources required;
- (K) the level of security clearance required of resources;
- (L) the price payable to the Contractor for performing the task, with an indication of whether it is a firm price or a maximum TA price (and, for maximum price task authorizations, the TA must indicate how the final amount payable will be determined; where the TA does not indicate how the final amount payable will be determined, the amount payable is the amount, up to the maximum, that the Contractor demonstrates was actually worked on the project, by submitting time sheets filled in at the time of the work by the individual resources to support the charges); and
- (M) any other constraints that might affect the completion of the task.

c) **Contractor's Response to Draft Task Authorization:** The Contractor must provide to the Technical Authority, within 2 working days of receiving the draft Task Authorization or within any longer time period specified in the draft TA, the proposed total price for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract. The Contractor's quotation must be based on the rates set out in the Contract. The Contractor will not be paid for preparing or providing its response or for providing other information required to prepare and validly issue the TA.

d) **Task Authorization Limit and Authorities for Validly Issuing Task Authorizations:**

To be validly issued, a TA must include the following signatures:

- (i) for any TA with a value, inclusive of revisions, of less than or equal to \$100K (including Applicable Taxes), the TA must be signed by:
  - (A) the Technical Authority; and
  - (B) a representative from (To be Determined at Contract Award); and
- (ii) for any TA with a value greater than this amount, a TA must include the following signatures:
  - (A) the Technical Authority; and
  - (B) a representative from \_\_\_\_\_ and
  - (C) the Contracting Authority.

Any TA that does not bear the appropriate signatures is not validly issued by Canada. Any work performed by the Contractor without receiving a validly issued TA is done at the Contractor's own risk. If the Contractor receives a TA that is not appropriately signed, the Contractor must notify the Contracting Authority. By providing written notice to the Contractor, the Contracting Authority may suspend the Client's ability to issue TAs at any time, or reduce the dollar value threshold described in sub-article (i) above; any suspension or reduction notice is effective upon receipt.

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- e) **Administration of Task Authorization Process for DND:** The administration of the Task Authorization process will be carried out by DES Proc 2-6-3 or another duly authorized representative of DES Proc. This process includes monitoring, controlling and reporting on expenditures of the contract with task authorizations to the Contracting Authority.
- f) **Periodic Usage Reports:**
- (i) The Contractor must compile and maintain records on its provision of services to the federal government under the Task Authorizations validly issued under the Contract. The Contractor must provide this data to Canada in accordance with the reporting requirements detailed below. If some data is not available, the reason must be indicated. If services are not provided during a given period, the Contractor must still provide a "NIL" report. The data must be submitted on a quarterly basis to the Contracting Authority. From time to time, the Contracting Authority may also require an interim report during a reporting period.
  - (ii) The quarterly periods are defined as follows:
    - (A) 1st quarter: April 1 to June 30;
    - (B) 2nd quarter: July 1 to September 30;
    - (C) 3rd quarter: October 1 to December 31; and
    - (D) 4th quarter: January 1 to March 31.

The data must be submitted to the Contracting Authority no later than 10 calendar days after the end of the reporting period.
  - (iii) Each report must contain the following information for each validly issued TA (as revised):
    - (A) the Task Authorization number and the Task Authorization Revision number(s), if applicable;
    - (B) a title or a brief description of each authorized task;
    - (C) the name, Category of Personnel and level of each resource involved in performing the TA, as applicable;
    - (D) the total estimated cost specified in the validly issued TA of each task, exclusive of Applicable Taxes;
    - (E) the total amount, exclusive of Applicable Taxes, expended to date against each authorized task;
    - (F) the start and completion date for each authorized task; and
    - (G) the active status of each authorized task as applicable (e.g., indicate whether work is in progress or if Canada has cancelled or suspended the TA, etc.).
  - (iv) Each report must also contain the following cumulative information for all the validly issued TAs (as revised):
    - (A) the amount, exclusive of Applicable Taxes, specified in the Contract (as last revised, as applicable) as Canada's total liability to the Contractor for all authorized TAs; and
    - (B) the total amount, exclusive of Applicable Taxes, expended to date against all validly issued tasks.
- g) **Consolidation of TAs for Administrative Purposes:** The Contract may be amended from time to time to reflect all validly issued Task Authorizations to date, to document the Work performed under those TAs for administrative purposes.

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## 7.7 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

### (a) General Conditions:

- (i) 2030 (2020-05-28 ), General Conditions - Higher Complexity - Goods, apply to and form part of the Contract.

### (b) Supplemental General Conditions:

The following Supplemental General Conditions:

- (i) 4003 (2010-08-16), Supplemental General Conditions - Licensed Software;
- (ii) 4004 (2013-04-25), Supplemental General Conditions - Maintenance and Support Services for Licensed Software;

apply to and form part of the Contract.

## 7.8 Security Requirement

The following security requirements (SRCL and related clauses provided by the Contract Security Program) apply and forms part of the Contract.

## 7.9 Contract Period

- (a) **Contract Period:** The "**Contract Period**" is the entire period of time during which the Contractor is obliged to perform the Work, which includes:

- (i) The "**Initial Contract Period**", which begins on the date the Contract is awarded and ends two years later; and
- (ii) The period during which the Contract is extended, if Canada chooses to exercise any options set out in the Contract.

### (b) Option to Extend the Contract:

- (i) The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to eight additional one-year periods under the same terms and conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions set out in the Basis of Payment.
- (ii) Canada may exercise this option at any time by sending a written notice to the Contractor at least 90 calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced, for administrative purposes only, through a contract amendment.

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## 7.10 Authorities

### (a) Contracting Authority

The Contracting Authority for the Contract is:

Name: Cendrella Hansen  
Title: Supply Officer  
Directorate: Applications and Software Procurement Directorate  
Address: 10 Wellington, Gatineau, QC K1A 0S5  
Telephone: (343) 551-5221  
E-mail address: Cendrella.Hansen@tpsgc-pwgsc.gc.ca

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

### (b) Technical Authority

The Technical Authority for the Contract is:

Name: Darren Benedik  
Title: Project Manager, SMMS Replacement Project  
Organization: Department of National Defence – ADM(IM)  
Address: NDHQ (Carling)  
60 Moodie Dr  
Ottawa, ON K1A 0K2  
Telephone: 613-410-5176  
E-mail address: darren.benedik@forces.gc.ca

In this person's absence, the Technical Authority is:

*(to be completed at Contract Award)*

Name:  
Title:  
Organization:  
Address:  
Telephone:  
E-mail address:

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority; however, the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### (c) Procurement Authority and Client Administrative Contact

*(to be completed at Contract Award)*

The Procurement Authority and Client Administrative Contact is:

Name:  
Title:

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Organization:  
Address:  
Facsimile:  
E-mail address:

The Procurement Authority and Client Administrative Contact must receive the original Invoice. All inquiries for request for payment must be made to the Client Administrative Contact.

(d) Contractor's Representative

*(to be completed at Contract Award)*

Name:  
Title:  
Telephone:  
E-mail Address:

### 7.11 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental web sites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

### 7.12 Payment

(a) **Basis of Payment**

(i) **Implementation Services:** For the provision of Implementation Services for the Interim SMMS Core Application, including installation, configuration, testing, transition, deployment, warranty, documentation, and project management. Implementation Services includes the requirements described within the following sections of the SOW (Annex A):

- (A) ID SOW-885 (Section 2);
- (B) ID SOW-909 (Section 3);
- (C) ID SOW-952 (Section 4);
- (D) ID SOW-1085 (Section 5); and
- (E) ID SOW-984 (Section 7).

In accordance with the Contract, Canada will pay the Contractor the firm price set out in Table 1 of Annex B, FOB destination, including all customs duties, Applicable Taxes extra.

(ii) **In-Service Support Services:** For the provision of Interim In-Service Support services for the Interim SMMS Core Application, including planning, documentation, helpdesk support, incident response, updates/patches, and configuration management on an annual basis. In-Service Support Services includes the requirements described within ID SOW-1009 (Section 8) of the SOW at Annex A. Canada will pay the Contractor the firm price set out in Table 2 of Annex B

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- (iii) **Licensed Software Subscription Services:** For the Licensed Software Subscription and associated services and warranty as described in the Standard Clauses and Conditions at paragraph 7.7 above and detailed in the Contract, Canada will pay the Contractor the firm all-inclusive price(s), set out in Table 3 of Annex B, including all custom duties if applicable, and GST/HST extra upon acceptance of Licensed Software Subscription by the Technical Authority and in accordance with the Method of Payment stated herein.
- (iv) **Optional Additional Licensed Software Subscriptions:** For the option to increase the number of Licensed Software Subscriptions that will be serviced under the Licensed Software Subscription Services, if Canada exercises its option, Canada will pay the Contractor the firm all-inclusive lot price(s) set out in Table 5 of Annex B, GST/HST extra. If the number of Licensed Software Subscription are increased during the Contract Period or during any of the Option Periods, Canada will pay the applicable price for the number of Contacts divided by 365, then multiplied by the number of days remaining in that specific period.
- (v) **Option to extend Licensed Software Subscription Services:** If Canada exercises its option to extend the Licensed Software Subscription Services period, Canada will pay the Contractor the firm annual price set out in Table 4 of Annex B, including all customs duties, Applicable Taxes extra.
- (vi) **Professional Services provided under a Task Authorization with a Maximum Price:** For professional services requested by Canada, in accordance with a validly issued Task Authorization, Canada will pay the Contractor, in arrears, up to the Maximum Price for the TA, for actual time worked and any resulting deliverables in accordance with the firm all-inclusive per diem rates set out in Table 6 of Annex B, Basis of Payment, Applicable Taxes extra.
- (vii) **Professional Services provided under a Task Authorization with a Firm Price:** For professional services requested by Canada, in accordance with a validly issued Task Authorization, Canada will pay the Contractor the firm price set out in the Task Authorization (based on the firm, all-inclusive per diem rates set out in Table 6 of Annex B), Applicable Taxes extra.
- (viii) **Travel and Living Expenses – National Joint Council Travel Directive** The Contractor will be reimbursed for its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal and private vehicle provided in Appendices B, C and D of the National Joint Council Travel Directive and with the other provisions of the directive referring to “travellers”, rather than those referring to “employees”. All travel must have the prior authorization of the Technical Authority. All payments are subject to government audit.
- (ix) **Competitive Award:** The Contractor acknowledges that the Contract has been awarded as a result of a competitive process. No additional charges will be allowed to compensate for errors, oversights, misconceptions or underestimates made by the Contractor when bidding for the Contract.
- (x) **Professional Services Rates:** In Canada's experience, bidders from time to time propose rates at the time of bidding for one or more categories of resources that they later refuse to honour, on the basis that these rates do not allow them to recover their own costs and/or make a profit. This denies Canada of the benefit of the awarded contract. If the Contractor does not respond or refuses to provide an individual with the qualifications described in the Contract within the time described in the Contract (or proposes instead to provide someone from an alternate category at a different rate),

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whether or not Canada terminates the Contract as a whole or in part or chooses to exercise any of the rights provided to it under the General Conditions, Canada may impose sanctions or take other measures in accordance with the PWGSC Vendor Performance Corrective Measure Policy (or equivalent) then in effect, which measures may include an assessment that results in conditions applied against the Contractor to be fulfilled before doing further business with Canada, or full debarment of the Contractor from bidding on future requirements.

- (xi) **Purpose of Estimates:** All estimated costs contained in the Contract are included solely for the administrative purposes of Canada and do not represent a commitment on the part of Canada to purchase goods or services in these amounts. Any commitment to purchase specific amounts or values of goods or services is described elsewhere in the Contract.

(b) **Limitation of Expenditure**

- (i) Canada's total liability to the Contractor under the Contract must not exceed the amount set out on page 1 of the Contract, less any Applicable Taxes. With respect to the amount set out on page 1 of the Contract, Customs duties are included and Applicable Taxes are included. Any commitments to purchase specific amounts or values of goods or services are described elsewhere in the Contract.
- (ii) No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
- (A) when it is 75 percent committed, or
- (B) 4 months before the Contract expiry date, or
- (C) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,
- whichever comes first.
- (iii) If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Providing this information does not increase Canada's liability.

(c) **Method of Payment - Multiple Payments**

- (i) H1001C (2008-05-12), Multiple Payments

(d) **Method of Payment for Task Authorizations with a Maximum Price:** For each Task Authorization validly issued under the Contract that contains a maximum price:

- (i) Canada will pay the Contractor no more frequently than once a month in accordance with the Basis of Payment. The Contractor must submit time sheets for each resource showing the days and hours worked to support the charges claimed in the invoice.
- (ii) Once Canada has paid the maximum TA price, Canada will not be required to make any further payment, but the Contractor must complete all the work described in the TA,

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all of which is required to be performed for the maximum TA price. If the work described in the TA is completed in less time than anticipated, and the actual time worked (as supported by the time sheets) at the rates set out in the Contract is less than the maximum TA price, Canada is only required to pay for the time spent performing the work related to that TA.

(e) **Method of Payment for Task Authorizations with a Firm Price - Lump Sum Payment on Completion:** Canada will pay the Contractor upon completion and delivery of all the Work associated with the validly issued Task Authorization in accordance with the payment provisions of the Contract if:

- (i) an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (ii) all such documents have been verified by Canada;
- (iii) the Work delivered has been accepted by Canada.

(f) **Method of Payment - Advance Payment**

- (i) Canada will pay the Contractor in advance for the services if:
  - (A) An accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
  - (B) All such documents have been verified by Canada.
- (ii) Payment in advance does not prevent Canada from exercising any or all potential remedies in relation to this payment or any of the Work, if the Work performed later proves to be unacceptable.

(g) **Electronic Payment of Invoices – Contract**

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

- (a) Visa Acquisition Card;
- (b) MasterCard Acquisition Card;
- (c) Direct Deposit (Domestic and International);
- (d) Electronic Data Interchange (EDI);
- (e) Wire Transfer (International Only);
- (f) Large Value Transfer System (LVTS) (Over \$25M)

(h) **Discretionary Audit**

- (i) C0100C (2010-01-11), Discretionary Audit - Commercial Goods and/or Services

(i) **Payment Credits**

- (i) **Late Delivery:** If the Contractor does not deliver the deliverables or perform the services within the time specified in the Contract, the Contractor must provide a credit to Canada of \$10,000.00 for each calendar day of delay up to a maximum of 10 days, subject to the limitation that the total amount of liquidated damages will not exceed 10% of the price of the Work delivered late.

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- (ii) **Professional Service:** If the Contractor does not provide a required professional services resource that has all the required qualifications within the time prescribed by the Contract or validly issued Task Authorization, the Contractor must credit to Canada an amount equal to the per diem rate (based on a 7.5-hour workday) of the required resource for each day (or partial day) of delay in providing the resource, up to a maximum of 10 days.
- (iii) **Corrective Measures:** If credits are payable under this Article for two consecutive months or for three months in any 12-month period, the Contractor must submit a written action plan describing measures it will implement or actions it will undertake to eliminate the recurrence of the problem. The Contractor will have five working days to deliver the action plan to the Client and the Contracting Authority and 20 working days to rectify the underlying problem.
- (iv) **Termination for Failure to Meet Response Times:** In addition to any other rights it has under the Contract, Canada may terminate the Contract for default in accordance with the General Conditions by giving the Contractor three months' written notice of its intent, if any of the following apply:
  - (A) the total amount of credits for a given monthly billing cycle reach a level of 10% of the total billing for that month; or
  - (B) the corrective measures required of the Contractor described above are not met.

This termination will be effective when the three-month notice period expires, unless Canada determines that the Contractor has implemented the corrective measures to Canada's satisfaction during those three months.
- (v) **Credits Apply during Entire Contract Period:** The Parties agree that the credits apply throughout the Contract Period, including during implementation.
- (vi) **Credits represent Liquidated Damages:** The Parties agree that the credits are liquidated damages and represent their best pre-estimate of the loss to Canada in the event of the applicable failure. No credit is intended to be, nor will it be construed as, a penalty.
- (vii) **Canada's Right to Obtain Payment:** The Parties agree that these credits are a liquidated debt. To collect the credits, Canada has the right to hold back, draw back, deduct or set off from and against any money Canada owes to the Contractor from time to time.
- (viii) **Canada's Rights & Remedies not Limited:** The Parties agree that nothing in this Article limits any other rights or remedies to which Canada is entitled under the Contract (including the right to terminate the Contract for default) or under the law generally.
- (ix) **Audit Rights:** The Contractor's calculation of credits under the Contract is subject to verification by government audit, at the Contracting Authority's discretion, before or after payment is made to the Contractor. The Contractor must cooperate fully with Canada during the conduct of any audit by providing Canada with access to any records and systems that Canada considers necessary to ensure that all credits have been accurately credited to Canada in the Contractor's invoices. If an audit demonstrates that past invoices contained errors in the calculation of the credits, the Contractor must pay to Canada the amount the audit reveals was required to be credited to Canada, plus interest, from the date Canada remitted the excess payment until the date of the refund (the interest rate is the Bank of Canada's discount annual rate of interest in effect on the date the credit was first owed to Canada, plus 1.25% per year). If, as a result of conducting an audit, Canada determines that the Contractor's records or systems for

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identifying, calculating or recording the credits are inadequate, the Contractor must implement any additional measures required by the Contracting Authority.

### 7.13 Invoicing Instructions

- (a) The Contractor must submit invoices in accordance with the information required in the General Conditions.
- (b) The Contractor's invoice must include a separate line item for each subparagraph in the Basis of Payment provision.
- (c) By submitting invoices (other than for any items subject to an advance payment), the Contractor is certifying that the goods and services have been delivered and that all charges are in accordance with the Basis of Payment provision of the Contract, including any charges for work performed by subcontractors.
- (d) The Contractor must provide the original of each invoice to the Client Administrative Contact. On request, the Contractor must provide a copy of any invoices requested by the Contracting Authority.

### 7.14 Certifications and Additional Information

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

### 7.15 Federal Contractors Program for Employment Equity - Default by Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "FCP Limited Eligibility to Bid" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

### 7.16 Applicable Laws

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

### 7.17 Priority of Documents

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

- (a) these Articles of Agreement, including any individual SACC Manual clauses incorporated by reference in these Articles of Agreement;
- (b) supplemental general conditions, in the following order:
  - (i) 4003 (2010-08-16), Licensed Software;
  - (ii) 4004 (2013-04-25), Maintenance and Support Services for Licensed Software;

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- (c) 2030 (2020-05-28), General Conditions - Higher Complexity – Goods ;
- (d) Annex A, Statement of Work;
- (e) Appendices to Annex A;
- (f) Annex B, Basis of Payment
- (g) Annex C, Security Requirements Check List;
- (h) Annex D, Insurance Requirements;
- (i) Annex E, Technical Capability Evaluation
- (j) Annex F, Supply Chain Security information
- (k) the signed Task Authorizations and any Certifications they required;
- (l) Form of performance guarantee, a separate agreement to be signed by \_\_\_\_\_ in accordance with the Article entitled "Performance Guarantee";

**Note to Bidders:** A performance guarantee might be required, for example, as a result of the financial capability review of the Bidder. If a performance guarantee is not required, this sub-article will be deleted at the time of contract award. If the bid solicitation makes the performance guarantee a condition precedent to the award of the contract, it does not need to be included as an annex or listed in the order of priority of documents, because it will already have been signed before contract award.

- (m) the Contractor's bid dated \_\_\_\_\_ (*insert date of bid*) (*If the bid was clarified or amended, insert the time of contract award*), as clarified on \_\_\_\_\_ "or" as amended on \_\_\_\_\_ (*insert date(s) of clarification(s) or amendment(s) if applicable*), not including any software publisher license terms and conditions that may be included in the bid, not including any provisions in the bid with respect to limitations on liability, and not including any terms and conditions incorporated by reference (including by way of a web link) in the bid.

**7.18 Defence Contract**

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

**7.19 Foreign Nationals (Canadian Contractor)**

- (a) SACC Manual clause A2000C (2006-06-16), Foreign Nationals (Canadian Contractor)

**Note to Bidders:** Either this clause or the one that follows, whichever applies (based on whether the successful Bidder is a Canadian Contractor or Foreign Contractor), will be included in any resulting contract

**7.20 Foreign Nationals (Foreign Contractor)**

- (a) SACC Manual clause A2001C (2006-06-16), Foreign Nationals (Foreign Contractor)

**7.21 Insurance Requirements**

- (a) SACC Manual clause G1005C (2016-01-28), Insurance Requirements

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## 7.22 Limitation of Liability - Information Management/Information Technology

- (a) This section applies despite any other provision of the Contract and replaces the section of the general conditions entitled "Liability". Any reference in this section to damages caused by the Contractor also includes damages caused by its employees, as well as its subcontractors, agents, and representatives, and any of their employees. This section applies regardless of whether the claim is based in contract, tort, or another cause of action. The Contractor is not liable to Canada with respect to the performance of or failure to perform the Contract, except as described in this section and in any section of the Contract pre-establishing any liquidated damages. The Contractor is only liable for indirect, special or consequential damages to the extent described in this Article, even if it has been made aware of the potential for those damages.
- (b) **First Party Liability:**
- (i) The Contractor is fully liable for all damages to Canada, including indirect, special or consequential damages, caused by the Contractor's performance or failure to perform the Contract that relate to:
    - (A) any infringement of intellectual property rights to the extent the Contractor breaches the section of the General Conditions entitled "Intellectual Property Infringement and Royalties";
    - (B) physical injury, including death.
  - (ii) The Contractor is liable for all direct damages caused by the Contractor's performance or failure to perform the Contract affecting real or tangible personal property owned, possessed, or occupied by Canada.
  - (iii) Each of the Parties is liable for all direct damages resulting from its breach of confidentiality under the Contract. Each of the Parties is also liable for all indirect, special or consequential damages in respect of its unauthorized disclosure of the other Party's trade secrets (or trade secrets of a third party provided by one Party to another under the Contract) relating to information technology.
  - (iv) The Contractor is liable for all direct damages relating to any encumbrance or claim relating to any portion of the Work for which Canada has made any payment. This does not apply to encumbrances or claims relating to intellectual property rights, which are addressed under (i)(A) above.
  - (v) The Contractor is also liable for any other direct damages to Canada caused by the Contractor's performance or failure to perform the Contract that relate to:
    - (A) any breach of the warranty obligations under the Contract, up to the total amount paid by Canada (including any applicable taxes) for the goods and services affected by the breach of warranty; and
    - (B) any other direct damages, including all identifiable direct costs to Canada associated with re-procuring the Work from another party if the Contract is terminated by Canada either in whole or in part for default, up to an aggregate maximum for this subparagraph (B) of the greater of .25 times the total estimated cost (meaning the dollar amount shown on the first page of the Contract in the cell titled "Total Estimated Cost" or shown on each call-up, purchase order or other document used to order goods or services under this instrument), or \$1,000,000.00.

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In any case, the total liability of the Contractor under subparagraph (v) will not exceed the total estimated cost (as defined above) for the Contract or \$1,000,000.00, whichever is more.

- (vi) If Canada's records or data are harmed as a result of the Contractor's negligence or willful act, the Contractor's only liability is, at the Contractor's own expense, to restore Canada's records and data using the most recent back-up kept by Canada. Canada is responsible for maintaining an adequate back-up of its records and data.

(c) **Third Party Claims:**

- (i) Regardless of whether a third party makes its claim against Canada or the Contractor, each Party agrees that it is liable for any damages that it causes to any third party in connection with the Contract as set out in a settlement agreement or as finally determined by a court of competent jurisdiction, where the court determines that the Parties are jointly and severally liable or that one Party is solely and directly liable to the third party. The amount of the liability will be the amount set out in the settlement agreement or determined by the court to have been the Party's portion of the damages to the third party. No settlement agreement is binding on a Party unless its authorized representative has approved the agreement in writing.
- (ii) If Canada is required, as a result of joint and several liability or joint and solidarily liable, to pay a third party in respect of damages caused by the Contractor, the Contractor must reimburse Canada by the amount finally determined by a court of competent jurisdiction to be the Contractor's portion of the damages to the third party. However, despite Sub-article (i), with respect to special, indirect, and consequential damages of third parties covered by this Section, the Contractor is only liable for reimbursing Canada for the Contractor's portion of those damages that Canada is required by a court to pay to a third party as a result of joint and several liability that relate to the infringement of a third party's intellectual property rights; physical injury of a third party, including death; damages affecting a third party's real or tangible personal property; liens or encumbrances on any portion of the Work; or breach of confidentiality.
- (iii) The Parties are only liable to one another for damages to third parties to the extent described in this Sub-article (c).

**7.23 Joint Venture Contractor**

- (a) The Contractor confirms that the name of the joint venture is \_\_\_\_\_ and that it is comprised of the following members: *[list all the joint venture members named in the Contractor's original bid]*.
- (b) With respect to the relationship among the members of the joint venture Contractor, each member agrees, represents and warrants (as applicable) that:
  - (i) \_\_\_\_\_ has been appointed as the "representative member" of the joint venture Contractor and has full authority to act as agent for each member regarding all matters relating to the Contract;
  - (ii) by giving notice to the representative member, Canada will be considered to have given notice to all the members of the joint venture Contractor; and
  - (iii) all payments made by Canada to the representative member will act as a release by all the members.

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- (c) All the members agree that Canada may terminate the Contract in its discretion if there is a dispute among the members that, in Canada's opinion, affects the performance of the Work in any way.
- (d) All the members are jointly and severally or solidarily liable for the performance of the entire Contract.
- (e) The Contractor acknowledges that any change in the membership of the joint venture (i.e., a change in the number of members or the substitution of another legal entity for an existing member) constitutes an assignment and is subject to the assignment provisions of the General Conditions.
- (f) The Contractor acknowledges that all security and controlled goods requirements in the Contract, if any, apply to each member of the joint venture Contractor.

**Note to Bidders:** This Article will be deleted if the Bidder awarded the contract is not a joint venture. If the contractor is a joint venture, this clause will be completed with information provided in its bid.

(g)

#### 7.24 Licensed Software

- (a) With respect to the provisions of Supplemental General Conditions 4003:

|  |  |
|--|--|
| Licensed Software                                | The Licensed Software, which is defined in 4003, includes all the products offered by the Contractor in its bid, and any other software code required for those products to function in accordance with the Software Documentation and the Specifications, including without limitation all of the following products:<br><br>_____ [this information will be completed at contract award using information in the Contractor's bid]   |
| Type of License being Granted                    | Subscription User License  |
| Number of Users Licensed                         | 110  |
| Option to Purchase Licenses for Additional Users | The Contractor grants to Canada the irrevocable option to purchase licenses for additional Users at the price set out in Annex B on the same terms and conditions as the initial User licenses granted under the Contract. This option may be exercised at any time during the Contract Period, as many times as Canada chooses. This option may only be exercised by the Contracting Authority by notice in writing and will be evidenced, for administrative purposes only, by a contract amendment. |
| Language of Licensed Software                    | The Licensed Software must be delivered in both French and English.  |

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|  |  |
|--|--|
| Media on which Licensed Software must be Delivered | The Licenced Software must be provided via secure Internet Download, unless otherwise mutually agreed between the Contractor and Canada. |
| Term of License                                    | 2 Initial Years  |
| Software Warranty Period                           | For the duration of the license.   |

- (b) **On-going Maintenance of Software Code:** The Contractor must continue to maintain the version of the Licensed Software (i.e., the version or "build" originally licensed under the Contract) as a commercial product (i.e., the Contractor or the software publisher must be continuing to develop new code in respect of the Licensed Software to maintain its functionality, enhance it, and deal with Software Errors) for at least 2 years from the date the Contract is awarded. After that time, if the Contractor or the software publisher decides to discontinue or no longer maintain the then-current version or "build" of the Licensed Software and, instead, decides to provide upgrades to the Licensed Software as part of the Software Support, the Contractor must provide written notice to Canada at least 12 months in advance of the discontinuation.

#### 7.25 Licensed Software Maintenance and Support

- (a) With respect to the provisions of Supplemental General Conditions 4004:

|   |   |
|---|---|
| Licensed Programs   | The Licensed Programs to be supported and maintained are: _____.  |
| Software Support Period   | Software Support Period is the Contract Period  |
| Software Support Period when Additional Licenses added during Contract Period | For any additional licenses purchased in accordance with the Contract, the Software Support Period currently underway will apply to the additional licenses purchased, so that the Software Support Period ends on the same date for all licences supported under the Contract  |
| Option to Extend Software Support Period                                      | The Contractor grants to Canada the irrevocable option(s) to extend the Software Support Period by eight additional 1-year periods, exercisable at any time during the Contract Period. The Contractor agrees that, during the entire Software Support Period, the prices will be those set out in Annex B. The option(s) may only be exercised by the Contracting Authority by notice in writing and will be evidenced, for administrative purposes only, by a contract amendment. |
| Hours for Providing Support Services  | The Contractor's personnel must be available 24 hours per day, seven days per week, inclusive of statutory holidays observed by Canada. Refer to Annex A for additional information.  |

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|  |   |
|--|---|
| Contractor must provide Swift Action Tactical (SWAT) services  | Yes   |
| Contractor must provide to Canada the Software Error corrections and Maintenance Releases and upgrades | Yes   |
| Contractor must keep track of software releases for the purpose of configuration control               | Yes   |
| Contact Information for Accessing the Contractor's Support Services                                    | In accordance with Section 5 of 4004, the Contractor will make its Support Services available through the following:<br>Toll-free _____ Telephone _____ Access: _____<br>_____ Email _____ Access: _____<br>The Contractor must respond to all telephone or email communications (with a live service agent) within 60 minutes of the initial time of the Client or User's initial communication.<br><br><b>[Note to Bidders:</b> to be completed with information from the Contractor at the time of award. Bidders are requested to provide this information in their bids].  |
| Website  | In accordance with Section 5 of 4004, the Contractor must make Support Services available over the Internet. To do so, the Contractor must include, as a minimum, frequently asked questions and on-line software diagnostic routines and support tools. Despite the Hours for Providing Support Services, the Contractor's website must be available to Canada's users 24 hours a day, 365 days a year, and must be available 99% of the time. The Contractor's website address for web support is _____.<br><br><b>[Note to Bidders:</b> to be completed with information from the Contractor at the time of award. Bidders are requested to provide this information in their bids]. |
| Language of Support Services   | The Support Services must be provided in both French and English, based on the choice of the User requesting support.   |

## 7.26 Training

- (a) **Providing Training:** as described within the Statement of Work.
- (b) **Providing Additional Training:**
  - (i) The Contractor must provide classroom and online training, beyond those described within the Statement of Work, on the software products that form part of the Software

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Solution on an "as-and-when-requested" basis during the Contract Period when a Task Authorization for training is issued in accordance with the Contract.

- (ii) The training must be available within 15 working days of the Task Authorization being issued, or as otherwise mutually agreed between Canada and the Contractor.
- (iii) The training, including both the instruction and the course materials, must be provided in the language (English or French) requested in the Task Authorization.
- (iv) If and as requested in the Task Authorization, the Contractor must submit in advance of the first training session the course syllabus and schedule, the training materials, and the names and qualifications of the instructors to the Technical Authority for approval.

#### 7.27 Professional Services - General

- (a) The Contractor must provide professional services on request as specified in this Contract.

All resources provided by the Contractor must meet the qualifications described in the Contract at Appendix F to Annex A (including those relating to previous experience, professional designation, education, language proficiency and security clearance) and must be competent to provide the required services by any delivery dates described in the Contract.

- (b) If the Contractor fails to deliver any deliverable (excluding delivery of an individual) or complete any task described in the Contract on time, in addition to any other rights or remedies available to Canada under the Contract or the law, Canada may notify the Contractor of the deficiency, in which case the Contractor must submit a written plan to the Technical Authority within ten working days detailing the actions that the Contractor will undertake to remedy the deficiency. The Contractor must prepare and implement the plan at its own expense.

#### 7.28 Safeguarding Electronic Media

- (a) Before using them on Canada's equipment, sending them to Canada, or making them available for download by Canada, the Contractor must use a regularly updated product to scan electronically all electronic media used to perform the Work for computer viruses and other coding intended to cause malfunctions. The Contractor must notify Canada if any electronic media used for the Work are found to contain computer viruses or other coding intended to cause malfunctions.
- (b) If magnetically recorded information or documentation is damaged or lost while in the Contractor's care or at any time before it is delivered to Canada in accordance with the Contract, including accidental erasure, the Contractor must immediately replace it at its own expense.

#### 7.29 Representations and Warranties

The Contractor made statements regarding its experience and expertise in its bid that resulted in the award of the Contract and the issuance of TA's/ROC's/SO's. The Contractor represents and warrants that all those statements are true and acknowledges that Canada relied on those statements in awarding the Contract and adding work to it through TA's/ROC's/SO's. The Contractor also represents and warrants that it has, and all its resources and subcontractors that perform the Work have, and at all times during the Contract Period they will have, the skills, qualifications, expertise and experience necessary to perform and manage the Work in accordance with the Contract, and that the Contractor (and any resources or subcontractors it uses) has previously performed similar services for other customers.

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### 7.30 Access to Canada's Property and Facilities

Canada's property, facilities, equipment, documentation, and personnel are not automatically available to the Contractor. If the Contractor would like access to any of these, it is responsible for making a request to the Technical Authority. Unless expressly stated in the Contract, Canada has no obligation to provide any of these to the Contractor. If Canada chooses, in its discretion, to make its property, facilities, equipment, documentation or personnel available to the Contractor to perform the Work, Canada may require an adjustment to the Basis of Payment and additional security requirements may apply.

### 7.31 Implementation

- (a) **Finalization of System Implementation Plan:** Within 10 working days of the Contract being awarded, Canada will provide any comments it has regarding the draft implementation plan submitted by the Contractor as part of its bid. The Contractor must update the System Implementation Plan to reflect Canada's comments and meet the requirements of the SOW (Annex A) as described in ID SOW-1064.

### 7.32 Transition Services at End of Contract Period

The Contractor agrees that, in the period leading up to the end of the Contract Period, it will make all reasonable efforts to assist Canada in the transition from the Contract to a new contract with another supplier. The Contractor agrees that there will be no charge for these services.

### 7.33 Termination for Convenience

With respect to Section 30 of General Conditions 2035, if applicable, or Section 32 of 2030, if applicable, subsection 4 is deleted and replaced with the following subsections 4, 5 and 6:

4. The total of the amounts, to which the Contractor is entitled to be paid under this section, together with any amounts paid, due or becoming due to the Contractor must not exceed the Contract Price.
5. Where the Contracting Authority terminates the entire Contract and the Articles of Agreement include a Minimum Work Guarantee, the total amount to be paid to the Contractor under the Contract will not exceed the greater of
  - (a) the total amount the Contractor may be paid under this section, together with any amounts paid, becoming due other than payable under the Minimum Revenue Guarantee, or due to the Contractor as of the date of termination, or
  - (b) the amount payable under the Minimum Work Guarantee, less any amounts paid, due or otherwise becoming due to the Contractor as of the date of termination.
6. The Contractor will have no claim for damages, compensation, loss of profit, allowance arising out of any termination notice given by Canada under this section except to the extent that this section expressly provides. The Contractor agrees to repay immediately to Canada the portion of any advance payment that is unliquidated at the date of the termination.

### 7.34 Identification Protocol Responsibilities

The Contractor will be responsible for ensuring that each of its agents, representatives or subcontractors (hereinafter referred to as Contractor Representatives) complies with the following self-identification requirements:

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- (a) Contractor Representatives who attend a Government of Canada meeting (whether internal or external to Canada's offices) must identify themselves as Contractor Representatives prior to the commencement of the meeting, to ensure that each meeting participant is aware of the fact that the individual is not an employee of the Government of Canada;
- (b) During the performance of any Work at a Government of Canada site, each Contractor Representative must be clearly identified at all times as being a Contractor Representative; and
- (c) If a Contractor Representative requires the use of the Government of Canada's e-mail system in the performance of the Work, then the individual must clearly identify him or herself as an agent or subcontractor of the Contractor in all electronic mail in the signature block as well as under "Properties." This identification protocol must also be used in all other correspondence, communication, and documentation.
- (d) If Canada determines that the Contractor is in breach of any obligation stated in this Article, upon written notice from Canada the Contractor must submit a written action plan describing corrective measures it will implement to eliminate the recurrence of the problem. The Contractor will have five working days to deliver the action plan to the Client and the Contracting Authority, and twenty working days to rectify the underlying problem.
- (e) In addition to any other rights it has under the Contract, Canada may terminate the Contract for default if the corrective measures required of the Contractor described above are not met.

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**ANNEX A**

**STATEMENT OF WORK**

(See Attached Document)

|   |  |                                      |
|---|--|--------------------------------------|
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## APPENDIX A TO ANNEX A

### TASKING ASSESSMENT PROCEDURE

- 1 Where a requirement for a specific task is identified, a draft Task Authorization Form (TA Form) as attached at Appendix B to Annex A will be provided to the Contractor in accordance with the allocation methodology stated in the Contract Article titled "Allocation of Task Authorizations". Once a draft TA Form is received the Contractor must submit to the Technical Authority a quotation using the rates in Table 6 of Annex B to supply the requested Resource Categories based on the information identified in the TA Form. The quotation must be signed and submitted to Canada within the time for response identified in the TA Form. The Contractor will be given a minimum of 48 hours turnaround time to submit a quotation.
- 2 If and as requested by Canada for Professional Services provided under a Task Authorization with a Maximum Price, the Contractor must supply for each resource that is proposed to participate in executing the Task Authorization: a résumé and the requested security clearance information. This information will be used to substantiate the allocation of individual resources to Resource Categories. The same individual must not be proposed for more than one Resource Category. The résumés must demonstrate that each proposed individual meets the qualification requirements described (including any educational requirements, work experience requirements, and professional designation or membership requirements). With respect to the proposed resources:
  - a) Proposed resources may be employees of the Contractor or employees of a subcontractor, or these individuals may be independent contractors to whom the Contractor would subcontract a portion of the Work. (Refer to Appendix A to Annex A, Certifications).
  - b) For educational requirements for a particular degree, designation or certificate, Canada will only consider educational programmes that were successfully completed by the resource before the date the draft TA was first issued to the Contractor.
  - c) For requirements relating to professional designation or membership, the resource must have the required designation or membership by the time of draft TA issuance and must continue, where applicable, to be a member in good standing of the profession or membership throughout the assessment period and Contract Period. Where the designation or membership must be demonstrated through a certification diploma or degree, such document, must be current, valid and issued by the entity specified in this Contract or if the entity is not specified the issuer must have been an accredited or otherwise recognized body, institution or entity at the time the document was issued.
  - d) For work experience, Canada will not consider experience gained as part of an educational programme, except for experience gained through a formal co-operative programme at a post-secondary institution.
  - e) For any requirements that specify a particular time period (e.g., 2 years) of work experience, Canada will disregard any information about experience if the résumé does not include the relevant dates (month and year) for the experience claimed (i.e., the start date and end date). Canada will evaluate only the duration that the resource actually worked on a project or projects (from his or her start date to end date), instead of the overall start and end date of a project or a combination of projects in which a resource has participated.
  - f) A résumé must not simply indicate the title of the individual's position, but must demonstrate that the resource has the required work experience by explaining the responsibilities and work performed by the individual while in that position. Only listing experience without providing any supporting data to describe responsibilities, duties and relevance to the requirement, or reusing the same wording as the TA Form, will not be considered "demonstrated" for the purposes of the assessment. The Contractor should provide complete details as to where, when, month and year, and how, through which activities/responsibilities, the stated qualifications / experience were obtained. In situations in which a proposed resource worked at the same time on more than one project, the duration of any overlapping time period will be counted only once toward any requirements that relate to the individual's length of experience.
- 3 If requested by Canada, the qualifications and experience of the proposed resources will be assessed against the requirements set out in Appendix F to Annex A to determine each proposed resource's compliance with the mandatory criteria. Canada may request proof of successful completion of formal training, as well as reference information. Canada may conduct reference checks to verify the accuracy of the information provided. If reference checks are done, they will be conducted in writing by e-mail (unless the contact at the reference is only available by telephone). Canada will not consider a mandatory criteria met unless the response is received within 5 working days. On the third working day after sending out the e-mails, if Canada has not received a response, Canada will notify the Contractor by e-mail, to allow the Contractor to contact its reference directly to ensure that it responds to Canada within 5 working days. Wherever information provided by a reference differs from the information supplied by the Contractor, the information supplied by the reference will be the information assessed. A mandatory criteria will not be considered as met if the reference customer is not a customer of the Contractor itself (for example, the customer cannot be the customer of an affiliate of the Contractor). Nor will a mandatory criteria be considered as met if the customer is itself an affiliate or other entity that does not deal at arm's length with the Contractor. Crown references will be accepted.
- 4 During the assessment of the resources proposed, should the references for two or more resources required under that TA either be unavailable or fail to substantiate the required qualifications of the proposed resources to perform the required services, the Contracting Authority may find the quotation to be non-responsive.
- 5 Once the quotation has been accepted by the Technical Authority, the TA Form will be signed by Canada and provided to the Contractor for signature. The TA Form must be appropriately signed by Canada prior to commencement of any work. The Contractor must not commence work until a validly issued TA Form (the Task Authorization) has been received, and any work performed in its absence is done at the Contractor's own risk.



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**APPENDIX B TO ANNEX A  
TASK AUTHORIZATION  
AUTORISATION DES TÂCHES**

|  |   |                                    |
|--|---|------------------------------------|
| All invoices/progress claims must show the reference Contract and Task numbers.  |   | Contract no. – N° du contrat       |
|  |   | Task no. – N° de la tâche          |
| Amendment no. – N° de la modification  | Increase/Decrease – Augmentation/Réduction  | Previous value – Valeur précédente |
| To – À   | <p><b>TO THE CONTRACTOR</b></p> <p>You are requested to supply the following services in accordance with the terms of the above reference contract. Only services included in the contract shall be supplied against this task.</p> <p>Please advise the undersigned if the completion date cannot be met. Invoices/progress claims shall be prepared in accordance with the instructions set out in the contract.</p> <p><b>À L'ENTREPRENEUR</b></p> <p>Vous êtes prié de fournir les services suivants en conformité des termes du contrat mentionné ci-dessus. Seuls les services mentionnés dans le contrat doivent être fournis à l'appui de cette demande.</p> <p>Prière d'aviser le signataire si la livraison ne peut se faire dans les délais prescrits. Les factures doivent être établies selon les instructions énoncées dans le contrat.</p> |                                    |
| Delivery location – Expédiez à   |   |                                    |
| Delivery/Completion date – Date de livraison/d'achèvement  | Date<br>for the Department of National Defence<br>pour le ministère de la Défense nationale   |                                    |
| Contract item no. N° d'article   | Services  | Cost Prix                          |
|  |   |                                    |
|  |   | <b>GST/HS<br/>T<br/>TPS/TVH</b>    |
|  |   | <b>Total</b>                       |
| <p><b>APPLICABLE ONLY TO PWGSC CONTRACTS:</b> The Contract Authority signature is required when the total value of the DND 626 exceeds the threshold specified in the contract.</p> <p><b>NE S'APPLIQUE QU'AUX CONTRATS DE TPSGC :</b> La signature de l'autorité contractante est requise lorsque la valeur totale du formulaire DND 626 est supérieure au seuil précisé dans le contrat.</p> |   |                                    |
| <p>for the Department of Public Works and Government Services<br/>pour le ministère des Travaux publics et services gouvernementaux</p>  |   |                                    |

|   |  |                                      |
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### Instructions for completing DND 626 - Task Authorization

**Contract no.**

Enter the PWGSC contract number in full.

**Task no.**

Enter the sequential Task number.

**Amendment no.**

Enter the amendment number when the original Task is amended to change the scope or the value.

**Increase/Decrease**

Enter the increase or decrease total dollar amount including taxes.

**Previous value**

Enter the previous total dollar amount including taxes.

**To**

Name of the contractor.

**Delivery location**

Location where the work will be completed, if other than the contractor's location.

**Delivery/Completion date**

Completion date for the task.

**for the Department of National Defence**

Signature of the DND person who has delegated **Authority** for signing DND 626 (level of authority based on the dollar value of the task and the equivalent signing authority in the PAM 1.4). **Note:** the person signing in this block ensures that the work is within the scope of the contract, that sufficient funds remain in the contract to cover this task and that the task is affordable within the Project/Unit budget.

**Services**

Define the requirement briefly (attach the SOW) and identify the cost of the task using the contractor's quote on the level of effort. The Task must use the basis of payment stipulated in the contract. If there are several basis of payment then list here the one(s) that will apply to the task quote (e.g. milestone payments; per diem rates/labour category hourly rates; travel and living rates; firm price/ceiling price, etc.). All the terms and conditions of the contract apply to this Task Authorization and cannot be ignored or amended for this task. Therefore it is not necessary to restate these general contract terms and conditions on the DND 626 Task form.

**Cost**

The cost of the Task broken out into the individual costed items in **Services**.

**GST/HST**

The GST/HST cost as appropriate.

**Total**

The total cost of the task. The contractor may not exceed this amount without the approval of DND indicated on an amended DND 626. The amendment value may not exceed 50% (or the percentage for amendments established in the contract) of the original value of the task authorization. The total cost of a DND 626, including all amendments, may not exceed the funding limit identified in the contract.

**Applicable only to PWGSC contracts**

This block only applies to those Task Authorization contracts awarded by PWGSC. The contract will include a specified threshold for DND sole approval of the DND 626 and a percentage for DND to approve amendments to the original DND 626. Tasks that will exceed these thresholds must be passed to the PWGSC Contracting Authority for review and signature prior to authorizing the contractor to begin work.

**Note:**

Work on the task may not commence prior to the date this form is signed by the DA Authority - for tasks within the DND threshold; and by both DND and PWGSC for those tasks over the DND threshold.

### Instructions pour compléter le formulaire DND 626 - Autorisation des tâches

**N° du contrat**

Inscrivez le numéro du contrat de TPSGC en entier.

**N° de la tâche**

Inscrivez le numéro de tâche séquentiel.

**N° de la modification**

Inscrivez le numéro de modification lorsque la tâche originale est modifiée pour en changer la portée.

**Augmentation/Réduction**

Inscrivez le montant total de l'augmentation ou de la diminution, y compris les taxes.

**Valeur précédente**

Inscrivez le montant total précédent, y compris les taxes.

**À**

Nom de l'entrepreneur.

**Expédiez à**

Endroit où le travail sera effectué, si celui-ci diffère du lieu d'affaires de l'entrepreneur.

**Date de livraison/d'achèvement**

Date d'achèvement de la tâche.

**pour le ministère de la Défense nationale**

Signature du représentant du MDN auquel on a délégué le **pouvoir d'approbation** en ce qui a trait à la signature du formulaire DND 626 (niveau d'autorité basé sur la valeur de la tâche et le signataire autorisé équivalent mentionné dans le MAA 1.4). **Nota :** la personne qui signe cette attache de signature confirme que les travaux respectent la portée du contrat, que suffisamment de fonds sont prévus au contrat pour couvrir cette tâche et que le budget alloué à l'unité ou pour le projet le permet

**Services**

Définissez brièvement le besoin (joignez l'ET) et établissez le coût de la tâche à l'aide de la soumission de l'entrepreneur selon le niveau de difficulté de celle-ci. Les modalités de paiement stipulées dans le contrat s'appliquent à la tâche. Si plusieurs d'entre elles sont prévues, énumérez ici celle/celles qui s'appliquera/ront à la soumission pour la tâche à accomplir (p.ex. acompte fondé sur les étapes franchies; taux quotidien ou taux horaire établi selon la catégorie de main-d'œuvre; frais de déplacement et de séjour; prix fixe ou prix plafond; etc.). Toutes les modalités du contrat s'appliquent à cette autorisation de tâche et ne peuvent être négligées ou modifiées quant à la tâche en question. Il n'est donc pas nécessaire de répéter ces modalités générales afférentes au contrat sur le formulaire DND 626.

**Prix**

Mentionnez le coût de la tâche en le répartissant selon les frais afférents à chaque item mentionné dans la rubrique **Services**.

**TPS/TVH**

Mentionnez le montant de la TPS/TVH, s'il y a lieu.

**Total**

Mentionnez le coût total de la tâche. L'entrepreneur ne peut dépasser ce montant sans l'approbation du MDN, formulaire DND 626 modifié à l'appui. Le coût de la modification ne peut pas être supérieur à 50 p. 100 du montant initial prévu dans l'autorisation de tâche (ou au pourcentage prévu dans le contrat pour les modifications). Le coût total spécifié dans le formulaire DND 626, y compris toutes les modifications, ne peut dépasser le plafond de financement mentionné dans le contrat.

**Ne s'applique qu'aux contrats de TPSGC**

Le présent paragraphe s'applique uniquement aux autorisations de tâche accordées par TPSGC. On inscrira dans le formulaire DND 626 un plafond précis qui ne pourra être approuvé que par le MDN et un pourcentage selon lequel le MDN pourra approuver des modifications au formulaire DND 626 original. Les tâches dont le coût dépasse ces plafonds doivent être soumises à l'autorité contractante de TPSGC pour examen et signature avant qu'on autorise l'entrepreneur à débiter les travaux.

**Nota :**

Les travaux ne peuvent commencer avant la date de signature de ce formulaire par le responsable du MDN, pour les tâches dont le coût est inférieur au plafond établi par le MDN, et par le MDN et TPSGC pour les tâches dont le coût dépasse le plafond établi par le MDN.



|  |   |   |
|--|---|---|
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**4. CERTIFICATION OF LANGUAGE**

The Contractor certifies that the proposed resource(s) in response to this draft Task Authorization is/are fluent in both official languages of Canada (French and English). The individual(s) proposed must be able to communicate orally and in writing in French and English without any assistance and with minimal errors.

\_\_\_\_\_  
Print name of authorized individual & sign above

\_\_\_\_\_  
Date

|   |  |   |
|---|--|---|
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## APPENDIX D TO ANNEX A

### GLOSSARY

#### ***Introduction***

Specific terms, acronyms, and abbreviations used in this SOW are defined herein.

Words that are not listed herein have standard definitions:

- As defined in the Concise Oxford English Dictionary;
- As typically used in Search and Rescue (SAR); and/or
- As commonly used in the English language.

When an acronym or term has two or more definitions, the definition or meaning which matches the context of the statement in which it appears is to be used.

If, in the Contractor's opinion, there exists ambiguity as to the correct interpretation of the definition, the Contractor must seek clarification from Canada.

#### ***Glossary***

|                                    |  |
|------------------------------------|--|
| ATC.....                           | Air Traffic Control                          |
| C/S.....                           | COSPAS-SARSAT                                |
| CCG.....                           | Canadian Coast Guard                         |
| CCGC.....                          | Canadian Coast Guard Cutter                  |
| CG.....                            | Coast Guard                                  |
| DD.....                            | Degrees Decimal of degrees                   |
| DDM.....                           | Degrees Decimals of Minutes                  |
| DMS.....                           | Degrees Minutes Seconds                      |
| DTG.....                           | Date Time Group                              |
| EPIRB.....                         | Emergency Position Indicating Radio Beacon   |
| F/V.....                           | Fishing Vessel                               |
| Ft.....                            | Feet   |
| Full SMMS Core Application.....    | <i>Refer to the SOW at ID SOW-882</i>        |
| GFA.....                           | Graphic Area Forecast                        |
| Interim SMMS Core Application..... | <i>Refer to the SOW at ID SOW-881</i>        |
| LKP.....                           | Last Known Position                          |
| MCTS.....                          | Maritime Communications and Traffic Services |
| METAR.....                         | Meteorological Terminal Air Report           |
| NM/nm.....                         | Nautical Mile                                |
| O/S.....                           | On Scene                                     |
| PIW.....                           | Person in Water                              |

|  |   |   |
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POB ..... Person on Board  
RCAF ..... Royal Canadian Air Force  
S/V ..... Sailing Vessel  
SIT ..... Subject Indicator Type  
SMC ..... SAR Mission Coordinator  
SMMS Core Application ..... *Refer to the SOW at ID SOW-880*  
SMMS Hosting Environment ..... *Refer to the SOW at ID SOW-883*  
SMMS System ..... *Refer to the SOW at ID SOW-884*  
SO ..... Search Object  
SOW ..... Statement of Work - *refer to Annex A*  
Sqn ..... Squadron  
SRR ..... Search and Rescue Region  
SRU ..... Search and Rescue Unit  
TC ..... Transport Canada  
WFS ..... Web Feature Services  
WMS ..... Web Map Services  
WMTS ..... Web Map Tile Service

|   |  |  |
|---|--|--|
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**APPENDIX E TO ANNEX A**

**CAMSAR Vol II sect. 4.02**

***(See Inserted Document)***

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## Chapter 4 SEARCH PLANNING AND EVALUATION CONCEPTS

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### 4.02 Inland Search Planning Methods

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#### Canadian Search Area Definition Method

**4.02.1** Based on historical data, two definitive probability areas have been established. These zones are categorized according to the priority with which they should be searched. The Canadian Search Area Definition (CSAD) method takes into account the variations in known crash positions along track and across track. Those variations are combined, giving rectangular areas within which the crash position is likely to be found.

**4.02.2** Other factors may influence the search area based on known habits of the pilot, aircraft equipment, available navigation aids, weather, equipment, local procedures and other considerations. In 2010 DRDC CORA re-examined the validity of the existing Canadian Search Area Definition (CSAD) methodology using crash data from the 2003-2010 period. For crashes in non-mountainous terrain, the data showed that crash locations tend to be closer to track than previous studies on which current CSAD areas are based. CSAD Area Two, offers minimal additional likelihood of covering crash sites.

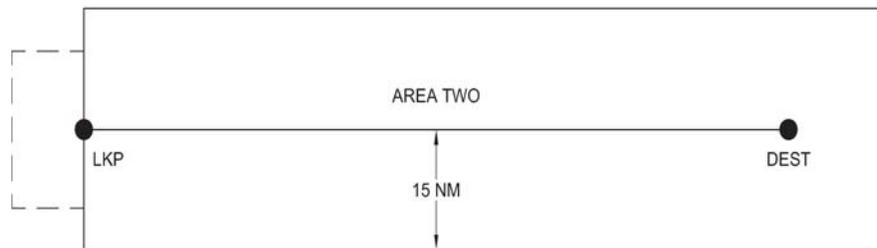
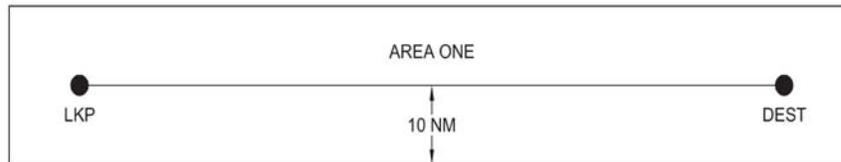
**4.02.3** Notwithstanding, the Search Master will consider all known factors to define a search area best suited for the unique circumstances of a particular search effort and may modify from CSAD in consultation with the Officer in Charge (OIC) of the joint rescue coordination center (JRCC) and the Search and Rescue Region (SRR) Commander.

**4.02.4** The use of the CSAD requires the following information:

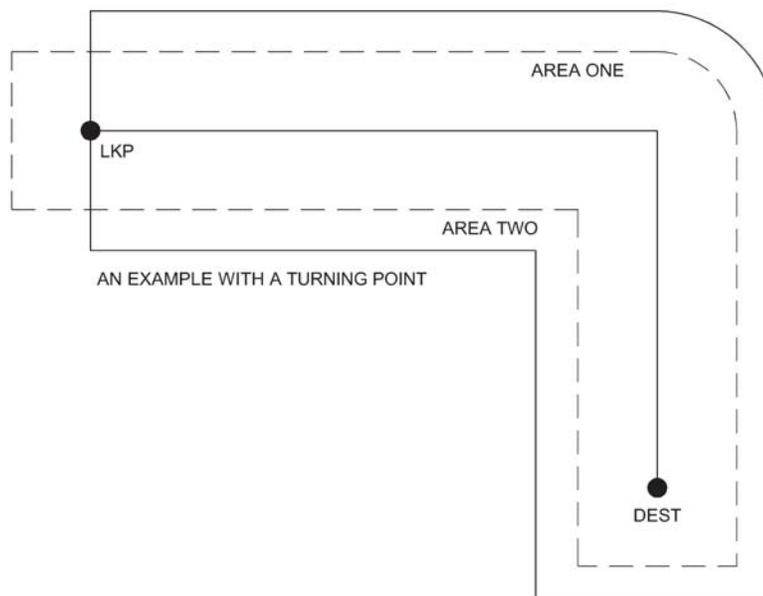
- .1 the last known position (LKP);
- .2 the intended route; and
- .3 the intended destination.

**4.02.5 CSAD Search Areas** – The CSAD method applies to all intended track lengths. The two areas are:

- .1 **AREA ONE** – A rectangle, 10 nautical miles (NM) each side of track, beginning 10 NM before LKP and extending 10 NM beyond destination; and
- .2 **AREA TWO** – A rectangle, 15 NM each side of track, beginning at the LKP and extending 15 NM beyond destination. AREA TWO includes that portion of AREA ONE where overlapping occurs.

**Chapter 4 SEARCH PLANNING AND EVALUATION CONCEPTS****4.02 Inland Search Planning Methods**

**4.02.6 CSAD Turning Point** – Where an en route turning point includes a track direction change of greater than 20°, the outside boundary of each area shall be an arc using the turning point as centre and a radius equal to 10 NM for AREA ONE and 15 NM for AREA TWO.



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## Chapter 4 SEARCH PLANNING AND EVALUATION CONCEPTS

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### 4.02 Inland Search Planning Methods

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**4.02.7** Normally, there is no requirement to adjust the search areas in an inland search. Such adjustment would have to be considered, however, if any of the three basic factors listed in *paragraph 4.02.4* should change during the search.

**4.02.8 Probability of Containment** – The probability of containment (POC), or density of crash positions based on the data, varies in the along-track and off-track directions. Generally, incidents tend to cluster close to the intended track, with the density dropping off sharply as offset increases. There are concentrations of incidents in the first tenth and last tenth of track but very few incidents in the underfly and overfly areas. There also tends to be more incidents in the second half of track than in the first half.

|  |
|--|
| <b>NOTE:</b> <i>Appendix D.01 – CSAD Square Mileage Graph</i> provides a ready reference for determining the square mileage of search areas. |
|--|

**4.02.9 CSAD Search Strategy and Sequence** – There is no single sequence of search types or patterns which will be suitable for all searches. For searches where the CSAD method is used, the following search sequence is suggested, unless circumstances dictate otherwise:

.1 **Phase I**

- .a Carry out track crawls along the missing aircraft's intended track and thoroughly check in the vicinity of the LKP and destination.
- .b Carry out electronic searches to detect any distress beacon signals.
- .c Carry out a search for visual detection aids over the high probability areas, covering 15 NM either side of the missing aircraft's intended track.

.2 **Phase II** – Thoroughly search AREA ONE in the following sequence, for all track lengths:

- .a The last quarter of the intended track, from the track outwards, with equal priority along the track.
- .b The third quarter of the intended track, from the track outwards, with equal priority along the track.
- .c The first quarter of the intended track, from the track outwards, commencing at the LKP.
- .d The second quarter of the intended track, from the track outwards, with equal priority along the track.
- .e The overfly area, expanding from the intended destination.

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## Chapter 4 SEARCH PLANNING AND EVALUATION CONCEPTS

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### 4.02 Inland Search Planning Methods

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- .f The underfly area, expanding from the LKP.
  - .g Upon satisfactory completion of CSAD Area One the SM should re-assess all relevant information prior to proceeding to phase III. Circumstances may preclude the employment of Phase III.
- .3 **Phase III** – Expand the search to AREA TWO and use the same sequence as in Phase II.

#### Mountain Visual Flight Rules Method

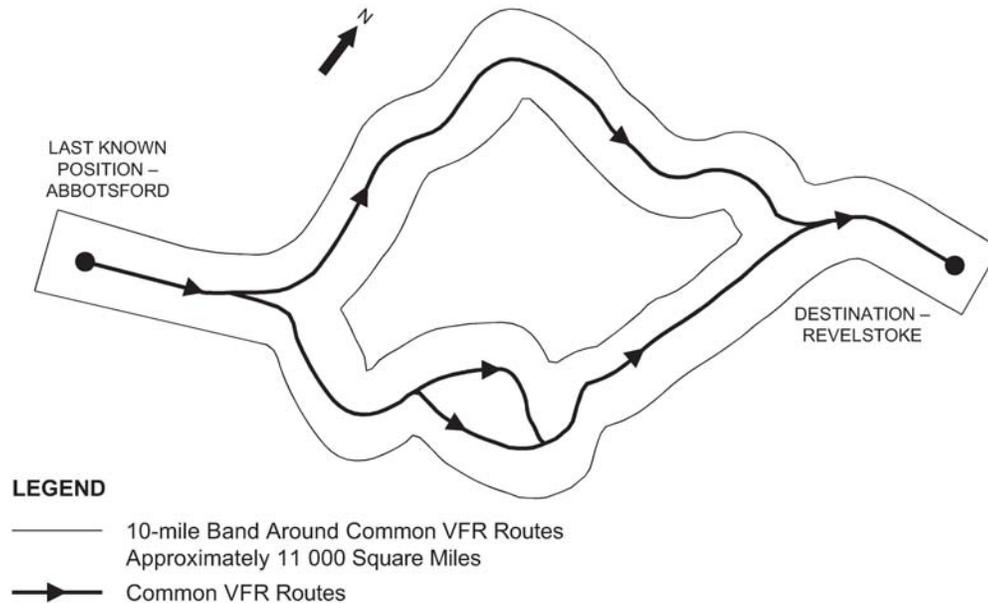
**4.02.10** Canadian search and rescue data involving Visual Flight Rules (VFR) flight plans has revealed distinct differences in the POC between the mountainous regions and other regions of the country. In particular:

- .1 although there tend to be more crash sites between one-half and three-quarters of the way along the intended track, a substantial portion occurs along the other areas of the track;
- .2 very few crash sites are found before the LKP or beyond the intended destination;
- .3 crash sites tend to cluster close to the intended track with the POC decaying sharply as you move away from the track; and
- .4 the minimum search area for a given POC always stretches along the entire length of the track.

## Chapter 4 SEARCH PLANNING AND EVALUATION CONCEPTS

### 4.02 Inland Search Planning Methods

**4.02.11 Mountain VFR Search Areas** – Two probability areas are defined for incidents involving VFR flight plans in mountainous regions:



- .1 **AREA A** – Area stretching along the entire intended track of the missing aircraft, from the LKP to the destination, and extends 5 NM either side of the track. Based on previous data and assuming the intended track is known, this area should include a large portion of crash sites. In order to include incidents where the crash occurs shortly after takeoff or on approach for landing, this area is extended 5 NM before the LKP and 5 NM beyond the destination.
- .2 **AREA B** – Area stretching along the entire intended track of the missing aircraft, from the LKP to the destination. It extends 10 NM either side of the track, and is also extended 10 NM before the LKP and 10 NM beyond the destination.

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**Chapter 4 SEARCH PLANNING AND EVALUATION CONCEPTS**

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**4.02 Inland Search Planning Methods**

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**NOTE:** AREA B also includes all of AREA A.

**NOTE:** If the missing aircraft's intended route is not known with any certainty, all likely routes must be covered or another search planning method used.

**4.02.12 Mountain VFR Search Strategy and Sequence** – Given that an aircraft is missing on a VFR flight in the mountainous regions of Canada and all the preliminary checks have been completed without success, the following procedure is recommended:

.1 **Phase I**

- .a Carry out track crawls along the missing aircraft's intended VFR route and thoroughly check LKP and destination for near take-off/landing incidents.
- .b Carry out electronic searches to detect any distress beacon signals.
- .c Carry out a search for visual detection aids over the high probability areas, covering 10 NM either side of the missing aircraft's intended VFR route. This should include all likely routes if the intended route is unknown.

.2 **Phase II** – Thoroughly search AREA A in the following sequence, for all track lengths. Once again, if the missing aircraft's intended route is not known with any certainty, all likely routes must be covered:

- .a the third quarter of the route, from the track outwards;
- .b the fourth quarter of the route, from the track outwards;
- .c the second quarter of the route, from the track outwards;
- .d the first quarter of the route, from the track outwards;
- .e the overfly area, expanding from the intended destination; and
- .f the underfly area, expanding from the LKP.

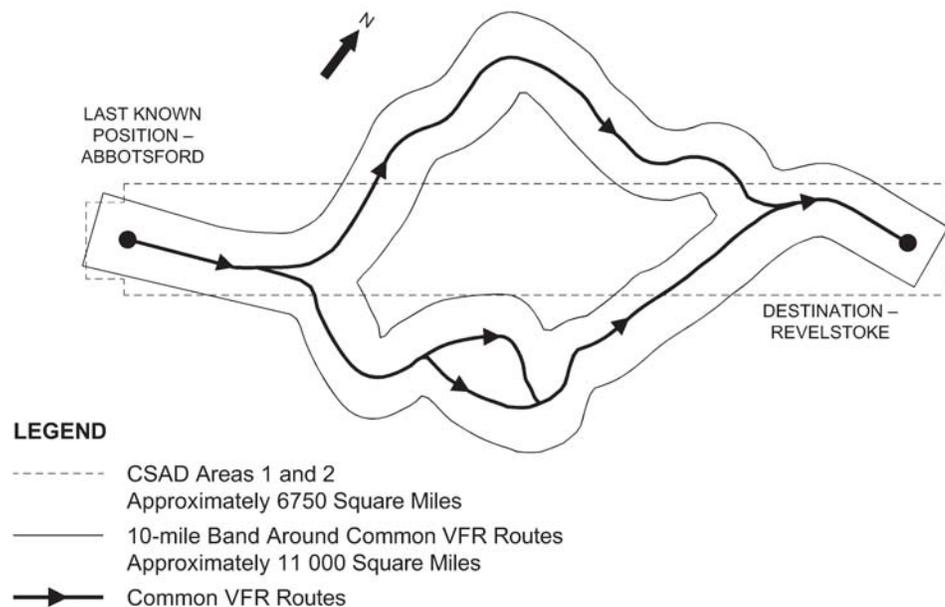
.3 **Phase III** – Expand the search to AREA B, and use the same sequence as in Phase II. Any valleys, dead-end canyons, passes, etc., that may have been taken accidentally by the missing aircraft should also be covered.

## Chapter 4 SEARCH PLANNING AND EVALUATION CONCEPTS

### 4.02 Inland Search Planning Methods

#### Comparisons of CSAD and Mountain VFR Search Areas

**4.02.13** The following figure shows a comparison between the CSAD and the Mountain VFR methods, for an incident involving a flight from Abbotsford to Revelstoke, where more than one common VFR route is possible. The practicality of the Mountain VFR method is demonstrated by the fact that the CSAD method covers only about one-third of the possible VFR routes.



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## APPENDIX F TO ANNEX A

### Professional Services Resource Qualifications

#### APPLICATION/SOFTWARE ARCHITECT

##### Experience Levels

- Junior: < 5 years of experience
- Intermediate: 5- < 10 years of experience
- Senior: 10+ years of experience

##### Responsibilities typically include but are not limited to:

- Develop technical architectures, frameworks and strategies, either for an organization or for a major application area, to meet the business and application requirements
- Identify the policies and requirements that drive out a particular solution
- Analyze and evaluate alternative technology solutions to meet business problems
- Ensures the integration of all aspects of technology solutions
- Monitor industry trends to ensure that solutions fit with government and industry directions for technology
- Analyze functional requirements to identify information, procedures and decision flows
- Evaluate existing procedures and methods, identify and document database content, structure, and application sub-systems, and develop data dictionary
- Define and document interfaces of manual to automated operations within application sub-systems, to external systems and between new and existing systems
- Define input/output sources, including detailed plan for technical design phase, and obtain approval of the system proposal
- Identify and document system specific standards relating to programming, documentation and testing, covering program libraries, data dictionaries, naming conventions, etc.

#### PROGRAMMER/ANALYST

##### Experience Levels

- Junior: < 5 years of experience
- Intermediate: 5- < 10 years of experience
- Senior: 10+ years of experience

##### Responsibilities typically include but are not limited to:

- Create and modify code and software
- Create and modify Graphical User Interface, screens and reports
- Gather and analyze data for the conduct of studies to establish the technical and economic feasibility of proposed computer systems, and for the development of functional and system design specifications
- Design methods and procedures for small computer systems, and sub-system of larger systems
- Develop, test and implement small computer systems, and sub-systems of larger systems
- Produce documentation, forms, manuals, programs, data files, and procedures for systems and/or applications

|   |  |                                      |
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## **BUSINESS ANALYST**

### **Experience Levels**

- Junior: < 5 years of experience
- Intermediate: 5- < 10 years of experience
- Senior: 10+ years of experience

### **Responsibilities typically include but are not limited to:**

- Develop and document statements of requirements for considered alternatives
- Perform business analyses of functional requirements to identify information, procedures, and decision flows
- Evaluate existing procedures and methods, identify and document items such as database content, structure, application subsystems
- Define and document interfaces of manual to automated operations within application subsystems, to external systems, and between new and existing systems
- Establish acceptance test criteria with client
- Support and use the selected departmental methodologies

## **PROJECT MANAGER (in accordance with the SOW at ID SOW-2614)**

### **Experience Level**

8+ years of cumulative experience as a Project Manager responsible for managing one or more technical project(s) related to the development, integration, and deployment of mission critical software. Mission critical software is defined as software or workload which continuous functioning on a 24 x 7 x 365 basis is essential to the survival of a business or an organization.

### **Responsibilities typically include but are not limited to:**

- Primary liaison with the Client
- Manage the project during the development, implementation and operations startup by ensuring that resources are made available and that the project is developed and is fully operational within previously agreed time, cost and performance parameters
- Formulate statements of problems; establishes procedures for the development and implementation of significant, new or modified project elements to solve these problems, and obtains approval thereof
- Define and document the objectives for the project; determine budgetary requirements, the composition, roles and responsibilities and terms of reference for the project team
- Report progress of the project on an ongoing basis and at scheduled points in the life cycle
- Meets in conference with stakeholders and other project managers and states problems in a form capable of being solved
- Prepare plans, charts, tables and diagrams to assist in analyzing or displaying problems; work with a variety of project management tools
- Project sign-off

|   |  |                                      |
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**ANNEX B**

**BASIS OF PAYMENT**

| <b>TABLE 1 – INITIAL REQUIREMENT FOR IMPLEMENTATION SERVICES</b>      |   |  |
|---|---|--|
| <b>Item #<br/>(A)</b>   | <b><u>Initial Deliverables Description</u><br/>(B)</b>  | <b><u>All-Inclusive Firm Lot Price (\$CAD)</u><br/>(C)</b> |
| 1   | For the provision of Implementation Services for the Interim SMMS Core Application, including installation, configuration, testing, transition, deployment, warranty, documentation, and project management | \$   |
| <b>Table 1 Total for Evaluation :<br/>(Applicable Taxes Excluded)</b> |   |  |

| <b>TABLE 1.1 – DELIVERABLE PAYMENT SCHEDULE</b>   |                           |   |  |       |
|---|---------------------------|---|--|-------|
| Payment Schedule for the Implementation and Delivery of the Solution described in Annex B, Statement of Requirements and Annex B, Basis of Payment Table 1. |                           |   |  |       |
| Phase   | Phase Description         | Deliverable Detail  |  | % Pmt |
| <b>Phase 1</b>  | <b>Project Initiation</b> | Begins at Contract Award and lasts through the deployment of a solution fulfilling the Interim SMMS Core Application requirements. The major events are listed in ID SOW-892. | Kick-Off meeting successful in accordance with ID SOW-1040   | 15%   |
|   |                           |   | System Implementation Review meeting successful in accordance with ID SOW-2213                           | 25%   |
|   |                           |   | Delivery and Canada's approval of the System Acceptance Test Report in accordance with ID SOW-1070       | 25%   |
|   |                           |   | Beginning of In-Service Support in accordance with ID SOW-1009 and the approved ISS Plan per ID SOW-1080 | 35%   |

Note: Costs for Phase 2 are not to be included in the bidder's proposal unless they relate to requirements indicated as "Mandatory" in the SOW. Phase 2 is anticipated to commence through one or more Task Authorizations, with the intent of gradually enhancing the SMMS Core Application to fulfill the Full SMMS Core Application requirements. Details on the Phase 2 specifications and requirements, contract deliverables, and schedule will be specified and mutually agreed upon by the Technical Authority (TA) and the Contractor at the completion of Phase 1. Until and unless one or more Task Authorizations are duly issued, Canada will have no obligation to award the Contractor any work related to Phase 2.

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**TABLE 2 - ANNUAL IN-SERVICE SUPPORT – INITIAL AND OPTIONAL YEARS**

For the provision of Interim In-Service Support as described in paragraph 7.12(a)(ii) of the Contract.

| <u>Item No.</u> | <u>Description</u>   | <u>All-Inclusive Firm Price (\$CAD)</u><br>(A) |
|-----------------|--|--|
| 1               | Contract Year 1 (\$CAD)  | \$   |
| 2               | Contract Year 2 (\$CAD)  | \$   |
| 3               | Option Year 1 (\$CAD)  | \$   |
| 4               | Option Year 2 (\$CAD)  | \$   |
| 5               | Option Year 3 (\$CAD)  | \$   |
| 6               | Option Year 4 (\$CAD)  | \$   |
| 7               | Option Year 5 (\$CAD)  | \$   |
| 8               | Option Year 6 (\$CAD)  | \$   |
| 9               | Option Year 7 (\$CAD)  | \$   |
| 10              | Option Year 8 (\$CAD)  | \$   |
|                 | <b>Table 2 Total for Evaluation<br/>(Sum of Column A):<br/>(Applicable Taxes Excluded)</b> | \$   |

**TABLE 3 - INITIAL REQUIREMENT FOR LICENSED SOFTWARE SUBSCRIPTION**

(Price includes Subscription Licensed Software, software maintenance and support, and warranty for the duration of the license)

| <u>ITEM NO.</u> | <u>Description</u><br>For the provision of User Licenses             | <u>Unit of Measure</u> | <u>All-Inclusive Firm Price (\$CAD)</u><br>(A) |
|-----------------|--|------------------------|--|
| 1               | SMMS Core Application as described in Annex A.                       | Price for 110 Users    | \$   |
| 2               | <b>Table 3 Total for Evaluation:<br/>(Applicable Taxes Excluded)</b> |                        |  |

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**TABLE 4 - IRREVOCABLE OPTION YEARS FOR LICENSED SOFTWARE SUBSCRIPTION**

| Item No. | Description<br>Option to extend the period of the Contract for the provision of Licensed Software Subscription for the irrevocable option years including software maintenance and support, and warranty. | Unit of Measure     | Option Year 1  | Option Year 2  | Option Year 3  | Option Year 4  | Option Year 5  | Option Year 6  | Option Year 7  | Option Year 8  |
|----------|---|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|          |   |                     | (\$CAD)<br>(A) | (\$CAD)<br>(B) | (\$CAD)<br>(C) | (\$CAD)<br>(D) | (\$CAD)<br>(E) | (\$CAD)<br>(F) | (\$CAD)<br>(G) | (\$CAD)<br>(H) |
| 1        | SMMS Core Application as described in Annex A.  | Price for 110 Users | \$             | \$             | \$             | \$             | \$             | \$             | \$             | \$             |
| 2        | Table 4 Total Price for Evaluation (A1+B1+C1+D1+E1+F1+G1+H1):   |                     | \$             |                |                |                |                |                |                |                |
|          | License Software Subscription Period for Option Year 1: <i>(to be determined)</i> up to and including <i>(to be determined)</i>   |                     |                |                |                |                |                |                |                |                |
|          | License Software Subscription Period for Option Year 2: <i>(to be determined)</i> up to and including <i>(to be determined)</i>   |                     |                |                |                |                |                |                |                |                |
|          | License Software Subscription Period for Option Year 3: <i>(to be determined)</i> up to and including <i>(to be determined)</i>   |                     |                |                |                |                |                |                |                |                |
|          | License Software Subscription Period for Option Year 4: <i>(to be determined)</i> up to and including <i>(to be determined)</i>   |                     |                |                |                |                |                |                |                |                |
|          | License Software Subscription Period for Option Year 5: <i>(to be determined)</i> up to and including <i>(to be determined)</i>   |                     |                |                |                |                |                |                |                |                |
|          | License Software Subscription Period for Option Year 6: <i>(to be determined)</i> up to and including <i>(to be determined)</i>   |                     |                |                |                |                |                |                |                |                |
|          | License Software Subscription Period for Option Year 7: <i>(to be determined)</i> up to and including <i>(to be determined)</i>   |                     |                |                |                |                |                |                |                |                |
|          | License Software Subscription Period for Option Year 8: <i>(to be determined)</i> up to and including <i>(to be determined)</i>   |                     |                |                |                |                |                |                |                |                |

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| TABLE 5 - IRREVOCABLE OPTIONAL ADDITIONAL LICENSED SOFTWARE SUBSCRIPTIONS |   |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|---|---|-----------------|-----------------------------|-----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Item No.  | Description   | Unit of Measure | Contract Year 1 (\$CAD) (A) | Contract Year 2 (\$CAD) (B) | Option Year 1 (\$CAD) (C) | Option Year 2 (\$CAD) (D) | Option Year 3 (\$CAD) (E) | Option Year 4 (\$CAD) (F) | Option Year 5 (\$CAD) (G) | Option Year 6 (\$CAD) (H) | Option Year 7 (\$CAD) (I) | Option Year 8 (\$CAD) (J) |
| 1   | SMMS Core Application as described in Annex A.  | 1               | \$                          | \$                          | \$                        | \$                        | \$                        | \$                        | \$                        | \$                        | \$                        | \$                        |
| 2   | Quantity of Additional User Licenses for Evaluation purposes:   |                 | 50                          | 50                          | 50                        | 50                        | 50                        | 50                        | 50                        | 50                        | 50                        | 50                        |
| 3   | Estimated Total per Year (CAD) (Taxes Excluded):  |                 | \$ (A1 x A2)                | \$ (B1 x B2)                | \$ (C1 x C2)              | \$ (D1 x D2)              | \$ (E1 x E2)              | \$ (F1 x F2)              | \$ (G1 x G2)              | \$ (H1 x H2)              | \$ (I1 x I2)              | \$ (J1 x J2)              |
| 4   | Table 5 Total Price for Evaluation (A3+B3+C3+D3+E3+F3+G3+H3+I3+J3):   |                 | \$                          |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Contract Year 1: (to be determined) up to and including (to be determined) |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Contract Year 2: (to be determined) up to and including (to be determined) |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Option Year 1: (to be determined) up to and including (to be determined)   |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Option Year 2: (to be determined) up to and including (to be determined)   |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Option Year 3: (to be determined) up to and including (to be determined)   |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Option Year 4: (to be determined) up to and including (to be determined)   |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Option Year 5: (to be determined) up to and including (to be determined)   |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Option Year 6: (to be determined) up to and including (to be determined)   |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Option Year 7: (to be determined) up to and including (to be determined)   |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |
|   | License Software Subscription Period for Option Year 8: (to be determined) up to and including (to be determined)   |                 |                             |                             |                           |                           |                           |                           |                           |                           |                           |                           |

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**TABLE 6 – OPTIONAL PROFESSIONAL SERVICES**

FIRM ALL INCLUSIVE PER DIEM RATES FOR OPTIONAL PROFESSIONAL SERVICES TO BE PROVIDED ON AN "AS AND WHEN REQUESTED BASIS"

| ITEM NO.   | DESCRIPTION                                   | FIRM PER DIEM RATE FOR Professional Service Category<br>(A) | NO. OF DAYS FOR EVALUATION PURPOSES ONLY<br>(B) | EXTENDED PRICE FOR EVALUATION PURPOSES<br>(C) = (A x B) |
|--|---|---|---|---|
| <b>APPLICATION/SOFTWARE ARCHITECT – JUNIOR</b>       |   |   |   |   |
| 1  | Initial Contract Period                       | \$  | 144   | \$  |
| 2  | Option Year 1                                 | \$  | 90  | \$  |
| 3  | Option Year 2                                 | \$  | 36  | \$  |
| 4  | Option Year 3                                 | \$  | 18  | \$  |
| 5  | Option Year 4                                 | \$  | 14  | \$  |
| 6  | Option Year 5                                 | \$  | 14  | \$  |
| 7  | Option Year 6                                 | \$  | 14  | \$  |
| 8  | Option Year 7                                 | \$  | 9   | \$  |
| 9  | Option Year 8                                 | \$  | 9   | \$  |
| 10   | Sub-Total for Evaluation (SUM of C1 to C9):   |   |   | \$  |
| <b>APPLICATION/SOFTWARE ARCHITECT – INTERMEDIATE</b> |   |   |   |   |
| 11   | Initial Contract Period                       | \$  | 240   | \$  |
| 12   | Option Year 1                                 | \$  | 150   | \$  |
| 13   | Option Year 2                                 | \$  | 60  | \$  |
| 14   | Option Year 3                                 | \$  | 30  | \$  |
| 15   | Option Year 4                                 | \$  | 23  | \$  |
| 16   | Option Year 5                                 | \$  | 23  | \$  |
| 17   | Option Year 6                                 | \$  | 23  | \$  |
| 18   | Option Year 7                                 | \$  | 15  | \$  |
| 19   | Option Year 8                                 | \$  | 15  | \$  |
| 20   | Sub-Total for Evaluation (SUM of C11 to C19): |   |   | \$  |
| <b>APPLICATION/SOFTWARE ARCHITECT – SENIOR</b>       |   |   |   |   |
| 21   | Initial Contract Period                       | \$  | 96  | \$  |
| 22   | Option Year 1                                 | \$  | 60  | \$  |
| 23   | Option Year 2                                 | \$  | 24  | \$  |
| 24   | Option Year 3                                 | \$  | 12  | \$  |

|   |  |  |
|---|--|--|
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| Client Ref. No. – N° de réf. De client                | File No. – N° du dossier<br>W8474-218069 | CCC No./ N° CCC – FMS No/ N° VME<br><span style="float: right;">111XL</span> |

|  |   |    |     |    |
|--|---|----|-----|----|
| 25                                       | Option Year 4                                 | \$ | 9   | \$ |
| 26                                       | Option Year 5                                 | \$ | 9   | \$ |
| 27                                       | Option Year 6                                 | \$ | 9   | \$ |
| 28                                       | Option Year 7                                 | \$ | 6   | \$ |
| 29                                       | Option Year 8                                 | \$ | 6   | \$ |
| 30                                       | Sub-Total for Evaluation (SUM of C21 to C29): |    |     | \$ |
| <b>PROGRAMMER/ANALYST – JUNIOR</b>       |   |    |     |    |
| 31                                       | Initial Contract Period                       | \$ | 192 | \$ |
| 32                                       | Option Year 1                                 | \$ | 120 | \$ |
| 33                                       | Option Year 2                                 | \$ | 48  | \$ |
| 34                                       | Option Year 3                                 | \$ | 24  | \$ |
| 35                                       | Option Year 4                                 | \$ | 18  | \$ |
| 36                                       | Option Year 5                                 | \$ | 18  | \$ |
| 37                                       | Option Year 6                                 | \$ | 18  | \$ |
| 38                                       | Option Year 7                                 | \$ | 12  | \$ |
| 39                                       | Option Year 8                                 | \$ | 12  | \$ |
| 40                                       | Sub-Total for Evaluation (SUM of C31 to C39): |    |     | \$ |
| <b>PROGRAMMER/ANALYST – INTERMEDIATE</b> |   |    |     |    |
| 41                                       | Initial Contract Period                       | \$ | 320 | \$ |
| 42                                       | Option Year 1                                 | \$ | 200 | \$ |
| 43                                       | Option Year 2                                 | \$ | 80  | \$ |
| 44                                       | Option Year 3                                 | \$ | 40  | \$ |
| 45                                       | Option Year 4                                 | \$ | 30  | \$ |
| 46                                       | Option Year 5                                 | \$ | 30  | \$ |
| 47                                       | Option Year 6                                 | \$ | 30  | \$ |
| 48                                       | Option Year 7                                 | \$ | 20  | \$ |
| 49                                       | Option Year 8                                 |    | 20  |    |
| 50                                       | Sub-Total for Evaluation (SUM of C41 to C49): |    |     | \$ |
| <b>PROGRAMMER/ANALYST – SENIOR</b>       |   |    |     |    |
| 51                                       | Initial Contract Period                       | \$ | 128 | \$ |
| 52                                       | Option Year 1                                 | \$ | 80  | \$ |
| 53                                       | Option Year 2                                 | \$ | 32  | \$ |
| 54                                       | Option Year 3                                 | \$ | 16  | \$ |
| 55                                       | Option Year 4                                 | \$ | 12  | \$ |
| 56                                       | Option Year 5                                 | \$ | 12  | \$ |

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|  |   |    |     |    |
|--|---|----|-----|----|
| 57                                     | Option Year 6                                 | \$ | 12  | \$ |
| 58                                     | Option Year 7                                 | \$ | 8   | \$ |
| 59                                     | Option Year 8                                 | \$ | 8   | \$ |
| 60                                     | Sub-Total for Evaluation (SUM of C51 to C59): |    |     | \$ |
| <b>BUSINESS ANALYST – JUNIOR</b>       |   |    |     |    |
| 61                                     | Initial Contract Period                       | \$ | 96  | \$ |
| 62                                     | Option Year 1                                 | \$ | 60  | \$ |
| 63                                     | Option Year 2                                 | \$ | 24  | \$ |
| 64                                     | Option Year 3                                 | \$ | 12  | \$ |
| 65                                     | Option Year 4                                 | \$ | 9   | \$ |
| 66                                     | Option Year 5                                 | \$ | 9   | \$ |
| 67                                     | Option Year 6                                 | \$ | 9   | \$ |
| 68                                     | Option Year 7                                 | \$ | 6   | \$ |
| 69                                     | Option Year 8                                 | \$ | 6   | \$ |
| 70                                     | Sub-Total for Evaluation (SUM of C61 to C69): |    |     | \$ |
| <b>BUSINESS ANALYST – INTERMEDIATE</b> |   |    |     |    |
| 71                                     | Initial Contract Period                       | \$ | 160 | \$ |
| 72                                     | Option Year 1                                 | \$ | 100 | \$ |
| 73                                     | Option Year 2                                 | \$ | 40  | \$ |
| 74                                     | Option Year 3                                 | \$ | 20  | \$ |
| 75                                     | Option Year 4                                 | \$ | 15  | \$ |
| 76                                     | Option Year 5                                 | \$ | 15  | \$ |
| 77                                     | Option Year 6                                 | \$ | 15  | \$ |
| 78                                     | Option Year 7                                 | \$ | 10  | \$ |
| 79                                     | Option Year 8                                 | \$ | 10  | \$ |
| 80                                     | Sub-Total for Evaluation (SUM of C71 to C79): |    |     | \$ |
| <b>BUSINESS ANALYST – SENIOR</b>       |   |    |     |    |
| 81                                     | Initial Contract Period                       | \$ | 64  | \$ |
| 82                                     | Option Year 1                                 | \$ | 40  | \$ |
| 83                                     | Option Year 2                                 | \$ | 16  | \$ |
| 84                                     | Option Year 3                                 | \$ | 8   | \$ |
| 85                                     | Option Year 4                                 | \$ | 6   | \$ |
| 86                                     | Option Year 5                                 | \$ | 6   | \$ |
| 87                                     | Option Year 6                                 | \$ | 6   | \$ |
| 88                                     | Option Year 7                                 | \$ | 4   | \$ |
| 89                                     | Option Year 8                                 | \$ | 4   | \$ |

|   |  |   |
|---|--|---|
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|  |   |    |     |    |
|--|---|----|-----|----|
| 90   | Sub-Total for Evaluation (SUM of C81 to C89): |    |     | \$ |
| PROJECT MANAGER (in accordance with the SOW at ID SOW-2614)                                      |   |    |     |    |
| 91   | Initial Contract Period                       | \$ | 160 | \$ |
| 92   | Option Year 1                                 | \$ | 100 | \$ |
| 93   | Option Year 2                                 | \$ | 40  | \$ |
| 94   | Option Year 3                                 | \$ | 20  | \$ |
| 95   | Option Year 4                                 | \$ | 15  | \$ |
| 96   | Option Year 5                                 | \$ | 15  | \$ |
| 97   | Option Year 6                                 | \$ | 15  | \$ |
| 98   | Option Year 7                                 | \$ | 10  | \$ |
| 99   | Option Year 8                                 | \$ | 10  | \$ |
| 100  | Sub-Total for Evaluation (SUM of C91 to C99): |    |     | \$ |
| Total for Table 6 (sum of C10 + C20 + C30 + C40 + C50 + C60 + C70 + C80 + C90 + C100):           |   |    |     | \$ |
| Initial Contract Period: <i>(To Be Determined)</i> up to and including <i>(To Be Determined)</i> |   |    |     |    |
| Option Year 1: <i>(To Be Determined)</i> up to and including <i>(To Be Determined)</i>           |   |    |     |    |
| Option Year 2: <i>(To Be Determined)</i> up to and including <i>(To Be Determined)</i>           |   |    |     |    |
| Option Year 3: <i>(To Be Determined)</i> up to and including <i>(To Be Determined)</i>           |   |    |     |    |
| Option Year 4: <i>(To Be Determined)</i> up to and including <i>(To Be Determined)</i>           |   |    |     |    |
| Option Year 5: <i>(To Be Determined)</i> up to and including <i>(To Be Determined)</i>           |   |    |     |    |
| Option Year 6: <i>(To Be Determined)</i> up to and including <i>(To Be Determined)</i>           |   |    |     |    |
| Option Year 7: <i>(To Be Determined)</i> up to and including <i>(To Be Determined)</i>           |   |    |     |    |
| Option Year 8: <i>(To Be Determined)</i> up to and including <i>(To Be Determined)</i>           |   |    |     |    |

|   |  |   |
|---|--|---|
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| TABLE A - TOTAL BID PRICE (TBP) FOR EVALUATION PURPOSES |   |                               |                 |
|---|---|-------------------------------|-----------------|
| ITEM NO.  | DESCRIPTION   | FORMULA                       | TOTAL PRICE (A) |
| 1   | INITIAL REQUIREMENT FOR IMPLEMENTATION SERVICES                 | Total from Table 1 of Annex B | \$              |
| 2   | ANNUAL IN-SERVICE SUPPORT – INITIAL AND OPTIONAL YEARS          | Total from Table 2 of Annex B | \$              |
| 3   | INITIAL REQUIREMENT FOR LICENSED SOFTWARE SUBSCRIPTION          | Total from Table 3 of Annex B | \$              |
| 4   | IRREVOCABLE OPTION YEARS FOR LICENSED SOFTWARE SUBSCRIPTION     | Total from Table 4 of Annex B | \$              |
| 5   | IRREVOCABLE OPTIONAL ADDITIONAL LICENSED SOFTWARE SUBSCRIPTIONS | Total from Table 5 of Annex B | \$              |
| 6   | OPTIONAL PROFESSIONAL SERVICES                                  | Total from Table 6 of Annex B | \$              |
| <b>Total Bid Price (TBP) - (sum of Column A):</b>       |   |                               | \$              |

|   |  |                                      |
|---|--|--------------------------------------|
| Solicitation No. – N° de l'invitation<br>W8474-218069 | Amd. No – N° de la modif.                | Buyer ID – Id de l'acheteur<br>111XL |
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ANNEX C

SECURITY REQUIREMENTS CHECK LIST



Government of Canada / Gouvernement du Canada

Contract Number / Numéro du contrat

W8474-21-8069B

Security Classification / Classification de sécurité

UNCLASSIFIED

SECURITY REQUIREMENTS CHECK LIST (SRCL)  
LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

| PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE   |   |   |                          |
|--|---|---|--------------------------|
| 1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine   | DND   | 2. Branch or Directorate / Direction générale ou Direction                                    | ADM(IM) / DGIMPD / DPDCS |
| 3. a) Subcontract Number / Numéro du contrat de sous-traitance   |   | 3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant                     |                          |
| 4. Brief Description of Work / Brève description du travail  |   |   |                          |
| Search and Rescue (SAR) Mission Management System (SMMS) Replacement Project   |   |   |                          |
| 5. a) Will the supplier require access to Controlled Goods? / Le fournisseur aura-t-il accès à des marchandises contrôlées?  | <input checked="" type="checkbox"/>                                   | No / Non  | Yes / Oui                |
| 5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? / Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?  | <input checked="" type="checkbox"/>                                   | No / Non  | Yes / Oui                |
| 6. Indicate the type of access required / Indiquer le type d'accès requis  |   |   |                          |
| 6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? / Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) / (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)                                    | <input type="checkbox"/>  | No / Non  | Yes / Oui                |
| 6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. / Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé. | <input checked="" type="checkbox"/>                                   | No / Non  | Yes / Oui                |
| 6. c) Is this a commercial courier or delivery requirement with no overnight storage? / S'agit-il d'un contrat de messagerie ou de livraison commerciale sans entreposage de nuit?   | <input checked="" type="checkbox"/>                                   | No / Non  | Yes / Oui                |
| 7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès   |   |   |                          |
| Canada <input checked="" type="checkbox"/>   | NATO / OTAN <input type="checkbox"/>                                  | Foreign / Étranger <input type="checkbox"/>   |                          |
| 7. b) Release restrictions / Restrictions relatives à la diffusion   |   |   |                          |
| No release restrictions / Aucune restriction relative à la diffusion <input checked="" type="checkbox"/>   | All NATO countries / Tous les pays de l'OTAN <input type="checkbox"/> | No release restrictions / Aucune restriction relative à la diffusion <input type="checkbox"/> |                          |
| Not releasable / À ne pas diffuser <input type="checkbox"/>  | Restricted to: / Limité à: <input type="checkbox"/>                   | Restricted to: / Limité à: <input type="checkbox"/>   |                          |
| Specify country(ies): / Préciser le(s) pays:   | Specify country(ies): / Préciser le(s) pays:                          | Specify country(ies): / Préciser le(s) pays:  |                          |
| 7. c) Level of information / Niveau d'information  |   |   |                          |
| PROTECTED A / PROTÉGÉ A <input checked="" type="checkbox"/>  | NATO UNCLASSIFIED / NATO NON CLASSIFIÉ <input type="checkbox"/>       | PROTECTED A / PROTÉGÉ A <input type="checkbox"/>  |                          |
| PROTECTED B / PROTÉGÉ B <input checked="" type="checkbox"/>  | NATO RESTRICTED / NATO DIFFUSION RESTREINTE <input type="checkbox"/>  | PROTECTED B / PROTÉGÉ B <input type="checkbox"/>  |                          |
| PROTECTED C / PROTÉGÉ C <input type="checkbox"/>   | NATO CONFIDENTIAL / NATO CONFIDENTIEL <input type="checkbox"/>        | PROTECTED C / PROTÉGÉ C <input type="checkbox"/>  |                          |
| CONFIDENTIAL / CONFIDENTIEL <input type="checkbox"/>   | NATO SECRET / NATO SECRET <input type="checkbox"/>                    | CONFIDENTIAL / CONFIDENTIEL <input type="checkbox"/>  |                          |
| SECRET / SECRET <input type="checkbox"/>   | COSMIC TOP SECRET / COSMIC TRÈS SECRET <input type="checkbox"/>       | SECRET / SECRET <input type="checkbox"/>  |                          |
| TOP SECRET / TRÈS SECRET <input type="checkbox"/>  |   | TOP SECRET / TRÈS SECRET <input type="checkbox"/>   |                          |
| TOP SECRET (SIGINT) / TRÈS SECRET (SIGINT) <input type="checkbox"/>  |   | TOP SECRET (SIGINT) / TRÈS SECRET (SIGINT) <input type="checkbox"/>                           |                          |

TBS/SCT 350-103(2004/12)

Security Classification / Classification de sécurité

UNCLASSIFIED



|  |   |   |
|--|---|---|
| <b>Solicitation No. – N° de l'invitation</b><br>W8474-218069 | <b>Amd. No – N° de la modif.</b>                | <b>Buyer ID – Id de l'acheteur</b><br>111XL |
| <b>Client Ref. No. – N° de réf. De client</b>                | <b>File No. – N° du dossier</b><br>W8474-218069 | <b>CCC No./ N° CCC – FMS No/ N° VME</b>     |



Government of Canada / Gouvernement du Canada

Contract Number / Numéro du contrat

**W8474-21-8069B**

Security Classification / Classification de sécurité  
UNCLASSIFIED

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?  
Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS?  No / Yes / Non / Oui
- If Yes, indicate the level of sensitivity:  
Dans l'affirmative, indiquer le niveau de sensibilité :
9. Will the supplier require access to extremely sensitive INFOSEC information or assets?  
Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate?  No / Yes / Non / Oui

Short Title(s) of material / Titre(s) abrégé(s) du matériel :  
Document Number / Numéro du document :

**PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)**

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

- |   |   |   |  |
|---|---|---|--|
| <input checked="" type="checkbox"/> RELIABILITY STATUS<br>COTE DE FIABILITÉ | <input type="checkbox"/> CONFIDENTIAL<br>CONFIDENTIEL           | <input type="checkbox"/> SECRET<br>SECRET           | <input type="checkbox"/> TOP SECRET<br>TRÈS SECRET               |
| <input type="checkbox"/> TOP SECRET – SIGINT<br>TRÈS SECRET – SIGINT        | <input type="checkbox"/> NATO CONFIDENTIAL<br>NATO CONFIDENTIEL | <input type="checkbox"/> NATO SECRET<br>NATO SECRET | <input type="checkbox"/> COSMIC TOP SECRET<br>COSMIC TRÈS SECRET |
| <input type="checkbox"/> SITE ACCESS<br>ACCÈS AUX EMPLACEMENTS              |   |   |  |

Special comments:  
Commentaires spéciaux :

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.  
REMARQUE : Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the  
Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail?  No / Yes / Non / Oui
- If Yes, will unscreened personnel be escorted?  
Dans l'affirmative, le personnel en question sera-t-il escorté?  No / Yes / Non / Oui

**PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)**  
**INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS**

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?  
Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS?  No / Yes / Non / Oui
11. b) Will the supplier be required to safeguard COMSEC information or  
Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC?  No / Yes / Non / Oui

**PRODUCTION**

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?  
Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ?  No / Yes / Non / Oui

**INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)**

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?  
Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS?  No / Yes / Non / Oui
11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?  
Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale?  No / Yes / Non / Oui

TBS/SCT 350-103(2004/12)

Security Classification / Classification de sécurité  
**UNCLASSIFIED**

**Canada**

101

W8474-21-8069B

Security Classification /  
Classification de sécurité  
UNCLASSIFIED

**PART C - (continued) / PARTIE C - (suite)**

For users completing the form **manually** use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.  
Les utilisateurs qui remplissent le formulaire **manuellement** doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form **online** (via the Internet), the summary chart is automatically populated by your responses to previous questions.

| Category<br>Catégorie         | PROTECTED<br>PROTÉGÉ |   |        | CLASSIFIED<br>CLASSIFIÉ |        |              | NATO       |              |        | COMSEC       |   |   |        |                 |
|-------------------------------|----------------------|---|--------|-------------------------|--------|--------------|------------|--------------|--------|--------------|---|---|--------|-----------------|
|                               | S                    | C | SECRET | CONFIDENTIAL            | SECRET | CONFIDENTIAL | RESTRICTED | CONFIDENTIAL | SECRET | CONFIDENTIAL | S | C | SECRET |                 |
| Information<br>Renseignements |                      |   |        |                         |        |              |            |              |        |              |   |   |        | Assets<br>Biens |
| Production                    |                      |   |        |                         |        |              |            |              |        |              |   |   |        |                 |
| IT Media /                    |                      |   |        |                         |        |              |            |              |        |              |   |   |        |                 |
| Support T.I.                  |                      |   |        |                         |        |              |            |              |        |              |   |   |        |                 |

Dans le cas des utilisateurs qui remplissent le formulaire **en ligne** (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

**SUMMARY CHART / TABLEAU RÉCAPITULATIF**

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?  
La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?  No / Oui  Yes / Oui

**If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".**  
**Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée "Classification de sécurité" au haut et au bas du formulaire.**

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?  
La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE?  No / Oui  Yes / Oui

**If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).**  
**Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case**

Solicitation No. – N° de l'invitation  
W8474-218069

Amd. No – N° de la modif.

Buyer ID – Id de l'acheteur

Client Ref. No. – N° de réf. De client  
W8474-218069

File No. – N° du dossier

CCC No./ N° CCC – FMS No/ N° VME  
111XL

## **ANNEX D**

### **INSURANCE REQUIREMENTS**

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

## ANNEX E

### TECHNICAL CAPABILITY EVALUTATION

#### **1 Overview and Information**

##### **1.1 Evaluation Methods**

The technical capability evaluation described herein will be conducted through:

Proposal-Based evaluation: The Proposal-Based evaluation will assess the content of the Bidder's proposal to determine if they have clearly demonstrated that the capability exists within the proposed application. This assessment is focused on the presence of a capability, and not its usability for operators. Passing all requirements assessed through the Proposal Mandatory evaluation method is a pre-condition to proceeding to a Demonstration-Based evaluation. Requirements M36 and M37 will be assessed first, and only if they both pass will the remainder of the requirements be assessed.

Demonstration-Based evaluation: The Demonstration-Based evaluation assesses the solution as demonstrated by the Bidder to determine whether the capability exists to a sufficient extent that it would be usable by operators to conduct SAR mission coordination in accordance with Canada's requirements, and to assign a score where applicable. For the demonstration, the Bidder will be required to execute the three (3) scenarios included in Appendix A to this annex.

##### **1.2 Operational Score Evaluation Methodology**

Where applicable, the Operational Score Evaluation methodology mentioned herein is as follows:

(a) Each applicable requirement is evaluated individually by a minimum of five (5) experienced SAR mission coordinators from DND and CCG based on the Bidder's demonstration of their solution. During the demonstration, evaluators and observers will ask questions or explore any areas where the proposed solution is unclear or where additional information would assist in the evaluation. In circumstances where limitations of the demonstration (such as conducting it in a virtual environment, screen size, missing links to external data sources) make it difficult to evaluate a requirement, evaluators will take this into account and evaluate the requirement accordingly.

(b) Following the demonstration, each evaluator will individually assign a score for each requirement based on their analysis and judgment as subject matter experts using the following scale:

2 points: The requirement is implemented in such a way that it results in all related tasks for aeronautical and maritime SAR Mission Coordination in Canada in accordance with national and international standards (as applicable) being accomplished efficiently, taking a minimum number of user actions, and containing no significant workflow idiosyncrasies.

1 point: The requirement is present in the proposed solution as demonstrated, and results in all related tasks for aeronautical and maritime SAR Mission Coordination in Canada in accordance with national and international standards (as applicable) being usable, although there may be some minor deficiencies that include, but are not limited to, one or more of the following:

- (i) The user actions required to use the capability have some inefficiencies that do not lead to significant delays in executing the related tasks;

(ii) Operators can carry out all key related tasks of SAR mission coordination, but some aspects present difficulties.

0 points: One of the following circumstances apply:

(i) The capability is present in the proposed solution as demonstrated, however the requirement is not met as the proposed application has major deficiencies to the extent that it is not usable by operators for the purpose of SAR mission coordination in Canada for aeronautical and maritime SAR (as applicable) in accordance with national and international standards. Deficiencies in features or usability that could cause a requirement to be unusable include, but are not limited to, one or more of the following:

- The user actions required to use the capability are inefficient, laborious, and/or time-consuming, leading to significant delays in executing the related tasks;
- The capability does not meet the minimum operational requirement to the extent that related tasks cannot be accomplished, or related tasks require cumbersome workarounds;
- Key incident information fields are only accessible through user interface elements that are only available by navigating through two (2) or more menus or sub-menus, or are otherwise not directly visible to users from the same screen;

(ii) The capability is substantively absent from the proposed solution as demonstrated, and it is not usable by operators for the purpose of SAR mission coordination in Canada for aeronautical and maritime SAR (as applicable) in accordance with national and international standards. This includes any aspect of the solution that necessitates the use of non-integrated applications to process, store, or display information necessary for prosecuting SAR cases, and thus contravenes requirement M35.

(c) Following individual evaluation, the highest score and the lowest score among all evaluators will be discarded, and the scores from the remaining evaluators will be averaged to establish a consolidated score.

(d) A mandatory requirement will be considered compliant if the consolidated score meets the minimum threshold identified for that requirement; otherwise, the mandatory requirement will be considered non-compliant.

(e) The overall score for a rated requirement will be determined by multiplying the consolidated score obtained through the Operational Score Evaluation by the weight of that requirement.

### **1.3 User Actions**

When used herein, a single "user action" is defined as any of the following:

- i) Clicking on a button with a pointer (e.g., clicking with a mouse pointer on a "Save" button is one user action);
- ii) Typing text in a textbox (e.g., entering an incident name into the relevant field is one action);
- iii) Selecting an item from a drop-down menu or list, including any scrolling action needed to find the item (e.g., finding and clicking on a vessel type from a drop-down is one action);
- iv) Opening a secondary menu (e.g., accessing a drop-down menu or sub-item on a menu or list);
- v) Using a keyboard hotkey combination (e.g., pressing Control-S is one action); and

vi) Scrolling with a mouse/pointer wheel.

At this time Canada does not support touch screen and tactile input methods. The demonstration should not encompass or require the use of such technologies.

## 2 Evaluation Criteria

### 2.1 Proposal-Based Evaluation - First Pass

The following requirements will be assessed on a first pass through the Proposal-Based evaluation.

| Requirement   | Evaluation Criteria   |
|---|---|
| <b>2.1.1 Technical Requirements</b>   |   |
| <p>M36 The application must be in use at the time of bid submission with at least one other nation for both aeronautical and maritime SAR in a recognized Rescue Coordination Centre (RCC) for the purpose of SAR mission coordination, in accordance with international standards set out by the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO), and their IAMSAR Manual Volume 1.</p> | <p>(a) The bidder must provide a description of which nation(s) use the proposed solution, and must include: the specific application version number in use by the nation(s), and the overall concept of operations for the nation(s) so that it is clear whether the solution is used in accordance with this requirement; and</p> <p>(b) The bidder must provide one questionnaire (found at Appendix B to this annex) for each of the nations described in accordance with subparagraph (a) above that is duly completed and signed by an appropriate individual from that nation, and must include all of the following information: signatory's position and contact information (telephone number or email address, or both); and the version number of the application that they use.</p> <p>This requirement is considered compliant if the responses to the questionnaire(s) provided in accordance with subparagraph (b) above demonstrate that the nation uses the same substantive version of the application (e.g., the same major version number) and they make use, at a minimum, of the following features listed in the questionnaire:</p> <ul style="list-style-type: none"> <li>- Logging;</li> <li>- COSPAS-SARSAT SIT message reception and mapping;</li> <li>- Search Object information gathering;</li> <li>- Search and Rescue Unit Management; and;</li> <li>- Incident data gathering.</li> </ul> |

| Requirement   | Evaluation Criteria   |
|---|---|
| M37 The application must not require any development or integration work at the time of bid submission to meet Canada's requirements and be ready for deployment for operational use. | The requirement is considered compliant if the proposal includes positive confirmation that all of the requirements in this evaluation and the mandatory requirements for the Interim SMMS Core Application in the Statement of Work (SOW) at ID SOW-1127 are currently present in the application, and would not require any development or integration work as of the time of bid submission to be compliant. |

## 2.2 Proposal-Based Evaluation - Second Pass

The following requirements will be assessed on a second pass through the Proposal-Based evaluation.

Each requirement will be considered compliant if the proposal demonstrates that the associated capability exists. The Bidder must describe how the requirement is present in the application through a detailed explanation; this would typically be supported with screen shots and reference training material as appropriate.

| Requirement  |
|--|
| <b>2.2.1 Logging</b>   |
| M1 The application must allow log creation.  |
| M2 The application must allow incident creation from initial log entry.  |
| <b>2.2.2 COSPAS-SARSAT</b>   |
| M3 The application must accept and display the Search and Rescue Satellite-Aided Tracking (COSPAS-SARSAT) data from the Canadian Mission Control Centre (CMCC) and the United States Mission Control Centre (USMCC) in accordance with COSPAS-SARSAT Mission Control Centres Standard Interface Description (C/S A.002). |
| M4 The application must treat COSPAS-SARSAT SIT messages as persistent entities separate from log entries.   |
| M5 The application must allow SIT alert messaging limitation based on geographical boundaries.   |
| <b>2.2.3 Search Object</b>   |
| M6 The application must be able to differentiate and manage all identifiable information of Search Objects of Air, Marine, and Humanitarian type.  |
| M7 The application must have a means of tracking individual Persons in Distress.   |
| M8 The application must have a means of tracking medical condition for Persons in Distress.  |

| Requirement  |
|--|
| <b>2.2.4 Sightings and Detections</b>  |
| M9 The application must allow the management of individual sightings and detections as persistent entities separate from incident and Rescue Centre multi-purpose Logs.          |
| M10 The application must allow the creation, edit, and deletion of electronic sightings (i.e. calculate radio horizon).  |
| M11 The application must display the calculated radio horizon onto a GIS map.  |
| <b>2.2.5 Contacts</b>  |
| M12 The application must allow users to create, edit, and manage contact information that is accessible throughout the application.  |
| M13 The application must allow users to create, edit, and manage incident-specific contact information.  |
| <b>2.2.6 Routing</b>   |
| M14 The application must allow users to generate multiple incident-specific routes.  |
| M15 The application must allow users to manually (textually) enter or designate route waypoints for any object of interest within an incident environment.                       |
| M16 The application must allow users to graphically display incident routes and waypoints for any object of interest within an incident environment.                             |
| M17 The application must allow users to manually enter or designate Date Time Group for route waypoints.   |
| <b>2.2.7 SAR Resource Unit Management</b>  |
| M18 The application must have a dedicated means of creating, tracking, editing, and managing primary and secondary SAR resources that are specific to individual Rescue Centres. |
| M19 The application must provide a dedicated incident-specific means of tracking, editing, and deleting key SAR Resource Unit mission timings.                                   |
| M20 The application must allow temporary assignment of non-tracked resources to incidents.   |
| <b>2.2.8 Incident Management</b>   |
| M21 The application must manage and display active, inactive, and closed SAR incidents.  |
| M22 The application must allow incidents to be filterable and sortable per rescue centre, displaying minimal tombstone data and incident summary for a selected incident.        |
| M23 The application must allow incident creation without log creation.   |
| <b>2.2.9 Weather</b>   |
| M24 The application must have an incident-specific weather gathering area separate from log entries.   |
| M25 The application must allow users to enter any number of incident-specific weather information from various sources and methods of input.                                     |
| M26 The application must allow users to parse key weather information within weather data.   |

| Requirement  |
|--|
| <b>2.2.10 Search Areas and Patterns</b>  |
| M27 The application must allow the creation, display, and edit of SAR Search areas and SAR Patterns as described in:<br>- The IAMSAR Volume II; and<br>- The CAMSAR Volume II Section 4.02.<br><br>Note: The relevant excerpt of the CAMSAR is included as Appendix E to Annex A.  |
| <b>2.2.11 GIS Display</b>  |
| M28 The application must have an integrated global GIS map.  |
| M29 The application must have an integrated GIS map for each incident.   |
| M30 The application must graphically display all pertinent static and dynamic SAR incident information.  |
| M31 The application's GIS must have common GIS tools and functions that allow users to manipulate the map.   |
| M32 The application must have an integrated gazetteer that allows users to geographically locate place names on the GIS map.   |
| <b>2.2.12 Survivability</b>  |
| M33 The application must have a means of producing a survivability estimate based on parameters and environmental factors for individual persons separate from the search object.  |
| <b>2.2.13 Situational Awareness</b>  |
| M34 The application must allow users to gather, record, interpret, and disseminate SAR incident information.   |
| M35 The application must be internally integrated and not force duplication of workload.<br><br>Note: An example of a circumstance which will cause the proposed solution to fail to meet this requirement includes requiring an external application to meet any of the requirements herein, where:<br>- The application is not provided with the proposed capability;<br>- User actions are needed to manipulate the external application; or<br>- The exchange of data between the proposed solution and the external application is not automated. |

### 2.3 Demonstration-Based Evaluation - Mandatory Criteria

The following requirements will be assessed through the Demonstration-Based evaluation to make a pass/fail determination on whether each requirement is compliant.

| Requirement   | Evaluation Criteria  | Additional Information   |
|---|--|--|
| <b>2.3.1 Logging</b>  |  |  |
| M1 The application must allow rapid log creation.                       | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p>  | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>i) A log can be created using a hotkey shortcut or a single button that is easily accessible from the user interface in all contexts from within the application;</li> <li>ii) When entering the log data, entry is facilitated by auto-populating key fields when possible, and permits completion of the log with few simple user actions;</li> <li>iii) DTG field is prepopulated and user editable;</li> <li>iv) Key SAR incident case events (e.g. Case creation, asset paging/tasking/release, LKP set, case closure, etc.) are automatically logged.</li> </ul> |
| M2 The application must allow incident creation from initial log entry. | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- Upon creating an initial log entry, the application provides a means to create a new incident from that log entry with four (4) or fewer user actions; and</li> <li>- Upon incident creation, the log entry is automatically associated to the incident without any further user actions being necessary.</li> </ul> |  |

| Requirement   | Evaluation Criteria   | Additional Information  |
|---|---|---|
| <b>2.3.2 COSPAS-SARSAT</b>  |   |   |
| <p>M3 The application must accept and display the Search and Rescue Satellite-Aided Tracking (COSPAS-SARSAT) data from the Canadian Mission Control Centre (CMCC) and the United States Mission Control Centre (USMCC) in accordance with COSPAS-SARSAT Mission Control Centres Standard Interface Description (C/S A.002).</p> | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- Upon a SIT message being sent to the application, the application automatically: <ul style="list-style-type: none"> <li>- Downloads the message;</li> <li>- Alerts operators through visual and auditory alarms that a new message has arrived;</li> <li>- Displays the necessary message information to the correct rescue centre;</li> <li>- Graphically displays SIT beacon alert messages onto the application GIS; and,</li> <li>- Stores the message accordingly for future review; and</li> </ul> </li> <li>- All SIT message content is displayed to users as per C/S A.002.</li> </ul> | <p>In this context:</p> <ul style="list-style-type: none"> <li>- “Display” is meant to be inclusive to the visual displaying of the message information as well as the activation of distinct and distinctive audio alarm sounds; and</li> <li>- Included in the “display” functionality is that the application displays an alert location icon onto the application GIS.</li> </ul>   |
| <p>M4 The application must treat COSPAS-SARSAT SIT messages as persistent entities separate from log entries.</p>   | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p>   | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Upon acknowledgement of a newly arrived SIT message, users can review past messages from a dedicated area within the application;</li> <li>- Storage of C/S messages in logs, chats, or other areas meant to carry out unrelated functions will be deemed non-compliant;</li> <li>- SIT messages visible in their dedicated area allow for rapid assignment and reassignment of messages to incidents.</li> </ul> |

| Requirement  | Evaluation Criteria   | Additional Information   |
|--|---|--|
| <p>M5 The application must allow SIT alert messaging limitation based on geographical boundaries.</p>  | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- Upon reception of COSPAS-SARSAT messages, the application parses the appropriate geographical references in the message and displays it only to users who are logged into that region's rescue centre; and</li> <li>- The application includes an overlap (buffer) of rescue region border area.</li> </ul>   | <p>Bidders are to clearly describe the logic used for displaying un-located beacons.</p>   |
| <p><b>2.3.3 Search Object</b></p>  |   |  |
| <p>M6 The application must be able to differentiate and manage all identifiable information of Search Objects of Air, Marine, and Humanitarian type.</p> | <p>The requirement is considered compliant if there is a distinct means of capturing all the information regarding the following in dedicated sections or fields (one section or field per bullet) for each Search Object (SO):</p> <ul style="list-style-type: none"> <li>- SO Identification;</li> <li>- SO Owner/Operator information;</li> <li>- SO Dimensions;</li> <li>- SO Colour/Markings;</li> <li>- SO Motor/Engine details;</li> <li>- SO Communications Equipment on board;</li> <li>- SO Navigation Equipment carried; and</li> <li>- SO Safety/Survival Equipment available.</li> </ul> |  |
| <p>M7 The application must have a means of tracking individual Persons in Distress.</p>  | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p>   | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Means of tabulating individual occupants of a distressed craft;</li> <li>- Pertinent occupant information is displayed in a useful way to assist operators in determining the status of the occupants throughout the incident life.</li> </ul> |

| Requirement  | Evaluation Criteria  | Additional Information   |
|--|--|--|
| <p>M8 The application must have a means of tracking medical condition for Persons in Distress.</p>   | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p>  | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- An easily accessed, dedicated area for the input, update, and review of medical information pertinent to individuals in distress;</li> <li>- Have this area integrated to auto-fill based on similar fields having been filed in in other areas of the application.</li> </ul> |
| <p><b>2.3.4 Sightings and Detections</b></p>   |  |  |
| <p>M9 The application must allow the management of individual sightings and detections as persistent entities separate from incident and Rescue Centre multi-purpose Logs.</p> | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- The application has a dedicated means of cataloguing/tabulating sightings and sighting information outside of log entries; and</li> <li>- Sightings can be assigned to incidents from this catalogue.</li> </ul>   |  |
| <p>M10 The application must allow the creation, edit, and deletion of electronic sightings (i.e. calculate radio horizon).</p>   | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- Upon reception of information regarding a distress signal being detected by means of radio (eg heard by aircraft on 121.5MHz band), operators can enter key information (reporting station name, position, altitude) from which a theoretical radio horizon will be calculated; and</li> <li>- Electronic Sightings can be assigned to incidents from this catalogue.</li> </ul> |  |

| Requirement   | Evaluation Criteria   | Additional Information  |
|---|---|---|
| <p>M11 The application must display the calculated radio horizon onto a GIS map.</p>  | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p>   | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Using the information gathered from requirement M11, operators can rapidly display the calculated radio horizon onto the application's GIS;</li> <li>- An application uses available terrain elevation data to identify masked areas and high detection probability areas.</li> </ul> |
| <p><b>2.3.5 Contacts</b></p>  |   |   |
| <p>M12 The application must allow users to create, edit, and manage contact information that is accessible throughout the application</p>                         | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- The application has a means of cataloguing/tabulating global contacts outside of log entries; and</li> <li>- Users can access, search, and display the contact information.</li> </ul>  |   |
| <p>M13 The application must allow users to create, edit, and manage incident-specific contact information.</p>  | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- The application has a dedicated means of cataloguing/tabulating incident-specific contacts outside of log entries within the incident; and</li> <li>- Users can access, search, and display the contact information.</li> </ul> |   |
| <p><b>2.3.6 Routing</b></p>   |   |   |
| <p>M14 The application must allow users to generate multiple incident-specific routes.</p>  | <p>The requirement is considered compliant if the application allows users to generate and display multiple routes within an incident.</p>  |   |
| <p>M15 The application must allow users to manually (textually) enter or designate route waypoints for any object of interest within an incident environment.</p> | <p>The requirement is considered compliant if the application allows users to generate and display multiple routes within an incident.</p>  |   |

| Requirement   | Evaluation Criteria   | Additional Information   |
|---|---|--|
| <p>M16 The application must allow users to graphically display incident routes and waypoints for any object of interest within an incident environment.</p>                             | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p> | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Users can turn on and off individual routes to be displayed on the GIS;</li> <li>- Routes can be manipulated to have differentiating colour schemes;</li> <li>- Route attributes (name, distance marks, LKP point) can be toggled on or off to be displayed onto the GIS.</li> </ul>   |
| <p>M17 The application must allow users to manually enter or designate Date Time Group for route waypoints.</p>   | <p>The requirement is considered compliant if the application allows users to enter Date Time Group (DTG) for individual route nodes.</p>   |  |
| <p><b>2.3.7 SAR Resource Unit Management</b></p>  |   |  |
| <p>M18 The application must have a dedicated means of creating, tracking, editing, and managing primary and secondary SAR resources that are specific to individual Rescue Centres.</p> | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p> | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- There is a centre specific dedicated area within the application to enter centre assigned SRUs;</li> <li>- The application displays SRU information in a useful way;</li> <li>- The application allows users to enter SRU functional status;</li> <li>- The application allows users to display or remove from display SRUs without deleting SRU histories from incidents;</li> <li>- The application allows users to retrieve SRUs from a database to be displayed as active SRUs;</li> <li>- The application allows single SRUs to be tasked to multiple concurrent missions.</li> </ul> |

| Requirement  | Evaluation Criteria  | Additional Information  |
|--|--|---|
| M19 The application must provide a dedicated incident-specific means of tracking, editing, and deleting key SAR Resource Unit mission timings. | The requirement is considered compliant if all the following are met:<br>- The application has a dedicated means of cataloguing/tabulating incident-specific SRU mission timings; and<br>- Mission times are recorded for individual SRUs and not collectively.                |   |
| M20 The application must allow temporary assignment of non-tracked resources to incidents.   | The requirement is considered compliant if the application allows users to add ad hoc SRUs which are not part of rescue centre assigned SRUs.  |   |
| <b>2.3.8 Incident Management</b>   |  |   |
| M21 The application must manage and display active, inactive, and closed SAR incidents.  | Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.<br><br>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher. | Typical characteristics for being compliant with this requirement and achieving a high score include:<br>- The application efficiently filters incidents by status;<br>- The application provides a clear colour coding scheme to provide information at a glance regarding incident status;<br>- The application provides time dependant filtering of displayed incidents. |

| Requirement  | Evaluation Criteria  | Additional Information  |
|--|--|---|
| <p>M22 The application must allow incidents to be filterable and sortable per rescue centre, displaying minimal tombstone data and incident summary for a selected incident.</p> | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p>  | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The application displays key tombstone information (incident name, incident number, status, position, location, etc) on its incident viewing list;</li> <li>- The incident list is sortable by the above tombstone information;</li> <li>- Incidents from any other national rescue centres can be viewed;</li> <li>- Incidents from any other national rescue centres can be used by any other national rescue centre;</li> <li>- Incidents are filtered by default to user rescue centre specific incidents.</li> </ul> |
| <p>M23 The application must allow rapid incident creation without log creation.</p>  | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- The application allows users to generate new incidents without first having to generate a log entry; and</li> <li>- The application allows users to generate new incidents using three (3) or fewer user actions.</li> </ul> |   |
| <p><b>2.3.9 Weather</b></p>  |  |   |
| <p>M24 The application must have an incident-specific weather gathering area separate form log entries.</p>  | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- The application has a dedicated area within an incident where incident relevant weather information can be captured; and</li> <li>- Weather data is saved outside the logs, chat, or attachments.</li> </ul>                 |   |

| Requirement   | Evaluation Criteria   | Additional Information  |
|---|---|---|
| <p>M25 The application must allow users to enter any number of incident-specific weather information from various sources and methods of input.</p> | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- The application allows users to enter any number of incident-specific weather reports for different locations with the area of operation; and</li> <li>- The application allows users to manually enter key weather information.</li> </ul> |   |
| <p>M26 The application must allow users to parse key weather information within weather data.</p>   | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p>   | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The application has distinct fields for all key weather information details, such as (but not limited to): location, air and water temperature, wind speed and direction, sky condition, wave height;</li> <li>- The application can autofill the key fields from database queries;</li> <li>- The application is internally integrated where other areas of the application requiring input of weather information can use the parsed weather information found in this area.</li> </ul> |

| Requirement  | Evaluation Criteria   | Additional Information |
|--|---|------------------------|
| <b>2.3.10 Search Areas and Patterns</b>  |   |                        |
| <p>M27 The application must allow the quick and easy creation, display, and edit of SAR Search areas and SAR Patterns as described in:</p> <ul style="list-style-type: none"> <li>- The IAMSAR Volume II; and</li> <li>- The CAMSAR Volume II Section 4.02.</li> </ul> <p>Note: The relevant excerpt of the CAMSAR is included as Appendix E to Annex A.</p> | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- The application can generate at a minimum the following search patterns and display them onto the GIS as defined in IAMSAR: <ul style="list-style-type: none"> <li>- Expanding Square;</li> <li>- Sector Search;</li> <li>- Creeping Line Ahead; and</li> <li>- Track crawl; and</li> </ul> </li> <li>- The application can generate at a minimum search areas of the following type: <ul style="list-style-type: none"> <li>- Buffered around a route;</li> <li>- Circular;</li> <li>- Square;</li> <li>- Rectangular; and</li> <li>- Polygonal (user defined shape).</li> </ul> </li> </ul> |                        |
| <b>2.3.11 GIS Display</b>  |   |                        |
| <p>M28 The application must have an integrated global GIS map.</p>   | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- The application has a dedicated GIS that integrates and displays information from other areas of the application; and</li> <li>- The application's GIS does not require development to integrate other components (eg. COSPAS-SARSAT, display of incidents, etc.).</li> </ul>   |                        |

| Requirement  | Evaluation Criteria  | Additional Information   |
|--|--|--|
| <p>M29 The application must have an integrated GIS map for each incident.</p>                                  | <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- The application has a dedicated GIS map for every incident independent from the "Overview" GIS map and from other incident maps; and</li> <li>- The application's incident GIS map only reflects the specific incident's information unless multiple incident are selected to be displayed.</li> </ul> |  |
| <p>M30 The application must graphically display all pertinent static and dynamic SAR incident information.</p> | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p>  | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The application displays "live" SRU data feeds;</li> <li>- When users modify incident position, the new position is reflected onto the GIS;</li> <li>- All Incident sightings are available for display onto the incident-specific GIS map;</li> <li>- Accepts search planning and drift modeling information from external tools (eg. SAROPS, CANSARP, etc.) using ICDs &amp; APIs;</li> <li>- The application displays user generated layers;</li> <li>- The application has built-in layers useful to the coordination of SAR incidents.</li> </ul> |

| Requirement  | Evaluation Criteria   | Additional Information   |
|--|---|--|
| <p>M31 The application's GIS must have common GIS tools and functions that allow users to easily manipulate the map.</p>         | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p>   | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The GIS allows users to add text boxes or labels with four or less user actions;</li> <li>- Users can rapidly toggle off and on layers;</li> <li>- GIS tools are intuitive and rapidly accessed;</li> <li>- Application provides a means to jump to specific coordinates;</li> <li>- The GIS provides users a means of draw geometric and amorphous shapes onto a map.</li> </ul>  |
| <p>M32 The application must have an integrated gazetteer allowing users to geographically locate place names on the GIS map.</p> | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if all the following are met:</p> <ul style="list-style-type: none"> <li>- Assessment in accordance with the Operational Score Evaluation methodology results in a consolidated score of 0.6 or higher; and</li> <li>- The application has an integrated means of searching databases of geographic locations and displaying search results onto the GIS.</li> </ul> | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Users can rapidly access and display searches of geographic locations;</li> <li>- Allows designated users to add, remove, or modify locations and attributes in entries of the database;</li> <li>- Database can be searched based on complete or partial terms;</li> <li>- Results can be filtered and sorted by location (province), position (latitude or longitude), or full name;</li> <li>- Application "pins" selected searched location onto the GIS map.</li> </ul> |

| Requirement  | Evaluation Criteria  | Additional Information   |
|--|--|--|
| <p><b>2.3.12 Survivability</b></p>   |  |  |
| <p>M33 The application must have a means of producing a survivability estimate based on parameters and environmental factors for individual persons separate from the search object.</p> | <p>The requirement is considered compliant if the application has an integrated means of producing a valid survivability model based on significant inputs, including:</p> <ul style="list-style-type: none"> <li>- Biometric data;</li> <li>- Environmental conditions; and</li> <li>- State of dress.</li> </ul> | <p>Typical characteristics for being compliant with this requirement are:</p> <ul style="list-style-type: none"> <li>- Using significant biometric data such as person's sex, age, weight (approximate), etc. as inputs;</li> <li>- Using environmental conditions such as air and water temperatures, wind speed, sea states as inputs;</li> <li>- Accounting for state of dress (e.g., fully clothed, wearing immersion suit, floatation device, etc.) and state of immersion.</li> </ul> <p>For comparison purposes:</p> <ul style="list-style-type: none"> <li>- A 40-year-old female, weighing 60kg, wearing a flight suit, in 13 deg C water, in calm wind and light sea state, an expected functional time and survival time would be 2.9 and 5.3 hours respectively;</li> <li>- A 20-year-old male, weighing 80kg, wearing a life jacket, in 4 deg C water, in calm wind and light sea state, an expected functional time and survival time would be 1.9 and 3.6 hours respectively; and</li> <li>- A 68-year-old male, weighing 100kg, wearing a flight suit, life jacket and parka, in 18 deg C water, in calm wind and light sea state, an expected functional time and survival time would both be greater than 36 hours.</li> </ul> |

| Requirement   | Evaluation Criteria   | Additional Information   |
|---|---|--|
| <p><b>2.3.13 Situational Awareness</b></p>  |   |  |
| <p>M34 The application must allow users to gather rapidly and efficiently, record, interpret, and disseminate SAR incident information.</p> | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p> | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The application displays key incident information in efficiently accessed areas;</li> <li>- Users can, at a glance, ingest incident information and comprehend the state of the incident;</li> <li>- Any mandatory fields required by the application are clearly identified;</li> <li>- The application can generate mission reports automatically by inserting incident information into the preformatted template;</li> <li>- Information density is such that vast amounts of information can efficiently be gathered without continuous navigation;</li> <li>- The application allows users to collapse and expand data fields reducing visual overload;</li> <li>- Incident and centre specific Logs are easily accessible, searchable, and readable in their entirety.</li> </ul> |

| Requirement  | Evaluation Criteria   | Additional Information   |
|--|---|--|
| <p>M35 The application must be internally integrated and not force duplication of workload.</p> <p>Note: An example of a circumstance which will cause this requirement to fail includes requiring an external application to meet any of the requirements herein, where:</p> <ul style="list-style-type: none"> <li>- The application is not provided with the proposed capability;</li> <li>- User actions are needed to manipulate the external application; or</li> <li>- The exchange of data between the proposed solution and the external application is not automated.</li> </ul> | <p>Scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document.</p> <p>The requirement is considered compliant if the Operational Score Evaluation for this requirement results in a consolidated score of 0.6 or higher.</p> | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Users are not required to re-enter the same information multiple times in multiple locations to use the application effectively;</li> <li>- Coordinate pairs can be taken from the built-in GIS and pasted to incident position fields;</li> <li>- When incident positions are entered, appropriate information is replicated to the incident-specific GIS map;</li> <li>- Application verifies incident entry validity prior to allowing users to close incidents.</li> </ul> |
| <b>2.3.14 Technical Requirements</b>   |   |  |
| <p>M37 The application must not require any development or integration work at the time of bid submission to meet Canada's requirements and be ready for deployment for operational use.</p>   | <p>The requirement is considered compliant if, during the demonstration, it is clear that all of the requirements being demonstrated do not require any additional development or integration work in order to be compliant.</p>  |  |

#### **2.4 Demonstration-Based Evaluation - Point-Rated Criteria**

Provided that all requirements are assessed as compliant following the Demonstration-Based Evaluation - Mandatory Criteria (as described above), the following requirements will also be assessed through the Demonstration-Based evaluation to assign a point-rated score.

All the following requirements will be scored in accordance with the Operational Score Evaluation methodology as described in Section 1.2 of this document. The consolidated score obtained through the Operational Score Evaluation for each requirement will be multiplied by the requirement's Weight to determine its overall score.

The score assigned to each Bidder for the Technical Capability Evaluation will be the sum of the scores earned for each requirement below. The maximum possible score is 50.

| Requirement  | Weight | Additional Information   |
|--|--------|--|
| <b>2.4.1 Logging</b>   |        |  |
| R1 The application should allow rapid log creation.  | 4      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- A log can be created using a hotkey shortcut or a single button that is easily accessible from the user interface in all contexts from within the application;</li> <li>- When entering the log data, entry is facilitated by auto-populating key fields when possible, and permits completion of the log with few simple user actions;</li> <li>- DTG field is prepopulated and user editable;</li> <li>- Key SAR incident case events (e.g. Case creation, asset paging/tasking/release, LKP set, case closure, etc.) are automatically logged.</li> </ul> |
| <b>2.4.2 COSPAS-SARSAT</b>   |        |  |
| R4 The application should treat COSPAS-SARSAT SIT messages as persistent entities separate from log entries. | 4      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Upon acknowledgement of a newly arrived SIT message, users can review past messages from a dedicated area within the application;</li> <li>- Storage of C/S messages in logs, chats, or other areas meant to carry out unrelated functions will be deemed non-compliant;</li> <li>- SIT messages visible in their dedicated area allow for rapid assignment and reassignment of messages to incidents.</li> </ul>  |

| Requirement   | Weight | Additional Information  |
|---|--------|---|
| <b>2.4.3 Search Object</b>  |        |   |
| R6 The application should be able to differentiate and manage all identifiable information of Search Objects of Air, Marine, and Humanitarian type. | 3      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Having distinct fields for all potential search object identifying information, such as (but not limited to): <ul style="list-style-type: none"> <li>- For Marine search objects: Vessel name, registration information, Type, Tonnage, Dimensions, Operation, Owner info (name, location, contact information), Colour (hull, deck, house), Safety equipment on board (life jackets, flares, lifeboats/rafts, etc);</li> <li>- For Air search objects: Tail number, Aircraft type (fixed winged, rotary wing, ultralight, etc), Manufacturer, Colour (primary, secondary, markings), Number of engines, Engine type, Owner info (name, location, contact information), Dimensions;</li> <li>- For Humanitarian search type: Identifying information (name, age, gender, clothing), medical information, assisting SRU, destination healthcare provider;</li> </ul> </li> <li>- Pictures of search objects can be embedded and displayed within the dedicated section;</li> <li>- Fields can be auto filled from database queries.</li> </ul> |
| R7 The application should have a means of tracking individual Persons in Distress.  | 2      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Means of tabulating Individual occupants of a distressed craft;</li> <li>- Pertinent occupant information is displayed in a useful way to assist operators in determining the status of the occupants throughout the incident life.</li> </ul>  |
| R8 The application should have a means of tracking medical condition for Persons in Distress.   | 2      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- An easily accessed, dedicated area need for the input, update, and review of medical information pertinent to individuals in distress;</li> <li>- Have this area integrated to auto-fill based on similar fields having been filed in in other areas of the application.</li> </ul>   |

| Requirement   | Weight | Additional Information  |
|---|--------|---|
| <b>2.4.4 Sightings and Detections</b>   |        |   |
| R9 The application should allow the management of individual sightings and detections as persistent entities separate from incident and Rescue Centre multi-purpose Logs. | 2      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Upon reception of sighting information, operators can input, edit, and (if needed) associate the sighting to an incident;</li> <li>- The sightings, akin to C/S messages, are treated as persistent objects that can live within or without an incident;</li> <li>- The sole storage of sighting information within a log, chat window, or non-dedicated means will not be considered as compliant with this requirement.</li> </ul>                                      |
| R11 The application should display the calculated radio horizon onto a GIS map.   | 2      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Using the information gathered from requirement M11, operators can rapidly display the calculated radio horizon onto the application's GIS;</li> <li>- An application uses available terrain elevation data to identify masked areas and high detection probability areas.</li> </ul>   |
| <b>2.4.5 Contacts</b>   |        |   |
| R12 The application should allow users to create, edit, and manage contact information that is accessible throughout the application                                      | 1      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Contacts can be searched based on full or partial terms;</li> <li>- Contact information is displayed in a useful and usable fashion;</li> <li>- The application can interface with telephony software allowing for calls to be placed directly from the contact list.</li> </ul>  |
| R13 The application should allow users to create, edit, and manage incident-specific contact information.   | 1      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The application has a dedicated, rapidly accessible area for incident-specific contacts;</li> <li>- Contacts can be searched based on full or partial terms;</li> <li>- Contact information is displayed in a useful and usable fashion;</li> <li>- The application can interface with telephony software allowing for calls to be placed directly from the contact list;</li> <li>- Incident-specific contacts are not added to the global contact directory.</li> </ul> |

| Requirement  | Weight | Additional Information  |
|--|--------|---|
| <b>2.4.6 Routing</b>   |        |   |
| R15 The application should allow users to manually (textually) enter or designate route waypoints for any object of interest within an incident environment.                       | 2      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Routes can be generated from float plans and flight plans gathered from live data feeds;</li> <li>- The application allows for rapid edit of route nodes graphically;</li> <li>- The application allows users to edit route nodes coordinates, waypoint names, and route names textually;</li> <li>- The application allows users to associate a route waypoint as being an incident LKP;</li> <li>- The applications allows users to use rhumbs lines or great circles for route leg generation.</li> </ul>  |
| R16 The application should allow users to graphically display incident routes and waypoints for any object of interest within an incident environment.                             | 2      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Users can turn on and off individual routes to be displayed on the GIS;</li> <li>- Routes can be manipulated to have differentiating colour schemes;</li> <li>- Route attributes (name, distance marks, LKP point) can be toggled on or off to be displayed onto the GIS.</li> </ul>  |
| <b>2.4.7 SAR Resource Unit Management</b>  |        |   |
| R18 The application should have a dedicated means of creating, tracking, editing, and managing primary and secondary SAR resources that are specific to individual Rescue Centres. | 3      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- There is a centre specific dedicated area within the application to enter centre assigned SRUs;</li> <li>- The application displays SRU information in a useful way;</li> <li>- The application allows users to enter SRU functional status;</li> <li>- The application allows users to display or remove from display SRUs without deleting SRU histories from incidents;</li> <li>- The application allows users to retrieve SRUs from a database to be displayed as active SRUs</li> <li>- The application allows single SRUs to be tasked to multiple concurrent missions.</li> </ul> |
| R19 The application should provide a dedicated incident-specific means of tracking, editing, and deleting key SAR Resource Unit mission timings.                                   | 3      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Mission timings include but are not limited to: Tasking time, Release time, Departure time, On scene arrival and departure times, Return time;</li> <li>- There is a dedicated area within the incident viewer to enter SRUs;</li> <li>- Mission total times accrue as additional sorties are added to individual SRUs;</li> <li>- Multiple sorties can be tracked for individual SRUs.</li> </ul>  |

| Requirement   | Weight | Additional Information   |
|---|--------|--|
| <b>2.4.8 Incident Management</b>  |        |  |
| R21 The application should manage and display active, inactive, and closed SAR incidents.   | 1      | Typical characteristics for being compliant with this requirement and achieving a high score include: <ul style="list-style-type: none"> <li>- The application efficiently filters incidents by status;</li> <li>- The application provides a clear colour coding scheme to provide information at a glance regarding incident status;</li> <li>- The application provides time dependant filtering of displayed incidents.</li> </ul>   |
| R22 The application should allow incidents to be filterable and sortable per rescue centre, displaying minimal tombstone data and incident summary for a selected incident. | 1      | Typical characteristics for being compliant with this requirement and achieving a high score include: <ul style="list-style-type: none"> <li>- The application displays key tombstone information (incident name, incident number, status, position, location, etc) on its incident viewing list;</li> <li>- The incident list is sortable by the above tombstone information;</li> <li>- Incidents from any other national rescue centres can be viewed;</li> <li>- Incidents from any other national rescue centres can be used by any other national rescue centre;</li> <li>- Incidents are filtered by default to user rescue centre specific incidents.</li> </ul> |
| <b>2.4.9 Weather</b>  |        |  |
| R25 The application should allow users to enter any number of incident-specific weather information from various sources and methods of input.                              | 1      | Typical characteristics for being compliant with this requirement and achieving a high score include: <ul style="list-style-type: none"> <li>- The application allows users to manually add weather data points to incidents;</li> <li>- The application can retrieve data information from connected databases.</li> </ul>  |
| R26 The application should allow users to parse key weather information within weather data.  | 1      | Typical characteristics for being compliant with this requirement and achieving a high score include: <ul style="list-style-type: none"> <li>- The application has distinct fields for all key weather information details, such as (but not limited to): location, air and water temperature, wind speed and direction, sky condition, wave height;</li> <li>- The application can autofill the key fields from database queries;</li> <li>- The application is internally integrated where other areas of the application requiring input of weather information can use the parsed weather information found in this area.</li> </ul>                                 |

| Requirement  | Weight | Additional Information   |
|--|--------|--|
| <b>2.4.10 Search Areas and Patterns</b>  |        |  |
| <p>R27 The application should allow the quick and easy creation, display, and edit of SAR Search areas and SAR Patterns as described in:</p> <ul style="list-style-type: none"> <li>- The IAMSAR Volume II; and</li> <li>- The CAMSAR Volume II Section 4.02.</li> </ul> <p>Note: The relevant excerpt of the CAMSAR is included as Appendix E to Annex A.</p> | 3      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The application allows users to manually edit search areas and patterns;</li> <li>- The application allows users to easily edit search areas and patterns from a single window;</li> <li>- The application allows users to set colour and background schemes;</li> <li>- The application allows users to manually set area names;</li> <li>- When generating a search area of geometric shape (square, circular, etc) key information such as side length or radius is displayed during creation;</li> <li>- The application allows users to manually set search pattern parameters such as leg length, track spacing, commence search point, orientation, etc.</li> </ul> |
| <b>2.4.11 GIS Display</b>  |        |  |
| <p>R29 The application should have an integrated GIS map for each incident.</p>  | 4      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- GIS map layers are accessed and displayed in an efficient and intuitive way;</li> <li>- The GIS map clearly reflect incident information points that geographic aspects to them (e.g., sightings, beacon alerts, last known location, etc.);</li> <li>- Incident-specific map information is saved along with the incident and can be reviewed at a later time after the incident has been closed.</li> </ul>  |
| <p>R30 The application should graphically display all pertinent static and dynamic SAR incident information.</p>   | 3      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The application displays "live" SRU data feeds;</li> <li>- When users modify incident position, the new position is reflected onto the GIS;</li> <li>- All Incident sightings are available for display onto the incident-specific GIS map;</li> <li>- Accepts search planning and drift modeling information from external tools (eg. SAROPS, CANSARP, etc.) using ICDs &amp; APIs;</li> <li>- The application displays user generated layers;</li> <li>- The application has built-in layers useful to the coordination of SAR incidents.</li> </ul>   |

| Requirement  | Weight | Additional Information   |
|--|--------|--|
| R31 The application's GIS should have common GIS tools and functions that allow users to easily manipulate the map.                    | 2      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The GIS allows users to add text boxes or labels with four or less user actions;</li> <li>- Users can rapidly toggle off and on layers;</li> <li>- GIS tools are intuitive and rapidly accessed;</li> <li>- Application provides a means to jump to specific coordinates;</li> <li>- The GIS provides users a means of draw geometric and amorphous shapes onto a map.</li> </ul>  |
| R32 The application should have an integrated gazetteer allowing users to geographically locate place names on the GIS map.            | 1      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- Users can rapidly access and display searches of geographic locations;</li> <li>- Allows designated users to add, remove, or modify locations and attributes in entries of the database;</li> <li>- Database can be searched based on complete or partial terms;</li> <li>- Results can be filtered and sorted by location (e.g., province), position (latitude or longitude), or full name;</li> <li>- Application "pins" selected searched location onto the GIS map.</li> </ul>   |
| <b>2.4.12 Survivability</b>  |        |  |
| <i>Not applicable for the Demonstration-Based Evaluation - Point-Rated Criteria</i>  |        |  |
| <b>2.4.13 Situational Awareness</b>  |        |  |
| R34 The application should allow users to gather rapidly and efficiently, record, interpret, and disseminate SAR incident information. | 1      | <p>Typical characteristics for being compliant with this requirement and achieving a high score include:</p> <ul style="list-style-type: none"> <li>- The application displays key incident information in efficiently accessed areas;</li> <li>- Users can, at a glance, ingest incident information and comprehend the state of the incident;</li> <li>- Mandatory fields are clearly identified;</li> <li>- The application can generate mission reports automatically by inserting incident information into the preformatted template;</li> <li>- Information density is such that vast amounts of information can efficiently be gathered without continuous navigation;</li> <li>- The application allows users to collapse and expand data fields reducing visual overload;</li> <li>- Incident and centre specific Logs are easily accessible, searchable, and readable in their entirety.</li> </ul> |

| Requirement  | Weight | Additional Information   |
|--|--------|--|
| R35 The application should be internally integrated and not force duplication of workload. | 1      | Typical characteristics for being compliant with this requirement and achieving a high score include:<br>- Users do not require to re-enter the same information multiple times in multiple locations to use the application effectively;<br>- Coordinate pairs can be taken from the built-in GIS and pasted to incident position fields;<br>- When incident positions are entered, appropriate information is replicated to the incident-specific GIS map;<br>- Application verifies incident entry validity prior to allowing users to close incidents. |
| <b>2.4.14 Technical Requirements</b>   |        |  |
| <i>Not applicable for the Demonstration-Based Evaluation - Point-Rated Criteria</i>        |        |  |

### 3 Illustrative Examples

To provide additional clarity on how the evaluation will be conducted, examples for selected requirements are included below. These examples illustrate the evaluation for two fictitious Bidders.

In case of any discrepancy between the examples described below and the requirements, criteria, and processes elsewhere within this document, the latter take precedence.

#### 3.1 Example #1: M1/R1

##### 3.1.1 Bidder 1

Bidder 1 is first assessed through Proposal-Based evaluation. The proposal provides enough information for all evaluators to consider requirement M1 **compliant**, and -- provided that all other requirements assessed through the Proposal-Based evaluation are also compliant -- the Bidder proceeds to the demonstration.

Bidder 1 conducts the demonstration, following which they are assessed using the Operational Score Evaluation methodology as follows:

Evaluator 1 score: 1 point  
 Evaluator 2 score: 2 points  
 Evaluator 3 score: 2 points  
 Evaluator 4 score: 1 point  
 Evaluator 5 score: 0 points

Result: Highest score (#2) and lowest score (#5) are discarded. Average of remaining scores is:  
 $(1+2+1)/3 = 1.33$ .

Since 1.33 is greater than 0.6, the Bidder is **compliant** for this requirement and earns  $(1.33 \times 4) = 5.33$  **points** (out of a total of 50 possible points) towards the technical evaluation.

### 3.1.2 Bidder 2

Bidder 2 is first assessed through Proposal-Based evaluation. The proposal provides enough information for all evaluators to consider requirement M1 **compliant**, and -- provided that all other requirements assessed through the Proposal-Based evaluation are also compliant -- the Bidder proceeds to the demonstration.

Bidder 2 conducts the demonstration, following which they are assessed using the Operational Score Evaluation methodology as follows:

Evaluator 1 score: 0 points

Evaluator 2 score: 2 points

Evaluator 3 score: 1 point

Evaluator 4 score: 0 points

Evaluator 5 score: 0 points

Result: Highest score (#2) and lowest score (#1) are discarded. Average of remaining scores is:  $(1+0+0)/3 = 0.33$ .

Since 0.33 is less than 0.6, the Bidder is **non-compliant** for this requirement. No points are awarded for the technical evaluation.

## 3.2 Example #2: M12/R12

### 3.2.1 Bidder 1

Bidder 1 is first assessed through Proposal-Based evaluation. The proposal provides enough information for all evaluators to consider requirement M12 **compliant**, and -- provided that all other requirements assessed through the Proposal-Based evaluation are also compliant -- the Bidder proceeds to the demonstration.

Bidder 1 conducts the demonstration, following which they are assessed for compliance as follows:

- The application has a means of cataloguing/tabulating global contacts outside of log entries: **PASS**.

- Users can access, search, and display the contact information: **PASS**.

Since both criteria pass, Bidder 1 is considered **compliant** and is then assessed using the Operational Score Evaluation methodology as follows:

Evaluator 1 score: 0 points

Evaluator 2 score: 1 point

Evaluator 3 score: 2 points

Evaluator 4 score: 0 points

Evaluator 5 score: 0 points

Result: Highest score (#3) and lowest score (#1) are discarded. Average of remaining scores is:  $(1+0+0)/3 = 0.33$ .

The Bidder earns  $(0.33 \times 1) = 0.33$  **points** (out of a total of 50 possible points) towards the technical evaluation.

### **3.2.2 Bidder 2**

Bidder 2 is first assessed through Proposal-Based evaluation. The proposal provides enough information for all evaluators to consider requirement M12 **compliant**, and -- provided that all other requirements assessed through the Proposal-Based evaluation are also compliant -- the Bidder proceeds to the demonstration.

Bidder 2 conducts the demonstration, following which they are assessed for compliance as follows:

- The application has a means of cataloguing/tabulating global contacts outside of log entries: **PASS**.
- Users can access, search, and display the contact information: **FAIL**.

Since one criterion failed, Bidder 2 is considered **non-compliant** for this requirement and is not assessed using the Operational Score Evaluation methodology.

### **3.3 Example #3: M14/R14**

#### **3.3.1 Bidder 1**

Bidder 1 is first assessed through Proposal-Based evaluation. The proposal provides enough information for all evaluators to consider requirement M14 **compliant**, and -- provided that all other requirements assessed through the Proposal-Based evaluation are also compliant -- the Bidder proceeds to the demonstration.

Bidder 1 conducts the demonstration, following which they are assessed for compliance as follows:

- The application allows users to generate and display multiple routes within an incident: **PASS**.

Since the one criterion passes, Bidder 1 is considered **compliant**. There are no rated points assigned to this requirement.

#### **3.3.2 Bidder 2**

Bidder 2 is first assessed through Proposal-Based evaluation. The proposal fails to demonstrate that requirement M12 is compliant, and the Bidder is therefore considered **non-compliant**. The Bidder is not requested to conduct a demonstration.

## **APPENDIX A TO ANNEX E OPERATIONAL SCENARIOS**

### ***Scenarios for the Demonstration-Based Evaluation***

#### **1 Introduction**

##### **1.1 Purpose**

As part of the Demonstration-Based evaluation, the Bidder must demonstrate the capability of their solution to handle marine and aeronautical incidents. Furthermore, given that incidents are not handled as isolated events, the application is expected to demonstrate its flexibility in handling different pieces of key information arriving at different points over the course of an incident.

The purpose of these scenarios is to assist in validating that all requirements assessed through the Technical Capability Evaluation will be met by a Bidder's application. Scenario information is presented sequentially and Bidders will be required to demonstrate their application's capability to ingest, display, and prosecute SAR Incidents using the given information.

#### **2 Subject Indicator Type (SIT) 185 Messages – For Information Only**

This section provides the SIT 185 messages used within these scenarios for information purposes. Considering the importance of correct formatting of SIT messages, Bidders are not to rely on the messages below; instead, Bidders are requested to contact the Contracting Authority on the cover page of this RFP, and the SIT messages will be provided via email in text (.txt) file format.

## 2.1 Panulirus\_EPIRB.TXT (Scenario 1)

1. DISTRESS COSPAS-SARSAT INITIAL ALERT  
2. MSG NO: 10664 REF NO: 2784119802FFBFF  
3. DETECTED AT: 01 OCT 20 1506 UTC BY SARSAT S11  
4. DETECTION FREQUENCY: 406.0370 MHZ  
5. COUNTRY OF BEACON REGISTRATION: 316/ CANADA  
6. USER CLASS:  
SERIAL USER LOCATION  
EPIRB (FLOAT FREE) SERIAL NO: 0360967  
CSTA CERTIFICATE NO: 0186  
7. EMERGENCY CODE: NIL  
8. POSITIONS:  
CONFIRMED - NIL  
DOPPLER A - 44 59.43 N 066 25.86 W PROBABILITY 58 PERCENT  
DOPPLER B - 46 20.00 N 032 30.00 W PROBABILITY 42 PERCENT  
DOA - NIL  
ALTITUDE 0 METRES  
ENCODED - NIL  
9. ENCODED POSITION PROVIDED BY: NIL  
10. NEXT PASS / EXPECTED DATA TIMES (UTC):  
CONFIRMED - NIL  
DOPPLER A - 01 OCT 20 1636 UTC GOOSE BAY LEOLUT  
DOPPLER b - 01 OCT 20 1836 UTC GOOSE BAY LEOLUT  
DOA - NIL  
ENCODED - NIL  
11. HEX ID: 2784119802FFBFF HOMING SIGNAL 121.5 MHZ  
12. ACTIVATION TYPE: AUTOMATIC  
13. BEACON NUMBER ON AIRCRAFT OR VESSEL NO:  
14. OTHER ENCODED INFORMATION:  
CSTA CERTIFICATE NO: 0186  
15. OPERATIONAL INFORMATION:  
MEOSAR ALERT LAST DETECTED AT 13 MAR 20 1313 UTC  
LUT ID: GOOSE BAY LEOLUT  
16. REMARKS: NIL  
END OF MESSAGE

## 2.2 C-FJOC\_ELT\_Unlocated.txt (Scenario 2)

1. DISTRESS COSPAS-SARSAT INTIAL ALERT (UNLOCATED)  
2. MSG NO: 04054 REF No: A78DF008A4411A5  
3. DETECTED AT: 30 SEP 20 1806 UTC BY SARSAT S11  
4. DETECTION FREQUENCY: 406.0278 MHZ  
5. COUNTRY OF BEACON REGISTRATION: 316/ CANADA  
6. USER CLASS:  
USER LOCATION  
ELT USER AIRCRAFT REGISTRATION: AIRCRAFT REGISTRATION: D-EKQD  
7. EMERGENCY CODE: NIL  
8. POSITIONS:  
RESOLVED - NIL  
DOPPLER A - NIL  
DOPPLER B - NIL  
ENCODED - NIL  
9. ENCODED POSITION PROVIDED BY: NIL  
10. NEXT PASS / EXPECTED DATA TIMES (UTC):  
CONFIRMED - NIL  
DOPPLER A - NIL  
DOPPLER B - NIL  
ENCODED - NIL  
11. HEX ID: A78DF008A4411A5 HOMING SIGNAL 121.5 MHZ  
12. ACTIVATION TYPE: AUTOMATIC  
13. BEACON NUMBER ON AIRCRAFT OR VESSEL NO: 0  
14. OTHER ENCODED INFORMATION:  
UNLOCATED BEACON DETECTION : A78DF008A4411A5  
15. OPERATIONAL INFORMATION:  
RELIABILITY OF DOPPLER POSITION DATA - SUSPECT DUE TO  
TECHNICAL PARAMETERS: CTA < 1 OR > 22  
LUT ID: GOOSE BAY LEOLUT  
16. REMARKS: NIL  
END OF MESSAGE

Solicitation No. – N° de l'invitation  
W8474-218069

Amd. No – N° de la modif.

Buyer ID – Id de l'acheteur

Client Ref. No. – N° de réf. De client  
W8474-218069

File No. – N° du dossier

111XL  
CCC No./ N° CCC – FMS No/ N° VME

### 2.3 C-FJOC\_ELT.txt (Scenario 2)

1. DISTRESS COSPAS-SARSAT POSITION CONFIRMED ALERT  
2. MSG NO: 04054 REF No: A78DF008A4411A5  
3. DETECTED AT: 31 SEP 20 0213 UTC BY SARSAT S07  
4. DETECTION FREQUENCY: 406.0278 MHZ  
5. COUNTRY OF BEACON REGISTRATION: 316/ CANADA  
6. USER CLASS:  
USER LOCATION  
ELT USER AIRCRAFT REGISTRATION: AIRCRAFT REGISTRATION: C-FNCI  
7. EMERGENCY CODE: NIL  
8. POSITIONS:  
RESOLVED - NIL  
DOPPLER A - 51 08.57 N 118 53.06 W PROBABILITY 65 PERCENT  
DOPPLER B - 50 19.61 N 105 33.60 W PROBABILITY 35 PERCENT  
ENCODED - NIL  
9. ENCODED POSITION PROVIDED BY: NIL  
10. NEXT PASS / EXPECTED DATA TIMES (UTC):  
CONFIRMED - NIL  
DOPPLER A - NIL  
DOPPLER B - NIL  
ENCODED - NIL  
11. HEX ID: A78DF008A4411A5 HOMING SIGNAL 121.5 MHZ  
12. ACTIVATION TYPE: AUTOMATIC  
13. BEACON NUMBER ON AIRCRAFT OR VESSEL NO: 0  
14. OTHER ENCODED INFORMATION:  
BEACON DETECTION : A78DF008A4411A5  
15. OPERATIONAL INFORMATION:  
LUT ID: EDMONTON LEOLUT  
16. REMARKS: NIL  
END OF MESSAGE

### 3 System State

Prior to commencing the test, the following globally accessible contact information and SRUs should be prepopulated into the system as they would normally have been already available:

#### Global Contact information

- MCTS Canada: 902-426-9750 and 902-426-9751
- New-Brunswick Ambulance: 506-648-3333
- 413 Squadron: 902-765-1494
- 103 Squadron: 709-256-1703
- 424 Squadron: 613-392-2811
- 442 Squadron: 250-339-8211

#### MARINE RESOURCES

- **SHIPS**  
Vessel name – Location – CG Program
  - EDWARD CORNWALLIS - YARMOUTH AREA - Marine AIDS PROGRAM
  - ALFRED NEEDLER - DARTMOUTH BASE/BIO - SELF MAINTENANCE
  - SIR WILLIAM ALEXANDER – IQALUIT, NU - Marine AIDS PROGRAM
  - EARL GREY - MAGDALEN ISLANDS, PQ - Marine AIDS PROGRAM
  - GEORGE R. PEARKES - SEPT ILES, PQ - SAR STANDBY
  - SIR WILFRED GRENFELL - GRAND BANKS - SAR AND FISHERIES PATROL
  - ANN HARVEY – STEPHENVILLE, NL - SAR STANDBY
  - TELEOST – TWILLINGATE, NL - SAR STANDBY
  - HARP – ST. JOHN'S - ALONGSIDE
  - LEONARD J COWLEY - TRANSIT FROM GRAND BANKS TO ST JOHN'S FOR CREW CHANGE
- **CG motor LIFE BOAT - 30 MINUTE SAR STANDBY**
  - SAINT JOHN, NB- COURTENAY BAY
  - WESTPORT, NS – WESTPORT
  - CLARKS HARBOUR, NS –CLARKS HARBOUR
  - SAMBRO, NS – SAMBRO
  - PORT BICKERTON, NS –BICKERTON
  - LOUISBOURG, NS – SPINDRIFT
  - CAP AUX MEULES, QUE – CAP AUX MEULES
  - SHIPPEGAN, NB – CAP BRETON
  - SOURIS, PEI – CAPE SPRY
  - SUMMERSIDE, PEI – CAP NORD
  - BURGEO, NFLD – WG GEORGE
  - BURIN, NFLD – JACKMAN

- LARK HARBOUR, BAY OF ISLANDS, NL – CAPE FOX
- PORT SAUNDERS, NL – CAPE NORMAN
- RIVIERE AUX RENARD, PQ – CAPE ROZIER
- HAVRE ST PIERRE , PQ – CAP DE RABAST
- ST. ANTHONY – PENNANT BAY

### AIR RESOURCES

- **413 SQN GREENWOOD**
  - C-130 HERCULES
    - R333 SERVICEABLE / SAR STANDBY
    - R343 SERVICEABLE.
    - R344 SERVICEABLE
    - R311 U/S
  - CH-149 CORMORANT
    - R912 SERVICEABLE / SAR STANDBY
    - R902 U/S
- **405 SQN AURORAS**
  - NOT AVAILABLE DUE TO OTHER TASKINGS
- **103 SQN GANDER**
  - CH-149 CORMORANT
    - R903 SERVICEABLE / SAR STANDBY
    - R906 SERVICEABLE
    - R912 SERVICEABLE
- **444 SQN GOOSE BAY**
  - R469 NORMAL CS STANDBY
- **424 SQN TRENTON**
  - C-130 HERCULES
    - R332 SERVICEABLE / SAR STANDBY
- **435 SQN TRENTON**
  - C-130 HERCULES
    - R335 SERVICEABLE / SAR STANDBY
- **442 SQN COMOX**
  - C-295 KINGFISHER
    - R222 SERVICEABLE / SAR STANDBY
    - R224 SERVICEABLE
    - R210 U/S
  - CH-149 CORMORANT
    - R910 SERVICEABLE / SAR STANDBY
    - R911 U/S

## 4 Scenario 1

### 4.1 Incoming Call

The rescue centre has received a call from a fisherman in distress off the coast of Saint John, New Brunswick with the following information:

- a. DTG: 01OCT2020 1100Z;
- b. Caller Name: John Bloggins (boat Captain);
- c. Phone number: 506-555-5555;
- d. Situation: An engine fire has disabled the vessel;
- e. PIW: NIL;
- f. Medical: NIL;
- g. Name of Vessel: Panulirus;
- h. C/S: Panulirus;
- i. Bow Number: 108057;
- j. Colour of Hull: White;
- k. Owner Name: Panulirus Fisheries Inc.;
- l. Address: 567 Point Road, Saint John, New Brunswick, Canada;
- m. POB: 4;
- n. LKP: CALL DROPPED BEFORE RECEIVING LAT/LONG.

### 4.2 Initial Actions to be demonstrated

Generate a log using fastest means and enter initial call information.

- a) In the proposed application create an incident from the initial call log with the information from the scenario. Add an approximate incident position 5nm SW from St John harbour.
- b) In the created incident, enter all the available Search Object information into their respective fields.
- c) In the incident contacts enter John Bloggins's contact information.

### 4.3 Incident management follow up actions to be demonstrated

Use globally accessible contacts to find MCTS Canada's phone number and enter call into log: "Contacted MCTS Canada, had them issue a Mayday relay, negative contact with the Panulirus."

Demonstrate retrieval of Weather data and enter into Incident:

- Insert current marine weather from St John harbour;
- Insert weather data from the St John Airport:
  - CYSJ 011100Z 3502KT 15SM FEW025 06/13 A3003 RMK SC1 SLP176;
- Current tide schedule: AST 0244 7.4m, 0902 1.1m, 1513 7m, 2121 1.6m;
- Wave/Swell height: 1m or less.

#### 4.4 Create SRU SAR Missions

Task the CCGS Courtney Bay to search for and provide assistance to the Panulirus. Task 413 Sqn Cormorant 912 from Greenwood to assist in search.

Use the Gazetteer to find and place a pin on Malpec, Gander Creek, Lorrenville, and Chance Harbour all in New Brunswick.

Task Details:

- a. Generate Search, tasking areas, and search patterns for the CCG Cutter and Cormorant;
  - CCGC has a rectangular search/tasking area along the shore SW of St John from Lorrenville to Chance Harbour. It conducts return track crawl (parallel to the shore from inshore outwards towards the centre of the Bay of Fundy);
  - Corm R912 has a polygon (user defined shape) search area along the shore NW of St John from Malpec to Gander Creek. It conducts a Creeping Line ahead;
  - Display these search areas and search patterns onto the incident specific map/GIS.
- b. SRU Briefing: Generate SAR Mission Briefing for both assets;
- c. Add Tasking time for both assets: 01OCT2020 1115Z;
- d. Both Began Sortie: 01OCT2020 1125Z.
- e. Enter a log entry for R337 having arrived in Igloolik

Record the following updated details into the incident log and SRU mission details:

- a. Courtney Bay ETA to on scene: 01OCT2020 1140Z;
- b. R912 ETA to on scene: 01OCT2020 1150Z;
- c. Both Arrived on Scene: 01OCT2020 1145Z.

Update On Scene Weather: 1145Z winds: 350 @ 6KT, visibility: 15SM, water temperature: 10°C, calm sea state.

#### 4.5 Incident Sightings

Sightings received: (to be generated and attached to the incident)

Flare sightings:

- Received report of a flare having been seen by S/V Wachiado at position 45 05.04N 066 13.09W:
  - Flare was red, seen going up and then down, lasted approximately 2.5 minutes, bearing 270, 1 fist above the horizon. Flare observed at 01OCT2020 1220Z.
- Call received from 23 Long Beach Lane, Dipper Harbour, NB:
  - Flare was red, was seen going up and then down, lasted approximately 2.5 minutes, looking S-E out of the harbour, was 1/2 fist above the horizon. Flare observed at 01OCT2020 1219Z.

Debris sighting:

- At 1400Z F/V Ptite Bie'e reported to MCTS having found a life ring belonging to the S/V Panulirus in position: 45.0101N 66.4401W.

Enter sightings into the incident and show that they appear onto the GIS.

Update search area: Modify the CGC Courtney Bay's search area to include Dipper Harbour and Maces Bay.

#### 4.6 Update Mission Data

Survivability modeling: Run Survival model for a person in water in the Bay of Fundy, assuming a 20-year-old male, weighing 80kg, wearing a life jacket, in 4 deg C water, in calm wind and light sea state using incident weather information for the remainder.

Delete the log entry showing that R337 has arrived in Igloolik.

Add a Tasking for a CCGA vessel: Task the CCGA F/V Ptite Bie'e to search near New River Beach, NB, and task one to search shores from Lepreau to Seeley's Cove.

*Beacon: Simulate the attached EPIRB SIT 185 (Panulirus\_EPIRB.TXT) data being received and attach/merge it to the incident.*

- *HEX ID: 2784119802FFBFF*
- *Owner: John Bloggins*
- *Name of Vessel: Panulirus*
- *Phone number: 506-555-5555*
- *Position: 44 59.43N 066 25.86W*

Demonstrate how the SIT Message can be viewed within the incident and from outside the incident.

Demonstrate the CCGC Courtney Bay being re-tasked to the EPIRB position and log with the following events taking place:

- Courtney Bay picks find 4 PIWs.
- Find nearest wharf (expected to use the integrated gazetteer.)
- Using the built in contacts, find number for New Brunswick ambulance service (506-648-3333) and send them to the wharf.

Enter final Mission timings:

- Cormorant:  
A/B: 1125Z On/S: 1145Z Off/S: 1515Z Landed: 1530Z  
A/B: 1600Z On/S: 1615Z Off/S: 1625Z Landed: 1650Z
- Courtney Bay:  
Departed: 1125Z On/S: 1145Z Off/S 1625  
Returned to base: 1825Z

#### 4.7 Closing the Incident

Enter a log entry showing Incident has been closed and by which SMC.

Close the incident and show that it has gone from active to closed in the main incident viewer.

## 5 Scenario 2

### 5.1 Incoming Call

An un-located ELT has been received through the JRCC Trenton sFTP. An Incident will be created in the application. The SIT Message contains the following broad information attained from the Canadian Beacon Registry (the SIT 185 message is provided in a separate file: **C-FJOC\_ELT\_Unlocated.txt**):

- a. DTG: 30SEP2020 1806Z;
- b. Beacon HEXCODE: A78DF008A4411A5;
- c. Owner Name: ABC Aviation Services Corp.;
- d. Address: E1 – 141 MacLaurin Dr, Calgary, AB T3Z 3S4;
- e. Phone Number: 403-555-5555;
- f. Aircraft type: Piper;
- g. Call Sign: C-FJOC;
- h. Tail Number: FJOC; and
- i. LKP: Unlocated.

### 5.2 Initial Actions to be demonstrated

Generate an incident from the incoming SIT 185 message and enter all the relevant tombstone information.

The incident name should be: **"A78DF008A4411A5 - ELT - C-FJOC"**.

Insert the owner information as part of the Search Object information.

Add a log entry showing that the SMC contacted the emergency contact information which provided the following information:

- There are 2 POBs, John Doe and Jane Dane. Cellphone numbers 403-555-5550 and 403-555-5510 respectively.
- Cell phone numbers called but were not answered.

From contacting ATC, the flight plan for C-FJOC was retrieved. Enter a route as follows:

- VFR flight plan YEG to YKA via YQF, YBW, MVFR route from Canmore- Golden-Salmon Arm-Kamloops; designate YEG as the LKP.
- Departure: 30SEP2020 1600Z; and
- ETA: 30SEP2020 2330Z.

Add the two POBs, PIC John Doe 48 YOM, passenger; Jane Dane 47 YOF.

Add the contact phone number for both passengers to the incident contacts.

Add weather of the day information for CYEG, CYKA, and attach the GFAs and Icing charts for the Pacific and Prairies region.

Add a log entry containing the following aircraft information having been retrieved from Transport Canada databases and enter the information into the Search Object page as applicable:

- Name (pilot): John Doe
- Call Sign: C-FJOC
- Tail Number: C-FJOC
- Registration Number: 314159
- Number of POBs: 2
- Owner Name: Shirley Kidding
- Company Name: ABC Holdings
- Address (City, State/Province, Postal Code): 155 MacLaurin Dr A, Calgary, AB T3Z 3S4
- Manufacturer Name: Cessna
- Model Name: 172
- Activity: Commercial - Rental
- Aircraft Type: Single-engine, land
- Aircraft Category: Airplane
- Landing Gear: Tricycle, fixed
- Number of Engines: 1
- Engine type: Piston

Attach a generic picture of a Cessna 172 to the incident.

From contacting ABC Holdings it is discovered that Jane Dane has type 2 diabetes, add this information to an appropriate section in POB management.

Add ABC Holdings in the incident contacts: phone number +1(403) 333-3333.

Correct John Doe' phone number to be (403) 555-5552.

### 5.3 Create SAR Mission for SAR assets

ATC advised that they had reviewed the communications tapes and C-FJOC's reported 5nm North of YQF at 1730Z that they were bypassing YWB and going straight from YQF to Banff.

Create a new route using this information and set the LKP as 5nm North of CYQF 30SEP2020 1730Z and display the new route onto the GIS.

In the sightings, add a report of an aircraft having detected an ELT signal while airborne with the following information and generate the radio horizon to be displayed on the GIS:

- Detecting aircraft: AC624 at 36,000 ft position over ROMRA fix. (N52°02'45.0" W117°39'09.0)

Task two (2) SRUs to commence searching for the missing plane. One Cormorant from 442 Sqn from Comox and one 435 Sqn C-130H from Winnipeg.

Enter the following SRU initial tasking time information and generate search areas:

- a. Tasked time: 30SEP2020 1936Z
- b. Create search areas around route as per the provided CAMSAR excerpt (CSAD 1, CSAD2, MVFR Search Area where applicable);
- c. Show divisions in the route search areas Areas as 1st, 2nd, 3rd, and 4th quarters.
- d. Create tasking area and display a pattern for a sector search out to 3nm from Airborne Report report location and an expanding square at 20'000ft with 30nm legs out to 120nm from the report location.
- e. Enter SRU Began Sortie time for both SRUs: 30SEP2020 2100Z

#### 5.4 Update the Mission

- a. Both Primary SRUs Arrived On Scene: 30SEP2020 2205Z
  - Updated O/S Weather: 042200Z Auto 36026KT 350v040 OVC010 1SM SN M12/M11 RMK A10 SLP257
- b. Create Search Area for a CASARA C-172
  - Task CASARA: Add a CASARA aircraft as an ad hoc SRU to search from YQF to Banff.
- c. Primary STUs Off Scene: 31SEP2020 0100Z
- d. Sortie ended: 31SEP2020 0130Z.

#### 5.5 Update Mission based on new beacon information

*Beacon: Simulate the attached ELT SIT 185 (C-FJOC\_ELT.txt) data being received and associated it to the incident. Demonstrate that the alert appears for users based out of JRCC Trenton and Victoria, but no other sites.*

- a. *New Beacon info:*
  - DTG: 31SEP2020 0213Z;
  - Beacon HEXCODE: A78DF008A4411A5;
  - Owner Name: ABC Aviation Services Corp.;
  - Address: E1 – 141 MacLaurin Dr, Calgary, AB T3Z 3S4;
  - Phone Number: 403-555-5555;
  - Aircraft type: Piper;
  - Call Sign: C-FJOC ;
  - Tail Number: FJOC ; and
  - LKP: 51 08.57N 118 53.06W.
- b. Re-task the Cormorant to carry out sector search at Coordinates
- c. Cormorant Arrived On Scene: 05NOV2018 0245Z;
  - Update O/S Weather: 310200Z Auto 36030KT 350v040 OVC010 1/2SM SN M17/M11 RMK A10 SLP257
- d. Log the following NOCL message information: 31SEP2020 0307Z, Search Aircraft found wreckage
  - NOCL message
    - A. Affirmative
    - B. 51 08.57 118 53.06

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C. 2 Grey  
D. One  
E. ONE  
F. NIL

- e. Cormorant Off Scene: 31SEP2020 0345Z; and
- f. Cormorant Sortie ended: 31SEP2020 0400Z.

#### **5.6 Close the Incident**

200 separate log entries with at least four (4) lines of text into the incident to show the display of multiple log entries.

Close the Incident.

#### **6 Scenario 3**

Demonstrate the arrival of ten separate beacons across multiple centres.

Demonstrate five beacons arriving simultaneously at one centre.

**APPENDIX B TO ANNEX E**  
**QUESTIONNAIRE TO INTERNATIONAL SAR OPERATORS**

*Date*

Name:

Position:

Nation/Country:

COSPAS-SARSAT Participating Nation (Yes/No):

Rescue Coordination Centre:

Area of Coverage/Responsibility (SRR):

To whom it may concern,

I hereby confirm that we use the application called “\_\_\_\_\_” version “\_\_\_\_\_” in our Rescue Coordination Centre in accordance with international Search and Rescue standards, such as those set out by the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR).

I confirm that we use the application for the following:

| <b>Activity</b>   | <b>Yes</b> | <b>No</b> |
|---|------------|-----------|
| <b>Logging</b><br>Logging typically consists of log creation to capture significant events that may or may not be related to a particular incident, and creating new incidents based on log entries.  |            |           |
| <b>COSPAS-SARSAT SIT message reception and mapping</b><br>COSPAS-SARSAT message handling typically involves the reception, storage, and processing of SIT 185, 925, and 926 messages. They would be fully displayed to operators, and an incident could either be started directly from the message, or the message could be attached to an ongoing incident. |            |           |
| <b>Search Object information gathering</b><br>Search Object information gathering usually involves the recording of key information on the target vessel, aircraft, or person(s) their general physical characteristics, safety equipment on board, and owner information.  |            |           |

| Activity  | Yes | No |
|---|-----|----|
| <p><b>Gathering Sightings reports</b></p> <p>Sightings usually include flares, debris, oil slicks, life rings, ELT radio beacon detections.</p>   |     |    |
| <p><b>Search and Rescue Unit management</b></p> <p>The tasks of Search and Rescue Unit (SRU) management would normally involve the tracking of position, status, and usability of SRUs. Also typically included in SRU management is the ability to track specific SRU mission times, such as times at which they: were tasked, departed base, arrived and departed the search area, and returned to base/port.</p> |     |    |
| <p><b>Incident data gathering (e.g., location, weather data, attachments, etc.)</b></p> <p>Incident data gathering normally involves the gathering of search area weather data, attaching incident relevant electronic files, generating reports, and building distressed craft routes.</p>   |     |    |
| <p><b>Geographic Information System mapping</b></p> <p>Geographic Information System (GIS) mapping is normally used for having overall graphical situational awareness as well as having incident-specific mapping that can display incident routes, search areas and patterns, and relevant layers for the prosecution of SAR cases.</p>   |     |    |
| <p><b>Search area and pattern creation</b></p> <p>Search area and pattern creation usually involves the creation of areas of varying shapes and sizes to encompass areas needing to be searched, as well as displaying an overlay of the desired search patterns to be used to conduct the search. Operators would typically create, edit, and delete these as needed.</p>  |     |    |
| <p><b>Incident contact management</b></p> <p>Contact management normally includes the management of relevant names, agencies, and phone numbers for individuals or organizations in relation to an incident.</p>  |     |    |
| <p><b>Survival time determination</b></p> <p>The expected survival time of a person in distress would normally be calculated by a built-in feature that calculates the survival time based on current on-scene weather, state of immersion, clothing being worn, age, sex, and weight of the distressed person.</p>   |     |    |

Sincerely,

\_\_\_\_\_

Signature

Name

Position

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## ANNEX F SUPPLY CHAIN SECURITY INFORMATION

### Supply Chain Security Information (SCSI) Vendor Submission Form



| PART A - BIDDER INFORMATION |  |
|-----------------------------|--|
| Procurement Name:           |  |
| Date submitted:             |  |
| Solicitation Number:        |  |
| Bidder Name:                |  |
| Bidder DUNS Number:         |  |

| PART B - PRODUCT LIST                     |
|---|
| <a href="#">CLICK HERE TO ADD ITEMS +</a> |

| PART C - OWNERSHIP INFORMATION            |
|---|
| <a href="#">CLICK HERE TO ADD ITEMS +</a> |

Please save this form only in Excel format before submitting. Please do not use other formats.

#### Tab B – IT PRODUCT LIST

| Item | OEM Name | OEM DUNS Number | Product Name | Model / Version | Product URL | Vulnerability Information | Supplier Name | Supplier DUNS Number | Supplier URL | Additional Information |
|------|----------|-----------------|--------------|-----------------|-------------|---------------------------|---------------|----------------------|--------------|------------------------|
| 1    |          |                 |              |                 |             |                           |               |                      |              |                        |
| 2    |          |                 |              |                 |             |                           |               |                      |              |                        |
| 3    |          |                 |              |                 |             |                           |               |                      |              |                        |
| 4    |          |                 |              |                 |             |                           |               |                      |              |                        |
| 5    |          |                 |              |                 |             |                           |               |                      |              |                        |

#### Tab C – Ownership Information

| Item | OEM or Supplier name | Ownership | Investors | Executives | Country / Nationality | Corporate website link |
|------|----------------------|-----------|-----------|------------|-----------------------|------------------------|
| 1    |                      |           |           |            |                       |                        |
| 2    |                      |           |           |            |                       |                        |
| 3    |                      |           |           |            |                       |                        |

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## BIDDER FORMS

### Form 1 Bid Submission Form

| BID SUBMISSION FORM   |  |  |
|---|--|--|
| <b>Bidder's full legal name</b><br><i>[Note to Bidders: Bidders who are part of a corporate group should take care to identify the correct corporation as the Bidder.]</i>  |  |  |
| <b>Authorized Representative of Bidder for evaluation purposes (e.g., clarifications)</b>   | Name:  |  |
|   | Title:   |  |
|   | Address:   |  |
|   | Telephone #:   |  |
|   | Fax #:   |  |
|   | Email:   |  |
| <b>Bidder's Procurement Business Number (PBN)</b><br><i>[see the Standard Instructions 2003]</i><br><i>[Note to Bidders: Please ensure that the PBN you provide matches the legal name under which you have submitted your bid. If it does not, the Bidder will be determined based on the legal name provided, not based on the PBN, and the Bidder will be required to submit the PBN that matches the legal name of the Bidder.]</i> |  |  |
| <b>Jurisdiction of Contract:</b><br>Province or Territory in Canada the Bidder wishes to be the legal jurisdiction applicable to any resulting contract (if other than as specified in solicitation)  |  |  |
| <b>Former Public Servants</b><br>See the Article in Part 2 of the bid solicitation entitled "Former Public Servant" for a definition of "Former Public Servant".  | Is the Bidder a FPS in receipt of a pension as defined in the bid solicitation?<br><br>Yes ____ No ____<br><br>If yes, provide the information required by the Article in Part 2 entitled "Former Public Servant " |  |

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| <b>BID SUBMISSION FORM</b>  |  |  |
|---|--|--|
|   | <p>Is the Bidder a FPS who received a lump sum payment under the terms of the terms of the Work Force Adjustment Directive?</p> <p>Yes ____ No ____</p> <p>If yes, provide the information required by the Article in Part 2 entitled "Former Public Servant "</p> |  |
| <b>Licensed Software Maintenance and Support:</b><br><i>(Contracting Authority should only insert when supplemental General Conditions 4004 has been inserted in Part 7).</i>   | Toll-free Telephone:   |  |
|   | E-Mail:  |  |
|   | Website address for web support:   |  |
| <b>Security Clearance Level of Bidder</b><br><b>[include both the level and the date it was granted]</b><br><b>[Note to Bidders: Please ensure that the security clearance matches the legal name of the Bidder. If it does not, the security clearance is not valid for the Bidder.]</b>   |  |  |
| <p>On behalf of the Bidder, by signing below, I confirm that I have read the entire bid solicitation including the documents incorporated by reference into the bid solicitation and I certify that:</p> <ol style="list-style-type: none"><li>1. The Bidder considers itself and its products able to meet all the mandatory requirements described in the bid solicitation;</li><li>2. This bid is valid for the period requested in the bid solicitation;</li><li>3. All the information provided in the bid is complete, true and accurate; and</li><li>4. If the Bidder is awarded a contract, it will accept all the terms and conditions set out in the resulting contract clauses included in the bid solicitation.</li></ol> |  |  |
| <b>Name, Title, and Signature of Authorized Representative of Bidder</b>  | <hr/>  |  |

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| <b>Form 2</b><br><b>Software Publisher Certification Form</b><br>(to be used where the Bidder itself is the Software Publisher)   |  |
|---|--|
| <p>The Bidder certifies that it is the software publisher of all the following software products, associated libraries, databases and that it has all the rights necessary to license them (and any non-proprietary sub-components incorporated into the software) on a royalty-free basis to Canada pursuant to the terms set out in the resulting contract:</p> |  |
| <hr/>   |  |
| <hr/>   |  |
| <hr/>   |  |
| <hr/>   |  |
| <i>[Bidders should add or remove lines as needed]</i>   |  |

**Form 3**  
**Software Publisher Authorization Form**  
(to be used where the Bidder is not the Software Publisher)

This confirms that the software publisher identified below has authorized the Bidder named below to license its proprietary software products under the contract resulting from the bid solicitation identified below. The software publisher acknowledges that no shrink-wrap or click-wrap or other terms and conditions will apply, and that the contract resulting from the bid solicitation (as amended from time to time by its parties) will represent the entire agreement, including with respect to the license of the software products of the software publisher listed below. The software publisher further acknowledges that, if the method of delivery (such as download) requires a user to "click through" or otherwise acknowledge the application of terms and conditions not included in the bid solicitation, those terms and conditions do not apply to Canada's use of the software products of the software publisher listed below, despite the user clicking "I accept" or signalling in any other way agreement with the additional terms and conditions.

This authorization applies to the following software products:

---

---

*[Bidders should add or remove lines as needed]*

Name of Software Publisher (SP) \_\_\_\_\_

Signature of authorized signatory of SP \_\_\_\_\_

Print Name of authorized signatory of SP \_\_\_\_\_

Print Title of authorized signatory of SP \_\_\_\_\_

Address for authorized signatory of SP \_\_\_\_\_

Telephone no. for authorized signatory of SP \_\_\_\_\_

Fax no. for authorized signatory of SP \_\_\_\_\_

Date signed \_\_\_\_\_

Solicitation Number \_\_\_\_\_

Name of Bidder \_\_\_\_\_

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**Form 4**  
**ELECTRONIC PAYMENT INSTRUMENTS**

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

- VISA Acquisition Card;
- MasterCard Acquisition Card;
- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);
- Wire Transfer (International Only);
- Large Value Transfer System (LVTS) (Over \$25M);

**Form 5**  
**FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY – CERTIFICATION**

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for [Employment and Social Development Canada \(ESDC\)](#) - Labours' website.

Date: \_\_\_\_\_ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- A1. The Bidder certifies having no work force in Canada.
- A2. The Bidder certifies being a public sector employer.
- A3. The Bidder certifies being a [federally regulated employer](#) being subject to the *Employment Equity Act*.
- A4. The Bidder certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- A5.1 The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC -Labour.

OR

- A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity \(LAB1168\)](#) to ESDC -Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC -Labour.

B. Check only one of the following:

- B1 The Bidder is not a Joint Venture.

OR

- B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions).

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### Form 6 Declaration Form

|   |                          |                          |                 |
|---|--------------------------|--------------------------|-----------------|
| This declaration form must be submitted as part of the bidding process. Please complete and submit in a <b>sealed envelope labelled "Protected"</b> to the attention of Integrity, Departmental Oversight Branch, PWGSC, 11 Laurier Street, Place du Portage, Phase III, Tower A, 10A1, Room 108, Gatineau (Québec) Canada K1A 0S5. Include the sealed envelope with your bid submission. This form is considered "Protected B" when completed.   |                          |                          |                 |
| <b>Complete Legal Name of Company:</b>  |                          |                          |                 |
| <b>Company's address:</b>   |                          |                          |                 |
| <b>Company's Procurement Business Number (PBN):</b>   |                          |                          |                 |
| <b>Bid Number:</b>  |                          |                          |                 |
| <b>Date of Bid: (YY-MM-DD)</b>  |                          |                          |                 |
| <b>Have you ever, as the bidder, your affiliates or as one of your directors, been convicted or have pleaded guilty of an offence in Canada or similar offence elsewhere under any of the following provisions <sup>1</sup> :</b>   |                          |                          |                 |
|   | <b>Yes</b>               | <b>No</b>                | <b>Comments</b> |
| <b>Financial Administration Act</b><br>80(1) d): False entry, certificate or return<br>80(2): Fraud against Her Majesty<br>154.01: Fraud against Her Majesty  | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| <b>Criminal Code</b><br>121: Frauds on the government and contractor subscribing to election fund<br>124: Selling or Purchasing Office<br>380: Fraud – committed against Her Majesty<br>418: Selling defective stores to Her Majesty  | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| <b>In the last 3 years, have you, as the bidder, your affiliates or one of your directors, been convicted or have pleaded guilty of an offence in Canada or elsewhere under any of the following provisions <sup>1</sup> :</b>  |                          |                          |                 |
| <b>Criminal Code</b><br>119: Bribery of judicial officers<br>120: Bribery of officers<br>346: Extortion<br>366 to 368: Forgery and other offences resembling forgery<br>382: Fraudulent manipulation of stock exchange transactions<br>382.1: Prohibited insider trading<br>397: Falsification of books and documents<br>422: Criminal breach of Contract<br>426: Secret commissions<br>462.31 Laundering proceeds of crime<br>467.11 to 467.13: Participation in activities of criminal organization | <input type="checkbox"/> | <input type="checkbox"/> |                 |
| <b>Competition Act</b><br>45: Conspiracies, agreements or arrangements between competitors<br>46: Foreign directives<br>47: Bid rigging<br>49: Agreements or arrangements of federal financial institutions   | <input type="checkbox"/> | <input type="checkbox"/> |                 |

<sup>1</sup> for which no pardon or equivalent has been received.

|   | Yes                      | No                       | Comments |
|---|--------------------------|--------------------------|----------|
| 52: False or misleading representation<br>53: deceptive notice of winning a prize   |                          |                          |          |
| <b>Corruption of Foreign Public Officials Act</b><br>3: Bribing a foreign public official<br>4: Accounting<br>5: Offence committed outside Canada | <input type="checkbox"/> | <input type="checkbox"/> |          |
| <b>Controlled Drugs and Substance Act</b><br>5: Trafficking in substance<br>6: Importing and exporting<br>7: Production of substance              | <input type="checkbox"/> | <input type="checkbox"/> |          |
| <b>Other Acts</b><br>239: False or deceptive statements of the Income Tax Act<br>327: False or deceptive statements of the Excise Tax Act         | <input type="checkbox"/> | <input type="checkbox"/> |          |

| Additional Comment |
|--------------------|
|                    |

I, (name) \_\_\_\_\_, (position) \_\_\_\_\_, of (company name bidder) \_\_\_\_\_ authorise PWGSC to collect and use the information provided, in addition to any other information that may be required to make a determination of ineligibility and to publicly disseminate the results.

I, (name) \_\_\_\_\_, (position) \_\_\_\_\_, of (company name bidder) \_\_\_\_\_ certify that the information provided in this form is, to the best of my knowledge, true and complete. Moreover, I am aware that any erroneous or missing information could result in the cancellation of my bid as well as a determination of ineligibility/suspension.

We appreciate your interest in doing business with The Government of Canada and your understanding on the additional steps that we need to take to protect the integrity of PWGSC's procurement process.

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## Form 7

### List of Names Form

In accordance with Part 5, Article 5.2(b) – Integrity Provision – List of Names, please complete the Form below.

| Complete Legal Name of Company   |  |
|--|--|
|  |  |
| Company's address  |  |
|  |  |
| Company's Procurement Business Number (PBN)  |  |
|  |  |
| Solicitation number  |  |
|  |  |
| Board of Directors (Use Format – first name last name)<br>Or put the list as an attachment |  |
| 1. Director  |  |
| 2. Director  |  |
| 3. Director  |  |
| 4. Director  |  |
| 5. Director  |  |
| 6. Director  |  |
| 7. Director  |  |
| 8. Director  |  |
| 9. Director  |  |
| 10. Director   |  |
| Other members  |  |
|  |  |
| Comments   |  |
|  |  |

# **SEARCH AND RESCUE MISSION MANAGEMENT SYSTEM REPLACEMENT PROJECT**

## **STATEMENT OF WORK**

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## Statement of Work

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-864  | <b>1 INTRODUCTION</b>   | Heading          |
| SOW-865  | <b>1.1 OBJECTIVE</b>  | Heading          |
| SOW-872  | The objectives of the Search and Rescue Mission Management System (SMMS) Replacement Project are to:  | Information      |
| SOW-873  | 1. Procure and rapidly deploy an Interim SMMS System to replace the in-service legacy system;   | Information      |
| SOW-2650 | 2. Procure and establish the Interim In-Service Support (ISS) Program for the Interim SMMS System;  | Information      |
| SOW-874  | 3. Further enhance the Interim SMMS System to meet the full operational capability requirements;  | Information      |
| SOW-875  | 4. Establish the Full ISS Program for the Full SMMS system.   | Information      |
| SOW-866  | This Statement of Work (SOW) describes the tasks and deliverables required of the Contractor to deliver and support a replacement SMMS System that meets the capability requirements of the SMMS Replacement Project of the Department of National Defence (DND).   | Information      |
| SOW-867  | <b>1.2 BACKGROUND</b>   | Heading          |
| SOW-868  | In Canada, the provision of aeronautical Search and Rescue (SAR) and maritime SAR services is a federal government mandate. The National SAR Program is supported by the Canadian Armed Forces (CAF) and the Canadian Coast Guard (CCG) to deliver SAR services, SAR operations including detection, response and rescue, and SAR mutual training.  | Information      |
| SOW-869  | The legacy command and control and logging software used to coordinate the response to SAR incidents is obsolete and no longer supportable. Its replacement with a modernized system is necessary to avoid lapses in Canada's ability to provide critical lifesaving SAR services.  | Information      |
| SOW-870  | SAR is a complex activity. Key members of the SAR response team are SAR Mission Coordinators, who are responsible for the command and control of aerospace and maritime SAR assets and search efforts, maintaining situational awareness of new information, logging updates and outcomes of SAR incidents, and providing periodic and "as required" updates to stakeholders of ongoing SAR incidents. These SAR Mission Coordinators are expert users who are based in three (3) Joint Rescue Coordination Centres (JRCCs) and two (2) Maritime Rescue Sub-Centres (MRSCs) across Canada, and are part of an integrated SAR system which includes integration with the SAR satellite system (COSPAS/SARSAT) and SAR assets across Canada. The Canadian SAR system typically responds to over 9,000 SAR incidents per year, with the highest activity occurring between May and September that could involve over one hundred (100) SAR incidents per day. Peak activity periods often see SAR Mission Coordinators working on ten (10) or more incidents simultaneously. | Information      |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-871  | <b>1.3 GENERAL</b>   | Heading          |
| SOW-2204 | Many requirements in this SOW contain a reference prefixed by “ID SOW-”, for example “ID SOW-9876”. The location of those references are within this document, to be found under the "ID" heading. References to ID numbers may include the associated page and/or section number in parentheses; in case of discrepancy, the ID number reference takes precedence over any page and/or section number reference.  | Information      |
| SOW-2205 | Unless otherwise stated herein, where reference is made to a section by ID number, that reference includes all of that SOW ID's subsections, sub-subsections, and so on.   | Information      |
| SOW-2642 | Public Services and Procurement Canada (PSPC) represents Canada as the Contracting Authority (CA), and the Department of National Defence represents Canada as the Technical Authority (TA). The CA is the primary point of contact for subjects related to the Contract, whereas the TA is the primary point of contact for subjects related to the SOW. The Contractor is requested to address their communications to Canada accordingly, with copies to other party.   | Information      |
| SOW-879  | <b>1.4 DEFINITIONS</b>   | Heading          |
| SOW-880  | <b>SMMS Core Application</b> is defined as a software application or a package of software applications that fulfills the requirements of the command and control capability for SMMS. This is further divided into:   | Information      |
| SOW-881  | 1. <b>Interim SMMS Core Application:</b> The application delivered to meet the Interim capability requirements specified in ID SOW-1085 (section 5, page 33); and  | Information      |
| SOW-882  | 2. <b>Full SMMS Core Application:</b> The application delivered to meet the Full capability requirements as specified in ID SOW-1025 (section 6, page 60).   | Information      |
| SOW-883  | <b>SMMS Hosting Environment</b> is defined as the environment in which the SMMS Core Application will be deployed, and it includes all components and infrastructure required to securely support the deployment of the SMMS Core Application. Canada will set up and manage a cloud environment as the SMMS Hosting Environment. Canada's intent is to deploy the SMMS Core Application on a Canada Protected B cloud tenant with multiple regions and availability zones. It is expected that there will be separate environments for training, pre-production (test), and production. | Information      |
| SOW-884  | <b>SMMS System</b> is used herein to refer to the overall SMMS system, which includes the SMMS Core Application and the SMMS Hosting Environment.  | Information      |
| SOW-2709 | Additional definitions are provided in the Glossary at Appendix D to this SOW.   | Information      |
| SOW-877  | <b>1.5 REFERENCE DOCUMENTS</b>   | Heading          |
| SOW-878  | The following documents, which are available commercially or publicly and are not provided by Canada, provide reference information applicable to this SOW:  | Information      |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-991  | International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)   | Information      |
| SOW-993  | COSPAS-SARSAT A.002   | Information      |
| SOW-2527 | The following document, which is not available commercially or publicly and is provided by Canada in appendices to this SOW, provides reference information applicable to this SOW:   | Information      |
| SOW-992  | Canadian Aeronautical and Maritime Search and Rescue Manual (CAMSAR) Volume II Chapter 4 section 4.02: Located in Appendix E to this SOW.   | Information      |
| SOW-885  | <b>2 PROJECT STRUCTURE, EVENTS, AND SCHEDULE</b>  | Heading          |
| SOW-886  | <b>2.1 GENERAL PROJECT STRUCTURE</b>  | Heading          |
| SOW-887  | The project is to be delivered in two (2) phases, as follows:   | Information      |
| SOW-888  | <u>Phase 1</u> . Phase 1 will commence at Contract Award and last through the deployment of a solution fulfilling the Interim SMMS Core Application requirements. The objective of the first phase is to rapidly deploy a Commercial Off-the-Shelf (COTS) application as an interim SMMS System into SAR operation to replace the legacy SMMS system. It consists of planning, engineering design, testing, security accreditation, deployment, training, transition support, and in-service support of the application. The major events are listed in ID SOW-892 (section 2.2, page 7); and | Information      |
| SOW-889  | <u>Phase 2</u> . Phase 2 may commence, at Canada's discretion, following acceptance of the Interim Core Application through one or more Task Authorizations, with the intent of gradually enhancing the SMMS Core Application to fulfill the Full SMMS Core Application requirements.   | Information      |
| SOW-890  | Details on the Phase 2 specifications and requirements, contract deliverables, and schedule will be specified and mutually agreed upon by Canada and the Contractor at the completion of Phase 1.   | Information      |
| SOW-891  | Refer to the Contract for the details on the Task Authorization process.  | Information      |
| SOW-892  | <b>2.2 PROJECT EVENTS AND SCHEDULE</b>  | Heading          |
| SOW-893  | The key project events for Phase 1 are described in the following sub-sections.   | Information      |
| SOW-897  | The Contractor must meet the entry and exit criteria for each event as described in ID SOW-1034 (section 3.12, page 13).  | Mandatory        |
| SOW-2141 | Canada anticipates the completion date for Phase 2 to be twelve (12) to twenty-four (24) months after the successful completion of SMMS Phase 1.  | Information      |
| SOW-2103 | <b>2.2.1 Event 1-1: Contract Award</b>  | Heading          |
| SOW-2104 | Event 1-1 occurs upon Contract Award.   | Information      |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2106 | <b>2.2.2 Event 1-2: Kick-Off</b>   | Heading          |
| SOW-2107 | Event 1-2 occurs when the Kick-off Meeting (KOM) is held.  | Information      |
| SOW-2108 | The Contractor must conduct the KOM no later than 15 working days following Event 1-1, Contract Award.   | Mandatory        |
| SOW-2109 | Additional requirements for the KOM are at ID SOW-1037 (section 3.12.2, page 13).  | Information      |
| SOW-2110 | <b>2.2.3 Event 1-3: System Implementation Review</b>   | Heading          |
| SOW-2112 | Event 1-3 occurs when the System Implementation Review Meeting is held.  | Information      |
| SOW-2113 | The Contractor must conduct the System Implementation Review Meeting no later than twenty (20) working days after Canada's acceptance to the closure of Event 1-2, KOM, with its associated success criteria fulfilled.  | Mandatory        |
| SOW-2114 | Additional requirements for the System Implementation Review Meeting are at ID SOW-1041 (section 3.12.3, page 14).   | Information      |
| SOW-2116 | <b>2.2.4 Event 1-4: SMMS Core Application Setup</b>  | Heading          |
| SOW-2117 | Event 1-4 occurs when the SMMS Core Application is set up.   | Information      |
| SOW-2118 | The Contractor must provide support to Canada to complete setting up the SMMS Core Application no later than twenty (20) working days after Canada's acceptance to the closure of Event 1-3, System Implementation Review Meeting, with its associated success criteria fulfilled, unless mutually agreed between Canada and the Contractor. | Mandatory        |
| SOW-2119 | Additional requirements for the SMMS Core Application Setup are at ID SOW-968 (section 4.4, page 23).  | Information      |
| SOW-2216 | <b>2.2.5 Event 1-5: System Acceptance Test (SAT) Readiness Review</b>  | Heading          |
| SOW-2217 | Event 1-5 occurs when the SMMS Core Application is successfully deployed in the SMMS Hosting Environment and is ready for System Acceptance Test (SAT).  | Information      |
| SOW-2218 | The Contractor must schedule and arrange for the SAT Readiness Review Meeting within fifteen (15) working days after the Canada's acceptance to the closure of Event 1-4, SMMS Core Application Setup, with its associated success criteria fulfilled or as otherwise mutually agreed with Canada.   | Mandatory        |
| SOW-2219 | The Contractor must provide a minimum of five (5) working days advance notice for its intent to call for the SAT Readiness Review Meeting.   | Mandatory        |
| SOW-2220 | Additional requirements for the SAT Readiness Review are at ID SOW-1043 (section 3.12.4, page 15).   | Information      |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2137 | <b>2.2.6 Event 1-6: System Acceptance Test (SAT)</b>   | Heading          |
| SOW-2138 | Event 1-6 occurs when the System Acceptance Test (SAT) is successfully held.   | Information      |
| SOW-2139 | The Contractor must complete the SAT no later than fifteen (15) working days after Canada's acceptance to the closure of Event 1-5, System Acceptance Test Readiness Review, with its associated success criteria fulfilled. | Mandatory        |
| SOW-2140 | Additional requirements for the SAT are at ID SOW-2223 (section 3.12.5, page 15).  | Information      |
| SOW-2133 | <b>2.2.7 Event 1-7: Training</b>   | Heading          |
| SOW-2134 | Event 1-7 occurs when all training requirements defined at ID SOW-984 (section 7, page 63) are fulfilled.  | Information      |
| SOW-2135 | The Contractor must complete all training no later than twenty (20) working days after Event 1-6, or as otherwise mutually agreed with Canada.   | Mandatory        |
| SOW-2136 | Additional requirements for Training are at ID SOW-984 (section 7, page 63).   | Information      |
| SOW-2129 | <b>2.2.8 Event 1-8: Transition and Deployment into Operations</b>  | Heading          |
| SOW-2130 | Event 1-8 occurs when Transition and Deployment into Operations occurs.  | Information      |
| SOW-2701 | The timing of Event 1-8 will be established following completion of the System Acceptance Test, as described in ID SOW-980 (section 4.6, page 33).   | Information      |
| SOW-2125 | <b>2.2.9 Event 1-9: Completion of Phase 1</b>  | Heading          |
| SOW-2126 | Event 1-9 occurs when Phase 1 is complete.   | Information      |
| SOW-2121 | <b>2.2.10 Event 1-10: Interim ISS Program Begins</b>   | Heading          |
| SOW-2122 | Event 1-10 occurs when the Interim ISS Program begins.   | Information      |
| SOW-2702 | The timing of Event 1-10 will be established following completion of the System Acceptance Test, as described in ID SOW-980 (section 4.6, page 33).  | Information      |
| SOW-2124 | Additional requirements for Interim ISS Program are identified at ID SOW-1009 (section 8, page 64).  | Information      |
| SOW-909  | <b>3 PROJECT MANAGEMENT</b>  | Heading          |
| SOW-910  | <b>3.1 PROJECT MANAGEMENT PLAN</b>   | Heading          |
| SOW-911  | The Contractor must prepare, deliver, maintain and update the Project Management Plan (PMP) in accordance with ID SOW-1054 (section 3.14.2.1, page 16).  | Mandatory        |
| SOW-912  | <b>3.2 PROJECT MANAGEMENT PROGRAM</b>  | Heading          |
| SOW-913  | The Contractor must implement and maintain a Project Management Program in accordance with the approved PMP for the duration of the SMMS Contract.   | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-914  | <b>3.3 PROJECT MANAGEMENT ORGANIZATION</b>  | Heading          |
| SOW-2613 | <b>3.3.1 General</b>  | Heading          |
| SOW-915  | The Contractor must establish and maintain a Project Management Organization in accordance with the approved PMP for the duration of the SMMS Contract.   | Mandatory        |
| SOW-916  | The Contractor's Project Management Organization must conduct the following for all work required under the SMMS SOW:   | Mandatory        |
| SOW-2513 | a. Scheduling;  | Mandatory        |
| SOW-2522 | b. Planning;  | Mandatory        |
| SOW-2521 | c. Organizing;  | Mandatory        |
| SOW-2520 | d. Directing;   | Mandatory        |
| SOW-2519 | e. Coordinating;  | Mandatory        |
| SOW-2518 | f. Executing;   | Mandatory        |
| SOW-2517 | g. Monitoring;  | Mandatory        |
| SOW-2516 | h. Controlling;   | Mandatory        |
| SOW-2515 | i. Orderly resource management;   | Mandatory        |
| SOW-2514 | j. Communicating;   | Mandatory        |
| SOW-2525 | k. Reporting;   | Mandatory        |
| SOW-2524 | l. Managing risk; and   | Mandatory        |
| SOW-2523 | m. Tracking/closing of action items   | Mandatory        |
| SOW-2614 | <b>3.3.2 Project Manager</b>  | Heading          |
| SOW-917  | The Contractor must designate a Project Manager (PM) to lead the Contractor's Project Management Organization for the duration of the SMMS Contract. The Contractor's Project Manager will be the primary point of contact between the Contractor and Canada for all subjects related to the SMMS Contract.   | Mandatory        |
| SOW-2615 | The Project Manager must be a current employee of the Contractor or the Contractor's parent company, subsidiary, division, or affiliate.  | Mandatory        |
| SOW-2616 | The Project Manager must have a minimum of eight years of cumulative experience as a Project Manager responsible for managing one or more technical project(s) related to the development, integration, and deployment of mission critical software. Mission critical software is defined as software or workload which continuous functioning on a 24 x 7 x 365 basis is essential to the survival of a business or an organization. | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2617 | <b>3.3.3 Lead In-Service Support Resource</b>   | Heading          |
| SOW-2618 | The Contractor must designate a Lead In-Service Support (ISS) Resource to lead the ISS program.   | Mandatory        |
| SOW-2619 | The Lead ISS Resource must be a current employee of the Contractor or the Contractor's parent company, subsidiary, division, or affiliate.  | Mandatory        |
| SOW-2620 | The Lead ISS Resource must have a minimum of eight years of cumulative experience in managing one or more ISS programs for mission critical software.   | Mandatory        |
| SOW-918  | <b>3.4 PROJECT MASTER SCHEDULE</b>  | Heading          |
| SOW-919  | The Contractor must prepare and deliver a Project Master Schedule (PMS) in accordance with ID SOW-1059 (section 3.14.2.2, page 17). The PMS approved by Canada will be the governing document for scheduling project events and activities.   | Mandatory        |
| SOW-920  | The Contractor must implement and maintain the PMS in accordance with the approved PMP for the duration of the SMMS Contract.   | Mandatory        |
| SOW-921  | The Contractor must provide the updated PMS in accordance with ID SOW-1059 (section 3.14.2.2, page 17).   | Mandatory        |
| SOW-922  | <b>3.5 PROGRESS REPORTING</b>   | Heading          |
| SOW-923  | <b>3.5.1 General</b>  | Heading          |
| SOW-924  | The Contractor must implement an internal project management process to provide the TA with the status of the work performed each month and on the proposed work for the upcoming month, to take the form of:<br><ul style="list-style-type: none"> <li>- Monthly progress reports as described in ID SOW-925 (section 3.5.2, page 11); and</li> <li>- Progress review meetings as described in ID SOW-927 (section 3.5.3, page 11).</li> </ul> | Mandatory        |
| SOW-925  | <b>3.5.2 Progress Reports</b>   | Heading          |
| SOW-926  | The Contractor must submit a monthly progress report five (5) working days prior to the monthly Project Review Meeting (PRM).   | Mandatory        |
| SOW-927  | <b>3.5.3 Progress Review Meetings</b>   | Heading          |
| SOW-928  | The Contractor's Project Manager or a duly authorized delegate must be present at all PRMs. If the Project Manager does not have final approval authority for decision making and changes then the person that has that final approval authority must also be present at all PRMs.  | Mandatory        |
| SOW-929  | All PRMs will be held at either Canada's facilities or in a virtual format as indicated by Canada, unless otherwise mutually agreed between the Contractor's Project Manager and Canada.  | Information      |
| SOW-930  | The Contractor must schedule, plan and organize Progress Review Meetings (PRMs) to be held on a monthly basis for the duration of Phase 1 and Phase 2   | Mandatory        |

| ID      | Requirements  | Requirement Type |
|---------|---|------------------|
|         | <p>of the SMMS Contract to review:</p> <ul style="list-style-type: none"> <li>a. Project progress since the last PRM;</li> <li>b. Review of the minutes and action items of the previous PRM;</li> <li>c. Review of Action Item Log and Monthly Progress Report; and</li> <li>d. Summary of the work planned for the following month, and any upcoming events which could impact the schedule, cost, and quality of all deliverables.</li> </ul>  |                  |
| SOW-936 | The Contractor must schedule, plan and organize the initial PRM.  | Mandatory        |
| SOW-939 | A PRM for a specific month may only be skipped with the pre-approval of Canada. Skipped PRM meetings will be credited to be used as additional meetings if deemed necessary by Canada. A PRM meeting can be interchanged with an equivalent meeting (technical or otherwise) to discuss any ad-hoc issues and in place of a formal meeting.   | Information      |
| SOW-940 | <b>3.6 ACTION ITEM LOG</b>  | Heading          |
| SOW-941 | The Contractor must establish and maintain an Action Item Log that clearly details Action Items resulting from meetings and correspondence between Canada and the Contractor. Information to be recorded for each Action Item must at least include the organization responsible for completing the action, the agreed closure date, the current status, number of days late, and closure objective evidence for. The Action Item Log must be reported within the Project Progress Reports. | Mandatory        |
| SOW-942 | <b>3.7 PROBLEM REPORTING</b>  | Heading          |
| SOW-943 | The Contractor must immediately notify Canada of major issues that may impact the deliverable schedule or for any problem areas which may jeopardize performance of the planned portion of the work. The Contractor must implement internal processes to ensure that this reporting occurs in a timely manner.  | Mandatory        |
| SOW-944 | <b>3.8 RISK MANAGEMENT</b>  | Heading          |
| SOW-945 | The Contractor must implement and maintain a Risk Management (RM) Program in accordance with the Risk Management section of the approved PMP for the duration of the SMMS Contract.   | Mandatory        |
| SOW-946 | <b>3.9 CONFIGURATION MANAGEMENT</b>   | Heading          |
| SOW-947 | The Contractor must implement and maintain a Configuration Management Program in accordance with the Configuration Management section of the approved PMP for the duration of the SMMS Contract.  | Mandatory        |
| SOW-948 | The Contractor Configuration Management Program must be applied to all deliverables, including data deliverables and all components of the SMMS Core Application.   | Mandatory        |
| SOW-949 | <b>3.10 SOFTWARE QUALITY ASSURANCE</b>  | Heading          |
| SOW-950 | The Contractor must implement and maintain a Software Quality Assurance Program in accordance with the Software Quality Assurance section of the approved PMP for the duration of the SMMS Contract.  | Mandatory        |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-951  | The Software Quality Assurance Program must provide quality control and quality assurance measures to the SMMS Core Application and its components.  | Mandatory        |
| SOW-2211 | <b>3.11 SECURITY ASSESSMENT AND AUTHORIZATION MANAGEMENT</b>   | Heading          |
| SOW-2212 | The Contractor must implement and maintain a Security Assessment and Authorization (SA&A) Management Program in accordance with the approved PMP for the duration of the SMMS Contract.  | Mandatory        |
| SOW-2210 | The SA&A Management Program must provide support and measures to ensure that the SMMS Core application and its components meet the requirements of Canada's evolving Security Assessment and Authorization (SA&A) process.   | Mandatory        |
| SOW-1034 | <b>3.12 EVENT ENTRANCE AND SUCCESS CRITERIA</b>  | Heading          |
| SOW-1035 | <b>3.12.1 GENERAL</b>  | Heading          |
| SOW-1036 | The event entrance and success criteria outlined in this section define the minimum entrance and exit criteria required for each major project event. These criteria must be fulfilled by the Contractor to be considered successful completion of the event. Not all entrance and success criteria outlined in this section have associated deliverables. | Mandatory        |
| SOW-1037 | <b>3.12.2 KICK OFF MEETING (KOM)</b>   | Heading          |
| SOW-1038 | The KOM provides an opportunity for all stakeholders to meet and agree on a way forward to complete the work required for the delivery of the SMMS capability. The mandatory entrance and success criteria for the KOM are as follows:   | Information      |
| SOW-938  | The initial PRM, or the Kick-off Meeting, must include the following agenda items, as a minimum, for discussion:   | Mandatory        |
| SOW-2528 | a. Project Management Plan;  | Mandatory        |
| SOW-2532 | b. Project Master Schedule;  | Mandatory        |
| SOW-2643 | c. Risk Management Plan and Risk Register;   | Mandatory        |
| SOW-2531 | d. Interim SMMS Core Application Requirement Review;   | Mandatory        |
| SOW-2530 | e. SMMS Hosting Environment;   | Mandatory        |
| SOW-2644 | f. System Implementation Plan; and   | Mandatory        |
| SOW-2645 | g. Security Assessment and Authorization Management  | Mandatory        |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-1039 | <p><u>Entrance Criteria:</u></p> <ol style="list-style-type: none"> <li>1. KOM agenda and any presentation material has been agreed to by Canada;</li> <li>2. Draft PMP has been submitted to Canada five (5) working days prior to the KOM for review; and</li> <li>3. Draft PMS has been submitted to Canada five (5) working days prior to the KOM for review.</li> </ol>   | Mandatory        |
| SOW-1040 | <p><u>Success Criteria:</u></p> <ol style="list-style-type: none"> <li>1. Meeting Minutes of KOM is accepted and approved by TA;</li> <li>2. Feedbacks and comments on the PMP has been provided by Canada;</li> <li>3. Feedbacks and comments on the PMS has been addressed by the Contractor and approved by TA; and</li> <li>4. Action items have been closed and agreed upon by the TA.</li> </ol>   | Mandatory        |
| SOW-1041 | <b>3.12.3 SYSTEM IMPLEMENTATION REVIEW MEETING</b>   | Heading          |
| SOW-1042 | <p>The System Implementation Review meeting provides an opportunity for all stakeholders to meet and agree on the plan for deploying the SMMS Core Application to meet the SMMS capability requirements. The mandatory entrance and success criteria for the System Implementation Review meeting are as follows:</p>  | Information      |
| SOW-2209 | <p><u>Entrance Criteria:</u></p> <ol style="list-style-type: none"> <li>1. System Implementation Review meeting agenda and any presentation material has been agreed to by Canada;</li> <li>2. Draft System Implementation Plan has been submitted to Canada five (5) working days prior to the System Implementation Review meeting for review.</li> <li>3. Draft System Acceptance Test (SAT) Plan has been submitted to Canada five (5) working days prior to the System Implementation Review meeting for review;</li> <li>4. Revised PMP has been submitted to Canada five (5) working days prior to the System Implementation Review meeting for review;</li> <li>5. SA&amp;A evidence and support documentation and materials for the SMMS Core Application have been submitted to Canada ten (10) working days prior to the SAT Readiness Review for review; and</li> <li>6. Draft In-Service Support Plan (ISS) has been submitted to Canada five (5) working days prior to the System Implementation Review for review.</li> </ol> | Mandatory        |
| SOW-2213 | <p><u>Success Criteria:</u></p> <ol style="list-style-type: none"> <li>1. Meeting Minutes of System Implementation Review meeting is accepted and approved by TA;</li> <li>2. System Implementation Plan has been updated to address the feedbacks from Canada and approved by TA;</li> <li>3. Feedbacks and comments on the SAT Plan have been provided by Canada;</li> <li>4. Feedbacks and comments on the ISS Plan have been provided by Canada;</li> <li>5. SA&amp;A evidence and support documentation and materials for the SMMS Core Application have been provided by Canada; and</li> <li>6. Action items have been closed and agreed upon by the TA.</li> </ol>   | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1043 | <b>3.12.4 SYSTEM ACCPETANCE TEST READINESS REVIEW</b>   | Heading          |
| SOW-1044 | The SAT Readiness Review Meeting provides an opportunity for all stakeholders to review the deployment of the SMMS Core Application in the SMMS Hosting Environment and to review the SAT plan to be executed in SAT. The mandatory entrance and success criteria for the SAT Readiness Review are as follows:  | Information      |
| SOW-2222 | <p><u>Entrance Criteria:</u></p> <ol style="list-style-type: none"> <li>1. Contractor submit notice to CA to call for the SAT Readiness Review Meeting;</li> <li>2. Canada to baseline the SMMS System prior to SAT. In other words, Canada will save the configuration of all components and services of the SMMS System as a reference prior to the SAT;</li> <li>3. Revised SAT Plan has been submitted to Canada ten (5) working days prior to the SAT Readiness Review for review;</li> <li>4. Revised ISS Plan has been submitted to Canada ten (5) working days prior to the SAT Readiness Review for review;</li> <li>5. SAT Readiness Review meeting agenda and any presentation material has been agreed to by Canada; and</li> <li>6. Additional or revised SA&amp;A evidence and support documentation and materials have been submitted to Canada ten (10) working days prior to the SAT Readiness Review for review.</li> </ol> | Mandatory        |
| SOW-2221 | <p><u>Success Criteria:</u></p> <ol style="list-style-type: none"> <li>1. Meeting Minutes of SAT Readiness Review meeting is accepted and approved by TA;</li> <li>2. SAT Plan and its schedule accepted and approved by TA;</li> <li>3. ISS Plan is accepted and approved by TA;</li> <li>4. SA&amp;A evidence and support documentation and materials for the SMMS Core Application have been accepted by TA, and the resolutions for any outstanding SA&amp;A issues have been accepted by TA; and</li> <li>5. Action items have been closed and agreed upon by the TA.</li> </ol>   | Mandatory        |
| SOW-2223 | <b>3.12.5 SYSTEM ACCEPTANCE TESTING</b>   | Heading          |
| SOW-2224 | The objective of the System Acceptance Testing is to validate that the SMMS Core Application, deployed in the SMMS Hosting Environment, meets all requirements for the Interim SMMS Core Application capability.  | Information      |
| SOW-2225 | <p><u>Entrance Criteria:</u></p> <ol style="list-style-type: none"> <li>1. Contractor submit notice to CA and TA to request for resources, including access to government sites, to support the SAT;</li> </ol>   | Mandatory        |
| SOW-2226 | <p><u>Success Criteria:</u></p> <ol style="list-style-type: none"> <li>1. All tests are executed in accordance with the approved SAT Plan;</li> <li>2. System Acceptance Test Report is reviewed and approved by TA;</li> <li>3. Resolutions for issues identified during SAT have been accepted and approved by TA; and</li> <li>4. Action items have been closed and agreed upon by the TA.</li> </ol>  | Mandatory        |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-905  | <b>3.13 MEETING REQUIREMENTS</b>   | Heading          |
| SOW-906  | The meeting requirements specified in this section apply to all meetings between the Contractor and Canada related to the work as part of this SOW.  | Information      |
| SOW-907  | The Contractor must prepare and submit an agenda to the TA for their approval at least five (5) working days prior to each meeting, with the exception of ad-hoc meetings requested by Canada.   | Mandatory        |
| SOW-908  | The Contractor must prepare and distribute the meeting materials and minutes and submit them to Canada for approval within five (5) working days after each meeting.   | Mandatory        |
| SOW-901  | <b>3.14 CONTRACT DATA REQUIREMENTS</b>   | Heading          |
| SOW-2206 | <b>3.14.1 General</b>  | Heading          |
| SOW-902  | The Contractor must prepare and deliver the data deliverables in accordance with the SMMS Contractor Documentation Requirements in ID SOW-1045 (section 3.14.2, page 16), which describes the minimum requirements for the content of each document to be delivered by the Contractor in accordance with this SOW.   | Mandatory        |
| SOW-903  | The Contractor must ensure that all documents and plans are consistent and fully integrated:<br>- With this SOW;<br>- With the Project Management Plan (PMP);<br>- With the Project Master Schedule (PMS); and<br>- Among themselves.  | Mandatory        |
| SOW-904  | The Contractor must maintain and update all data deliverables, including plans and documents, as required for the duration of the SMMS Contract.   | Mandatory        |
| SOW-1045 | <b>3.14.2 Document Requirements</b>  | Heading          |
| SOW-1050 | Unless otherwise indicated, all Contractor documents must be in Microsoft Word, Excel, PowerPoint, Project, Visio or Adobe Acrobat in a searchable format; no scanned documents without the ability to search characters or words will be accepted. All Microsoft-based documents must be compatible, readable, and searchable with the 2013 version of the applicable software suite. | Mandatory        |
| SOW-1054 | <b>3.14.2.1 DOC 001: Project Management Plan (PMP)</b>   | Heading          |
| SOW-1055 | <b>3.14.2.1.1 Description</b>  | Heading          |
| SOW-1056 | The PMP details the Contractor's approach to the management of the project through the project lifecycle. It covers all aspects of the project.  | Information      |
| SOW-2568 | <b>3.14.2.1.2 Content</b>  | Heading          |
| SOW-2624 | The PMP must describe the methodology, processes, and means employed to manage the different aspects of the project and to ensure timely completion of the project within the approved budget and timeframe.   | Mandatory        |

SMMS Replacement Project – SOW

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2569 | As a minimum, the PMP must describe the Contractor's management approach to meet the mandatory requirements in the following areas:   | Mandatory        |
| SOW-2570 | a. Organization structure and resource assignment for the SMMS Project  | Mandatory        |
| SOW-2572 | b. Project Management   | Mandatory        |
| SOW-2575 | c. Scope and Requirement Management   | Mandatory        |
| SOW-2576 | d. Schedule Management  | Mandatory        |
| SOW-2571 | e. System Engineering Management  | Mandatory        |
| SOW-2573 | f. Communication Management   | Mandatory        |
| SOW-2574 | g. Configuration Management   | Mandatory        |
| SOW-2577 | h. Risk Management  | Mandatory        |
| SOW-2578 | i. Software Quality Assurance   | Mandatory        |
| SOW-2579 | j. Security Assessment and Authorization (SA&A) Management  | Mandatory        |
| SOW-2706 | The Contractor must describe the process that will be used to collect and verify the mandatory evidence required for the priority security controls described in ID SOW-2403 (section 4.5, page 32) as part of the SA&A Management section. | Mandatory        |
| SOW-2707 | The Contractor must describe details of the mandatory evidence to be collected to validate the priority security controls described in ID SOW-2403 as part of the SA&A Management section.  | Mandatory        |
| SOW-1057 | <b>3.14.2.1.3 Delivery Date</b>   | Heading          |
| SOW-1058 | The Contractor must submit a draft of the PMP to Canada for review at least five (5) working days prior to the KOM meeting.   | Mandatory        |
| SOW-2696 | The Contractor must submit a revised version of the PMP to Canada for review at least five (5) working days prior to the System Implementation Review meeting for review.   | Mandatory        |
| SOW-1059 | <b>3.14.2.2 DOC 002: Project Master Schedule (PMS)</b>  | Heading          |
| SOW-1060 | <b>3.14.2.2.1 Description</b>   | Heading          |
| SOW-1061 | The PMS provides detailed information on the tasks, events, and activities required to deliver the SMMS Core Application within the project timeline.   | Information      |
| SOW-2580 | <b>3.14.2.2.2 Content</b>   | Heading          |
| SOW-2581 | The PMS must be provided in MS Project 2013 compatible format and must include the following information as a minimum:<br>-Task Title<br>-Start Date<br>-Duration<br>-Finish Date<br>-Constraint  | Mandatory        |

SMMS Replacement Project – SOW

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2582 | The PMS must provide a Work Breakdown Structure (WBS) on all the activities required for the project in Phase 1.   | Mandatory        |
| SOW-2589 | The Contractor must prepare the WBS using the principles contained in the Project Management Institute (PMI) WBS Practice Standard and/or other industry standards as a guide.                   | Mandatory        |
| SOW-2583 | The PMS must show all major deliverables.  | Mandatory        |
| SOW-2584 | The PMS must show all key tasks, activities, events, and milestones in Phase 1.  | Mandatory        |
| SOW-2587 | The PMS must show all dependencies between tasks, activities and events.   | Mandatory        |
| SOW-2588 | The PMS must identify the stakeholder(s) responsible for the execution of each task and activity.  | Mandatory        |
| SOW-2585 | The PMS must identify the critical path for Phase 1.   | Mandatory        |
| SOW-1062 | <b>3.14.2.2.3 Delivery Date</b>  | Heading          |
| SOW-1063 | The Contractor must submit a PMS to Canada for review at least five (5) working days prior to the KOM meeting.   | Mandatory        |
| SOW-1064 | <b>3.14.2.3 DOC 003: System Implementation Plan</b>  | Heading          |
| SOW-1065 | <b>3.14.2.3.1 Description</b>  | Heading          |
| SOW-1066 | The System Implementation Plan provides all technical information related to the deployment of the SMMS Core Application to the SMMS Hosting Environment.  | Information      |
| SOW-2563 | <b>3.14.2.3.2 Content</b>  | Heading          |
| SOW-2564 | The System Implementation Plan must contain the following information, as a minimum:   | Mandatory        |
| SOW-2554 | • <u>Architecture Design and Specifications</u>  | Information      |
| SOW-2559 | The Contractor must provide a detailed System Architecture design and its description for the deployment of the SMMS Core Application to the SMMS Hosting Environment to support SAR operations. | Mandatory        |
| SOW-2686 | The Contractor must identify all elements or components in the SMMS Hosting Environment which may impact the performance of the SMMS System.   | Mandatory        |
| SOW-2560 | The Contractor must provide a detailed System Architecture design for deploying the SMMS Core Application to the SMMS Hosting Environment to support SAR training.                               | Mandatory        |
| SOW-2561 | The Contractor must provide Canada with all detailed requirements and specifications necessary to configure the SMMS Hosting Environment to support SAR operation and training.                  | Mandatory        |
| SOW-2555 | • <u>Roles and Responsibilities</u>  | Information      |

SMMS Replacement Project – SOW

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2562 | The Contractor must describe the roles and responsibilities of all stakeholders involved in the deployment of the SMMS Core Application to the SMMS Hosting Environment.   | Mandatory        |
| SOW-2556 | <ul style="list-style-type: none"> <li>• <u>Software Packages and Toolkits</u></li> </ul>  | Information      |
| SOW-2565 | The Contractor must provide all software packages, toolkits, deployment scripts, and any other software components required for the deployment of the SMMS Core Application, along with detailed information on their purpose, installation, and configuration.  | Mandatory        |
| SOW-2557 | <ul style="list-style-type: none"> <li>• <u>Detailed Deployment Process</u></li> </ul>   | Information      |
| SOW-2566 | The Contractor must provide detailed instructions, procedures, and any support material required for deploying the SMMS Core Application to the SMMS Hosting Environment.  | Mandatory        |
| SOW-2558 | <ul style="list-style-type: none"> <li>• <u>Technical Support for Deployment</u></li> </ul>  | Information      |
| SOW-2567 | The Contractor must describe the technical support that is included in the scope of this Contract to assist Canada's technical team to deploy the SMMS Core Application to the SMMS Hosting Environment.   | Mandatory        |
| SOW-1067 | <b>3.14.2.3.3 Delivery Date</b>  | Heading          |
| SOW-1068 | The Contractor must submit a draft of the System Implementation Plan to Canada for review at least five (5) working days prior to the System Implementation Review meeting.  | Mandatory        |
| SOW-1075 | <b>3.14.2.4 DOC 004: System Acceptance Test Plan</b>   | Heading          |
| SOW-1076 | <b>3.14.2.4.1 Description</b>  | Heading          |
| SOW-1077 | The System Acceptance Test Plan provides a detailed description of all tests to be included in the System Acceptance Test and how they are used to validate that the SMMS Core Application requirements.   | Information      |
| SOW-2590 | <b>3.14.2.4.2 Content</b>  | Heading          |
| SOW-2591 | The System Acceptance Test Plan must describe all the test cases to be performed as part of the System Acceptance Testing.   | Mandatory        |
| SOW-2592 | For each test case, the following information must be provided as a minimum: <ul style="list-style-type: none"> <li>- Test objectives;</li> <li>- Requirement(s) and capability(ies) to be validated by the test;</li> <li>- Roles and responsibilities of all stakeholders involved in the test;</li> <li>- Test environment, equipment, and tools requirements;</li> <li>- Pre-condition(s) for the test;</li> <li>- Detailed test procedures and the associated expected results at each step;</li> </ul> and <ul style="list-style-type: none"> <li>- Exit criteria for the test.</li> </ul> | Mandatory        |
| SOW-2594 | The System Acceptance Test Plan must describe the sign-off procedure and process for the System Acceptance Test.   | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1078 | <b>3.14.2.4.3 Delivery Date</b>   | Heading          |
| SOW-1079 | The Contractor must submit a draft System Acceptance Test (SAT) Plan to Canada for review at least five (5) working days prior to the System Implementation Review meeting.   | Mandatory        |
| SOW-2697 | The Contractor must submit a revised SAT Plan to Canada for review at least five (5) working days prior to the SAT Readiness Review Meeting.  | Mandatory        |
| SOW-1070 | <b>3.14.2.5 DOC 005: System Acceptance Test Report</b>  | Heading          |
| SOW-1071 | <b>3.14.2.5.1 Description</b>   | Heading          |
| SOW-1072 | The System Acceptance Test Report provides a summary of the test results of the System Acceptance Test and provides the way forward for any issues identified in the System Acceptance Test.  | Information      |
| SOW-2595 | <b>3.14.2.5.2 Content</b>   | Heading          |
| SOW-2596 | The System Acceptance Test Report must provide test results for all test cases obtained during the System Acceptance Test.  | Mandatory        |
| SOW-2597 | The System Acceptance Test Report must include as-run test procedures, identification of anomalies, and the evaluation of the test data against the pass/fail acceptance criteria.  | Mandatory        |
| SOW-2598 | The System Acceptance Test Report must include proposed resolution to address all issues identified during the System Acceptance Test.  | Mandatory        |
| SOW-1073 | <b>3.14.2.5.3 Delivery Date</b>   | Heading          |
| SOW-1074 | The Contractor must submit the System Acceptance Test Report to Canada for review within ten (10) working days after the completion of the System Acceptance Test.  | Mandatory        |
| SOW-1080 | <b>3.14.2.6 DOC 006: Interim In-Service Support (ISS) Plan</b>  | Heading          |
| SOW-1081 | <b>3.14.2.6.1 Description</b>   | Heading          |
| SOW-2601 | The Interim ISS Plan details the Contractor's approach to the In-Service Support for the SMMS Core Application through the project lifecycle.   | Information      |
| SOW-2602 | <b>3.14.2.6.2 Content</b>   | Heading          |
| SOW-2625 | The Interim ISS Plan must describe the methodology, processes, and means that the Contractor will employ to manage the different aspects of ISS and to ensure the SMMS Core Application is maintained to meet Canada's operational needs. | Mandatory        |
| SOW-2238 | The Interim ISS Plan must describe how the Contractor intends to fulfill the Interim ISS requirements in ID SOW-1981 (section 8.4, page 65).  | Mandatory        |
| SOW-2604 | The Interim ISS Plan must detail the scope of the Interim ISS Program.  | Mandatory        |
| SOW-2607 | The Interim ISS Plan must define the roles and responsibilities of the Contractor and other stakeholders involved in the Interim ISS Program.   | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2608 | The Interim ISS Plan must describe how communication between the Contractor, Canada, and other stakeholders involved in the Interim ISS Program will be managed.  | Mandatory        |
| SOW-2605 | The Interim ISS Plan must describe the Contractor's resources to support the Interim ISS Program.   | Mandatory        |
| SOW-2606 | The Interim ISS Plan must describe how the Contractor will manage updates and patches for the SMMS Core Application for the duration of the Interim ISS Program.  | Mandatory        |
| SOW-2609 | The Interim ISS Plan must address how the Contractor will manage security and SA&A for the SMMS Core Application for the duration of the Interim ISS Program.   | Mandatory        |
| SOW-2612 | The Interim ISS Plan must describe the Contractor's configuration management process for the SMMS Core Application to be employed for the duration of the Interim ISS Program.  | Mandatory        |
| SOW-2610 | The Interim ISS Plan must describe how licensing for the SMMS Core Application will be managed for the duration of the Interim ISS Program.   | Mandatory        |
| SOW-2411 | The Interim ISS Plan must describe recommended additional aspects of ISS that Canada should consider in order to fully support, enhance, and optimize the Interim ISS program beyond the mandatory requirements described in this SOW. Canada will consider these recommendations when developing the Full ISS Program. | Mandatory        |
| SOW-1083 | <b>3.14.2.6.3 Delivery Date</b>   | Heading          |
| SOW-1084 | The Contractor must submit a draft Interim ISS Plan to Canada for review at least five (5) working days prior to the System Implementation Review meeting.  | Mandatory        |
| SOW-2698 | The Contractor must submit the revised Interim ISS Plan to Canada for review at least five (5) working days prior to the SAT Readiness Review Meeting.  | Mandatory        |
| SOW-2630 | <b>3.15 ACCEPTANCE PROCESS</b>  | Heading          |
| SOW-2631 | <b>3.15.1 General</b>   | Heading          |
| SOW-2632 | All reports, deliverables, documents, and all services rendered by the Contractor are subject to review and acceptance by Canada, unless otherwise specified in the Contract.   | Mandatory        |
| SOW-2699 | <b>3.15.2 Documents</b>   | Heading          |
| SOW-2633 | The review and acceptance process of data deliverables in Contract Data in ID SOW-901 (section 3.14, page 16) is:   | Information      |
| SOW-2634 | a. Receipt of the data deliverable will be acknowledged by the Contract Authority;  | Information      |
| SOW-2635 | b. Comments and feedback on the data deliverable will be provided by Canada within twenty (20) working days following receipt of the data unless otherwise specified in the Contract Data Requirements section;   | Information      |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2636 | c. The Contractor must revise the data deliverable to address Canada's comments and feedback, and submit the revised document to Canada;   | Mandatory        |
| SOW-2637 | d. Revised data deliverable will be reviewed by Canada upon receipt of the document. Acceptance, approval or rejection will be by notification from the Contracting Authority. In the absence of receipt of Contracting Authority's notification, acceptance or approval as applicable will occur at the expiry of twenty (20) working days following receipt of the data unless otherwise specified in the Contract Data Requirement section. Notification of rejection will include a description of the reason for rejection. | Information      |
| SOW-2708 | In case of rejection in accordance with ID SOW-2637 (section 3.15.2, page 22), the Contractor must provide a revised document within 15 working days, or a date to be mutually agreed with Canada.   | Mandatory        |
| SOW-952  | <b>4 SYSTEMS ENGINEERING</b>   | Heading          |
| SOW-953  | <b>4.1 GENERAL</b>   | Heading          |
| SOW-2207 | Unless otherwise specified, the requirements in ID SOW-952 (section 4, page 22) apply to all versions of the SMMS Core Application delivered to Canada, including -- but not limited to -- the Interim SMMS Core Application and the Full SMMS Core Application.   | Information      |
| SOW-954  | The Contractor must deliver an Interim SMMS Core Application that is compliant to all specifications and requirements in ID SOW-1085 (section 5, page 33).   | Mandatory        |
| SOW-1028 | The Contractor must work collaboratively with Canada to identify and prioritize groups of features for the Full SMMS Core Application, as described within ID SOW-2005 (section 6.2, page 61), to define the scope of new application versions to be implemented through Task Authorizations. ID SOW-1026 (section 6.1, page 60) describes the process by which Canada will work with the Contractor to establish the detailed scope of the Full SMMS Core Application and implement its capabilities.                           | Mandatory        |
| SOW-2552 | <b>4.2 SYSTEM IMPLEMENTATION PLAN</b>  | Heading          |
| SOW-2553 | The Contractor must prepare, deliver, maintain and update the System Implementation Plan in accordance with ID SOW-1064 (section 3.14.2.3, page 18).   | Mandatory        |
| SOW-958  | <b>4.3 HOSTING ENVIRONMENT ARCHITECTURE AND DESIGN</b>   | Heading          |
| SOW-959  | Canada will provide detailed information on the SMMS Hosting Environment available for the deployment of the SMMS Core Application.  | Information      |
| SOW-960  | The Contractor must provide Canada with the detailed requirements and architecture necessary to configure the cloud-based SMMS Hosting Environment to support SAR operation and training.  | Mandatory        |
| SOW-961  | The Contractor must collaborate with Canada to establish, configure, test, and refine the SMMS Hosting Environment while ensuring that the SMMS System meets the SMMS System Requirements specified in ID SOW-1085 (section 5, page 33).   | Mandatory        |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-962  | The Contractor must collaborate with Canada to define a deployment process for deploying the SMMS Core Application into the SMMS Hosting Environment.  | Mandatory        |
| SOW-964  | The Contractor must prepare and deliver a System Architecture Specifications as part of the System Implementation Plan in accordance with ID SOW-1064 (section 3.14.2.3, page 18).   | Mandatory        |
| SOW-965  | The Contractor must schedule and coordinate a System Architecture Review meeting that meets the schedule requirements in ID SOW-892 (section 2.2, page 7).   | Mandatory        |
| SOW-966  | The Contractor must maintain and update the approved System Architecture Specifications for the duration of the SMMS Contract.   | Mandatory        |
| SOW-967  | Canada will be interested in discussing with the Contractor regarding the feasibility of using Platform as a Service (PaaS) capabilities offered by Cloud Service Providers to simplify the architecture for deployment (for instance: containerized deployment, PaaS for database, etc.). | Information      |
| SOW-968  | <b>4.4 SMMS HOSTING ENVIRONMENT AND APPLICATION SETUP</b>  | Heading          |
| SOW-969  | Canada will configure the SMMS Hosting Environment in accordance with the approved System Architecture Specifications.   | Information      |
| SOW-970  | Canada will be responsible for the design, maintenance, configuration management, and costs of the SMMS Hosting Environment, including its components and services.  | Information      |
| SOW-971  | The Contractor must prepare the SMMS Core Application components to conform to the approved System Architecture Specifications and to be deployed to the SMMS Hosting Environment.   | Mandatory        |
| SOW-2240 | The Contractor must provide detailed instructions and any support material required for deploying the SMMS Core Application to the SMMS Hosting Environment.   | Mandatory        |
| SOW-2241 | Canada will be responsible deploying the SMMS Core Application to the SMMS Hosting Environment.  | Information      |
| SOW-972  | The Contractor must provide technical support to Canada's technical team for deploying the SMMS Core Application to the SMMS Hosting Environment. This is to be done through the most efficient means, such as videoconference (with or without screen sharing), telephone, and/or email.  | Mandatory        |
| SOW-2043 | <b>4.5 SECURITY</b>  | Heading          |
| SOW-956  | The Contractor must provide evidence and support to demonstrate that the SMMS Core Application meets the security control requirements specified in ITSG-33 as required by Canada's Security Assessment and Authorization (SA&A) process.  | Mandatory        |
| SOW-2243 | Canada will collect and verify evidence for the following cloud landing zone controls (Stream 1):  | Information      |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2244 | AC-2 Account Management (Priority control)                                       | Information      |
| SOW-2245 | AC-2 Automated System Account Management   | Information      |
| SOW-2246 | AC-3 Access Enforcement (Priority control)                                       | Information      |
| SOW-2247 | AC-4 Information Flow Enforcement (Priority control)                             | Information      |
| SOW-2248 | AC-5 Separation of Duties  | Information      |
| SOW-2249 | AC-6 Least Privilege (Priority control)  | Information      |
| SOW-2250 | AC-6 Privileged Accounts   | Information      |
| SOW-2251 | AC-6 Prohibit Non-Privileged Users from Executing Privileged Functions           | Information      |
| SOW-2252 | AC-7 Unsuccessful Logon Attempts   | Information      |
| SOW-2253 | AC-9 Previous Logon (Access) Notification  | Information      |
| SOW-2254 | AC-19 Access Control for Mobile Devices  | Information      |
| SOW-2255 | AC-20 Non-Organizationally Owned Systems   | Information      |
| SOW-2256 | AU-2 Auditable Events (Priority control)   | Information      |
| SOW-2257 | AU-3 Content of Audit Records (Priority control)                                 | Information      |
| SOW-2258 | AU-5, Response to Audit Processing Failures                                      | Information      |
| SOW-2259 | AU-6 Audit Review, Analysis and Reporting (Priority control)                     | Information      |
| SOW-2260 | AU-8 Time Stamps   | Information      |
| SOW-2261 | AU-9 Protection of Audit Information   | Information      |
| SOW-2262 | AU-9 Audit Access by Subset of Privileged Users                                  | Information      |
| SOW-2263 | AU-12 Audit Generation   | Information      |
| SOW-2264 | CM-2 Baseline Configuration (Priority control)                                   | Information      |
| SOW-2265 | CM-3 Configuration Change Control  | Information      |
| SOW-2266 | CM-4 Security Impact Analysis  | Information      |
| SOW-2267 | CM-5 Access Restrictions for Change  | Information      |
| SOW-2268 | CM-8 Information System Component Inventory                                      | Information      |
| SOW-2269 | IA-2 Identification and Authentication (Organizational Users) (Priority control) | Information      |
| SOW-2270 | IA-2 Network Access to Privilege Accounts  | Information      |
| SOW-2271 | IA-2 Local Access to Privileged Accounts   | Information      |
| SOW-2272 | IA-2 Remote Access - Separate MFA Device   | Information      |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2273 | IA-4 Identifier Management   | Information      |
| SOW-2274 | IA-5 Authenticator Management (Priority control)   | Information      |
| SOW-2275 | IA-5 Password-Based Authentication   | Information      |
| SOW-2276 | IA-5 Protection of Authenticators  | Information      |
| SOW-2277 | IA-5 No Embedded Unencrypted Static Authenticators   | Information      |
| SOW-2278 | IA-5 Expiration of Cached Authenticators   | Information      |
| SOW-2279 | IA-6 Authenticator Feedback  | Information      |
| SOW-2280 | IA-8 Identification and Authentication (Non-Organizational Users)  | Information      |
| SOW-2281 | PE-3 Physical Access Control (Priority control)  | Information      |
| SOW-2282 | PE-19 Information Leakage (Priority control)   | Information      |
| SOW-2283 | SA-22 Unsupported System Components  | Information      |
| SOW-2284 | SC-5 Denial of Service Protection  | Information      |
| SOW-2285 | SC-7 Boundary Protection (Priority control)  | Information      |
| SOW-2286 | SC-7 Deny by Default / Allow by Exception  | Information      |
| SOW-2287 | SC-8 Transmission Confidentiality and Integrity  | Information      |
| SOW-2288 | SC-8 Cryptographic or Alternate Physical Protection  | Information      |
| SOW-2289 | SC-12 Cryptographic Key Establishment and Management   | Information      |
| SOW-2290 | SC-13 Cryptographic Protection (Priority control)  | Information      |
| SOW-2291 | SC-17 Public Key Infrastructure Certificates   | Information      |
| SOW-2292 | SC-28 Protection of Information at Rest  | Information      |
| SOW-2293 | SC-28 Cryptographic Protection at Rest   | Information      |
| SOW-2294 | SI-2 Flaw Remediation (Priority control)   | Information      |
| SOW-2295 | SI-3 Malicious Code Protection (Priority control)  | Information      |
| SOW-2296 | SI-3 Non-Signature-Based Detection   | Information      |
| SOW-2297 | SI-4 Information System Monitoring (Priority control)  | Information      |
| SOW-2298 | Canada will collect and verify evidence for the following cloud infrastructure controls such as VMs, VPCs, Load Balancers, Databases (Stream 2): | Information      |
| SOW-2299 | AC-2 Account Management (Priority control)   | Information      |
| SOW-2300 | AC-3 Access Enforcement (Priority control)   | Information      |
| SOW-2301 | AC-4 Information Flow Enforcement (Priority control)   | Information      |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2302 | AC-6 Least Privilege (Priority control)  | Information      |
| SOW-2303 | AT-3 Role-Based Security Training (Priority control)   | Information      |
| SOW-2304 | AU-2 Auditable Events (Priority control)   | Information      |
| SOW-2305 | AU-3 Content of Audit Records (Priority control)   | Information      |
| SOW-2306 | AU-6 Audit Review, Analysis and Reporting (Priority control)   | Information      |
| SOW-2307 | AU-12 Audit Generation   | Information      |
| SOW-2308 | CA-3 Information System Connections (Priority control)   | Information      |
| SOW-2309 | CM-2 Baseline Configuration (Priority control)   | Information      |
| SOW-2310 | IA-2 Identification and Authentication (Organizational Users) (Priority control)   | Information      |
| SOW-2311 | IA-5 Authenticator Management (Priority control)   | Information      |
| SOW-2312 | IR-6 Incident Reporting (Priority control)   | Information      |
| SOW-2313 | MP-2 Media Access (Priority control)   | Information      |
| SOW-2314 | PE-3 Physical Access Control   | Information      |
| SOW-2315 | PE-19 Information Leakage  | Information      |
| SOW-2316 | PS-6 Access Agreements (Priority control)  | Information      |
| SOW-2317 | RA-5 Vulnerability Scanning (Priority control)   | Information      |
| SOW-2318 | SA-4 Acquisition Process   | Information      |
| SOW-2319 | SA-8 Security Engineering Principles (Priority control)  | Information      |
| SOW-2320 | SC-7 Boundary Protection (Priority control)  | Information      |
| SOW-2321 | SC-13 Cryptographic Protection   | Information      |
| SOW-2322 | SC-26 Honeypots (Priority control)   | Information      |
| SOW-2323 | SC-101 Unclassified Telecommunications Systems in Secure Facilities (Priority control)   | Information      |
| SOW-2324 | SI-2 Flaw Remediation (Priority control)   | Information      |
| SOW-2325 | SI-3 Malicious Code Protection (Priority control)  | Information      |
| SOW-2326 | SI-4 Information System Monitoring (Priority control)  | Information      |
| SOW-2327 | SI-7 Software, Firmware and Information Integrity (Priority control)   | Information      |
| SOW-2328 | The Contractor must collect and verify evidence for the following containerized application controls, including -- but not limited to -- the associated mandatory evidence requirement(s) associated to each control (Stream 3): | Mandatory        |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2329 | AC-2, Account Management (Priority control)  | Information      |
| SOW-2330 | The Contractor must provide evidence that the application federates with existing Active Directory accounts to take advantage of role-based access (RBAC) controls in place for those accounts. AC-2 requires the use of role-based schemes for the application based on search and rescue roles.      | Mandatory        |
| SOW-2331 | AC-3, Access Enforcement (Priority control)  | Information      |
| SOW-2332 | The SMMS Core Application must have Role-Based access control (RBAC) to restrict access by different user types. AC-3 requires role-based access control (RBAC).   | Mandatory        |
| SOW-2333 | The Contractor must provide evidence of role-based access controls for application container deployment and management to prevent the deployment of rogue containers. AC-3 requires role-based access control (RBAC).  | Mandatory        |
| SOW-2548 | The Contractor must provide evidence that all application containers are run with their root file system in read-only mode. AC-3 requires access control rules that include read-only file systems.  | Mandatory        |
| SOW-2334 | AC-4, Information Flow Enforcement (Priority control)  | Information      |
| SOW-2335 | The Contractor must provide evidence that the orchestrator is configured to separate network traffic into discrete virtual networks by sensitivity level (i.e., one virtual network for Unclassified and one for Protected B). AC-4 requires information flow enforcement between processing domains.  | Mandatory        |
| SOW-2336 | The Contractor must provide evidence to confirm that containers are segmented by sensitivity level using boundary devices (i.e., Unclassified and Protected B) to implement security zoning. AC-4 requires separation of processing domains.   | Mandatory        |
| SOW-2337 | The Contractor must provide evidence that containers are not able to send traffic across different sensitivity levels (i.e., from Protected B to Unclassified). AC-4 requires information flow enforcement between processing domains.   | Mandatory        |
| SOW-2338 | The Contractor must provide evidence to confirm the use of application-aware network filtering tools with dynamic rule management to address the ephemeral network topology. AC-4 requires security policy filters.  | Mandatory        |
| SOW-2339 | AC-6, Least Privilege (Priority control)   | Information      |
| SOW-2340 | The Contractor must provide evidence that the application is compatible with the use of secure computing (seccomp) to constrain the system-level capabilities containers are allocated at runtime. AC-6 requires the least privilege principle be implemented to constrain capabilities of containers. | Mandatory        |

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| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2341 | The Contractor must provide evidence that custom profiles are created and passed to container runtimes to limit their capabilities. AC-6 requires authorizations be configured to limit container capabilities.   | Mandatory        |
| SOW-2547 | The Contractor must provide evidence that the orchestrator uses a least-privilege access model. AC-6 requires the orchestrator to use least privilege.  | Mandatory        |
| SOW-2342 | AC-12 Session Termination (Priority control)  | Information      |
| SOW-2343 | The Contractor must provide evidence that the application performs session termination after a configurable amount of time.   | Mandatory        |
| SOW-2344 | AT-3, Role-Based Security Training (Priority control)   | Information      |
| SOW-2345 | The Contractor must provide evidence that application administrator security training requirements have been documented. AT-3 requires role- based security training.   | Mandatory        |
| SOW-2346 | AU-2, Audit Events (Priority control)   | Information      |
| SOW-2347 | The Contractor must provide evidence that application security audit events are defined to identify misuse cases, AU-2 requires audit events to be defined.   | Mandatory        |
| SOW-2350 | AU-7, Audit Reduction and Report Generation   | Information      |
| SOW-2351 | The Contractor must provide evidence that application logging is enabled to identify anomalous access patterns such as running privileged commands to manipulate containers. AU-7 requires audit reduction techniques to identify anomalous behaviour in application audit records. | Mandatory        |
| SOW-2352 | AU-9, Protection of Audit Information   | Information      |
| SOW-2353 | The Contractor must provide evidence that application audit records are protected from deletion or modification. AU-9 requires protection of audit information.   | Mandatory        |
| SOW-2354 | CA-9, Internal System Connections   | Information      |
| SOW-2355 | The Contractor must provide evidence that documents all of the internal system connections required by the application. CA-9 requires that internal system connections be described.  | Mandatory        |
| SOW-2356 | CM-3, Configuration Change Control  | Information      |
| SOW-2357 | The Contractor must provide evidence that the orchestrator can securely introduce nodes to the cluster and provide an accurate inventory of nodes and their connectivity states. CM-3 requires automated change implementation.   | Mandatory        |
| SOW-2358 | CM-5, Access Restrictions for Change  | Information      |

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| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2359 | The Contractor must provide evidence that all access to registries requires authentication. CM-5 requires the Contractor to enforce access restrictions to software libraries.  | Mandatory        |
| SOW-2360 | CM-6, Configuration Settings  | Information      |
| SOW-2361 | The Contractor must provide evidence of automated tools to enforce compliance with secure configuration best practices. CM-6 requires the Contractor to make use of automated mechanisms to verify configuration settings against standards provided by the Center for Internet Security (CIS) and the U.S. Security Technical Implementation Guides (STIGs). | Mandatory        |
| SOW-2362 | The Contractor must provide evidence of compliance with the Center for Internet Security (CIS) Docker Benchmark. CM-6 requires security configurations to comply with established benchmarks.   | Mandatory        |
| SOW-2363 | CM-7, Least Functionality   | Information      |
| SOW-2364 | The Contractor must provide evidence of automated tools preventing the running of non-compliant images. CM-7 requires the Contractor to prevent non-compliant program execution.  | Mandatory        |
| SOW-2365 | The Contractor must provide evidence of pruning registries of unsafe, vulnerable images. CM-7 requires the Contractor to conduct periodic review of images.   | Mandatory        |
| SOW-2366 | The Contractor must provide evidence that Docker drops system calls that are unsafe and typically unnecessary for container operation. CM-7 requires unauthorized calls be dropped.   | Mandatory        |
| SOW-2367 | The Contractor must provide evidence that the application runs on a minimalistic Operating System (OS) to reduce the attack surface and mitigate the risks associated with a general-purpose OS. CM-7 requires configuration to provide only essential capabilities.  | Mandatory        |
| SOW-2368 | CM-8, Information System Component Inventory  | Information      |
| SOW-2369 | The Contractor must provide evidence that images are only pushed to a registry after passing a compliance assessment. CM-8 requires assessment of compliance to required configuration.   | Mandatory        |
| SOW-2545 | CP-2, Contingency Plan  | Information      |
| SOW-2546 | The Contractor must provide evidence of planning for high availability that addresses maintaining essential missions and business functions despite an information system disruption, compromise, or failure.   | Mandatory        |
| SOW-2370 | CP-9, Information System Backup   | Information      |
| SOW-2371 | The Contractor must provide evidence that application backups are implemented. CP-9 requires information system backup.   | Mandatory        |
| SOW-2372 | CP-10, Information System Recovery and Reconstitution   | Information      |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2373 | The Contractor must provide evidence that application information can be recovered from backups. CP-10 requires information system recovery and reconstitution.  | Mandatory        |
| SOW-2374 | IA-2, Identification and Authentication (Organizational Users) (Priority control)  | Information      |
| SOW-2375 | The SMMS Core Application must have multifactor authentication.  | Mandatory        |
| SOW-2544 | The Contractor must provide evidence that all application accounts require multifactor authentication. IA-2 requires the Contractor to require multifactor authentication for all user and administrator accounts.                       | Mandatory        |
| SOW-2376 | IA-5, Authenticator Management (Priority control)  | Information      |
| SOW-2377 | The Contractor must provide evidence that all application secrets are stored outside of images and provided dynamically at runtime. IA-5 requires the Contractor to certify that there is no storage of clear text passwords.            | Mandatory        |
| SOW-2378 | RA-5, Vulnerability Scanning (Priority control)  | Information      |
| SOW-2379 | The Contractor must provide evidence that container-specific vulnerability management tools and processes have been implemented. RA-5 requires the Contractor to use of vulnerability scanning tools and techniques during development.  | Mandatory        |
| SOW-2380 | The Contractor must provide evidence that images are only pushed to a registry after passing a vulnerability scan. RA-5 requires the Contractor to perform mandatory scanning of images.   | Mandatory        |
| SOW-2381 | SA-8, Security Engineering Principles (Priority control)   | Information      |
| SOW-2382 | The Contractor must provide evidence that all application components and dependencies are packaged and deployed in containers. SA-8 requires the use of security engineering principles to package contains according to best practices. | Mandatory        |
| SOW-2383 | SA-15, Development Process, Standards and Tools  | Information      |
| SOW-2384 | The Contractor must provide evidence that the application is compatible with a host operated in a stateless manner to greatly reduce the attack surface. SA- 15 requires attack surface reduction as a means of reducing risk.           | Mandatory        |
| SOW-2542 | SC-6, Resource Availability  | Information      |
| SOW-2543 | The Contractor must provide evidence of high availability. SC-6 requires protection of the availability of resources.  | Mandatory        |
| SOW-2385 | SC-7, Boundary Protection (Priority control)   | Information      |
| SOW-2386 | The Contractor must provide evidence to confirm the control of egress network traffic sent by containers. SC-7 requires detection and denial of unauthorized egress traffic  | Mandatory        |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2387 | SC-8, Transmission Confidentiality and Integrity   | Information      |
| SOW-2388 | The Contractor must provide evidence that application development tools, orchestrators and container runtimes are only connected to registries over encrypted channels. SC-8 requires the Contractor to use encryption in transit for all communications.            | Mandatory        |
| SOW-2389 | SC-28, Protection of Information at Rest   | Information      |
| SOW-2390 | The Contractor must provide evidence that tools for encrypting all application data at rest still allow proper access from containers. SC-28 requires encryption at rest for all application storage.  | Mandatory        |
| SOW-2391 | SC-32, Information System Partitioning   | Information      |
| SOW-2392 | The Contractor must provide evidence that containerized and non-containerized workloads are not mixed on the same host instance. SC-32 requires system partitioning into separate environment based on workload type.  | Mandatory        |
| SOW-2393 | SC-39, Process Isolation   | Information      |
| SOW-2394 | The Contractor must provide evidence that the application is compatible with the use of SELinux and AppArmor to provide enhanced controls and isolation for containers running the Linux OS. SC-39 requires isolation be provided using a separate execution domain. | Mandatory        |
| SOW-2395 | SI-2, Flaw Remediation (Priority control)  | Information      |
| SOW-2396 | The Contractor must provide evidence that tools are in place to scan for Common Vulnerabilities and Exposures (CVEs) in the runtimes deployed. SI-2 requires flaw remediation based on CVEs.   | Mandatory        |
| SOW-2397 | The Contractor must provide evidence that tools are used to regularly check for updates to all software components. SI-2 requires automated tools to determine the status of software components.  | Mandatory        |
| SOW-2398 | The Contractor must provide evidence that the application is compatible with the latest OS updates. SI-2 requires the that the OS must be kept up to date.   | Mandatory        |
| SOW-2399 | SI-3, Malicious Code Protection (Priority control)   | Information      |
| SOW-2400 | The Contractor must provide evidence of scanning for malware signature sets. SI-3 requires scanning by the Contractor using anti-virus definitions and reputation-based technologies.  | Mandatory        |
| SOW-2401 | SI-4, Information System Monitoring (Priority control)   | Information      |
| SOW-2402 | The Contractor must provide evidence that application-aware tools detect traffic flows between containers and other network entities. SI-4 requires monitoring of traffic flows.   | Mandatory        |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2403 | The Contractor must provide evidence of the detection of network anomalies including unexpected traffic flows, port scanning or outbound access to dangerous destinations. SI-4 requires analysis of communications traffic anomalies.   | Mandatory        |
| SOW-2404 | The Contractor must provide evidence that container-aware tools are used prevent and detect anomalies such as unexpected process execution, unexpected system calls, changes to protected files, writes to unexpected locations, creation of unexpected listeners, traffic sent to unexpected destinations and malware storage and execution. SI-4 requires analysis of unexpected event patterns. | Mandatory        |
| SOW-2405 | The Contractor must provide evidence that tools are in place to monitor what directories are being mounted by containers to prevent policy violations. SI-4 requires monitoring of transactions of interest such as directories being mounted.   | Mandatory        |
| SOW-2406 | SI-7, Software, Firmware, and Information Integrity (Priority control)   | Information      |
| SOW-2407 | The Contractor must provide evidence of high integrity through the use of verification tools to detect unauthorized changes to software and application information. SI-7 requires the Contractor to perform integrity verification of the SMMS Core Application.  | Mandatory        |
| SOW-2549 | The Contractor must provide evidence that containers are run in an immutable manner. SI-7 requires the Contractor to perform container integrity verification.   | Mandatory        |
| SOW-2408 | The Contractor must provide evidence of central control of images. SI-7 requires the Contractor to use centrally-managed tools to control the integrity of images.   | Mandatory        |
| SOW-2409 | The Contractor must provide evidence that all images are signed by authorized personnel. SI-7 requires images to be signed using cryptographic protection.   | Mandatory        |
| SOW-2410 | The Contractor must provide evidence that each image is identified by a cryptographic signature from a CSE-validated implementation. SI-7 requires the Contractor to provide cryptographic mechanisms to detect unauthorized changes to images.  | Mandatory        |
| SOW-973  | <b>4.6 SYSTEM ACCEPTANCE TESTING</b>   | Heading          |
| SOW-974  | The Contractor must prepare and deliver a System Acceptance Test Plan in accordance with ID SOW-1075 (section 3.14.2.4, page 19).  | Mandatory        |
| SOW-975  | The Contractor must coordinate and complete the work required for the System Acceptance Testing in accordance with the approved System Acceptance Test Plan.   | Mandatory        |
| SOW-976  | As part of the System Acceptance Test, the Contractor must establish a performance baseline for the SMMS System.   | Mandatory        |
| SOW-977  | The Contractor is encouraged to utilize automated testing tools to support the System Acceptance Testing.  | Information      |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2232 | The Contractor must include load and stress test(s) as part of the SAT to validate the performance of the SMMS System.   | Mandatory        |
| SOW-2233 | The Contractor must include scalability test(s) to validate the auto-scaling feature, if applicable, of the SMMS System as part of the SAT.  | Mandatory        |
| SOW-2234 | The Contractor must include the testing of the training environment as part of the SAT.  | Mandatory        |
| SOW-2235 | The Contractor must include interoperability test(s) to validate the interoperability between the SMMS System and the in-service beacon alert message servers.   | Mandatory        |
| SOW-978  | The Contractor must prepare and deliver a System Acceptance Test Report in accordance with ID SOW-1070 (section 3.14.2.5, page 20).  | Mandatory        |
| SOW-979  | The Contractor must rectify issues identified in the System Acceptance Testing to the TA's satisfaction.   | Mandatory        |
| SOW-980  | Upon the completion of the System Acceptance Test, the TA and the Contractor will determine mutually agreeable dates for Transition and Deployment into Operations of the SMMS System and to begin the ISS Program.  | Information      |
| SOW-981  | <b>4.7 TRANSITION REQUIREMENTS</b>   | Heading          |
| SOW-982  | It is anticipated that the in-service legacy SMMS system and the new SMMS System will be operating simultaneously during the transition period from the legacy to the new systems.   | Information      |
| SOW-983  | The Contractor must ensure that the work required for the deployment of the SMMS Core Application does not impact the operation of the legacy SMMS system.   | Mandatory        |
| SOW-1085 | <b>5 INTERIM SMMS CORE APPLICATION</b>   | Heading          |
| SOW-1087 | <b>5.1 SMMS SYSTEM REQUIREMENTS</b>  | Heading          |
| SOW-1088 | <b>5.1.1 Operation</b>   | Heading          |
| SOW-2534 | The requirements and information below describe the quantities and locations of users who will be accessing the SMMS System, particularly to establish system-level capacity and bandwidth. Unless otherwise stated explicitly, there is no requirement for the Contractor to deliver or provide hardware or user terminals to any of the sites. | Information      |
| SOW-2703 | While the requirements below apply to the SMMS System, the Contractor must do the following so that these requirements are achieved:<br>- Configure the SMMS Core Application; and<br>- Provide Canada with the necessary configuration information for the SMMS Hosting Environment.  | Mandatory        |
| SOW-1089 | The SMMS System must provide the SMMS Core Application capability to the following Rescue Coordination Centres:<br>- JRCC Halifax (Atlantic Region);   | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
|          | <ul style="list-style-type: none"> <li>- JRCC Halifax alternate site;</li> <li>- JRCC Trenton (Central and Arctic Canada);</li> <li>- JRCC Trenton alternate site;</li> <li>- JRCC Victoria (Pacific Region);</li> <li>- JRCC Victoria alternate site;</li> <li>- MRSC Quebec (Quebec Region);</li> <li>- MRSC Quebec alternate site;</li> <li>- MRSC St John's; and</li> <li>- Canadian Mission Control Centre (CMCC) at Trenton.</li> </ul> |                  |
| SOW-1090 | <p>It is anticipated that a maximum of ten (10) dedicated terminals will be assigned to support SAR operation simultaneously at each Rescue Coordination Centre listed in ID SOW-1089 (section 5.1.1, page 33).</p>   | Information      |
| SOW-1093 | <p>The SMMS System must provide the SMMS Core Application capability to up to a maximum of five (5) Deployed Search Head Quarters (DSHQ). The DSHQ is a mobile terminal kit that allow SAR operator to access the SMMS System remotely at an off-site location.</p>   | Mandatory        |
| SOW-1097 | <p>The SMMS System must provide the SMMS Core Application capability to support the training of Search and Rescue Mission Coordinators (SMC) at the Canadian Coast Guard College (CCGC) in Sydney.</p>  | Mandatory        |
| SOW-1098 | <p>It is anticipated that a maximum of forty (40) dedicated terminals will be assigned to support SMC training simultaneously at the CCGC.</p>  | Information      |
| SOW-1099 | <p>The SMMS System must allow system administration and its related tasks to be performed from a remote location.</p>   | Mandatory        |
| SOW-2646 | <p>The SMMS System must support up to 150 concurrent operators without performance degradation.</p>   | Mandatory        |
| SOW-1101 | <p><b>5.1.2 System Performance</b></p>  | Heading          |
| SOW-1102 | <p>All SMMS sites must have the same level of performance capabilities.</p>   | Mandatory        |
| SOW-1103 | <p>It is expected that the SMMS System provides an application response time of less than five (5) seconds ninety percent (90%) of the time when the system is operating at full capacity. Application response time is defined as the time required by the system to return and display the results of a request to the user.</p>  | Information      |
| SOW-1104 | <p>For tasks that require more than five (5) seconds to complete, it is expected that the SMMS System shows a progress indicator to indicate the progress of the task.</p>  | Information      |
| SOW-1105 | <p>It is expected that data entered by a user is synchronized in the SMMS System and available for use and viewing by any other users within five (5) seconds.</p>  | Information      |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-1106 | <b>5.1.3 Security</b>  | Heading          |
| SOW-1107 | Canada is responsible for ensuring that the SMMS Hosting Environment meets the security control specifications and requirements in ID SOW-2043 (section 4.5, page 23) as stipulated in the Information Technology Security Guidance-33 (ITSG-33) as required by Canada's Security Assessment and Authorization (SA&A) process. | Information      |
| SOW-1109 | The SMMS Core Application must meet the security control specifications and requirements stipulated in ID SOW-2043 (section 4.5, page 23) as required by Canada's SA&A process.  | Mandatory        |
| SOW-1110 | The SMMS Core Application must meet or exceed the security profile of Protected B/High Integrity/High Availability as specified in ID SOW-2043.  | Mandatory        |
| SOW-1108 | The SMMS System, with the SMMS Core Application deployed in the SMMS Hosting Environment, is required to meet or exceed the security profile of Protected B/High Integrity/High Availability as specified in ID SOW-2043.  | Information      |
| SOW-1111 | <b>5.1.4 Availability</b>  | Heading          |
| SOW-1112 | The SMMS System will be deployed as a multiple-region high availability system on a commercially available cloud environment. The anticipated availability of the cloud infrastructure is at least 99.99%.   | Information      |
| SOW-1113 | The SMMS Core Application must be available with a minimum uptime percentage of 99.95%.  | Mandatory        |
| SOW-1116 | <b>5.1.5 Redundancy</b>  | Heading          |
| SOW-1117 | The SMMS System must have no single point of failure.  | Mandatory        |
| SOW-1118 | <b>5.1.6 Scalability</b>   | Heading          |
| SOW-1119 | The SMMS System must have automatic scaling such that optimal level of computing resources are allocated to support the number of users assessing the system.  | Mandatory        |
| SOW-1120 | <b>5.1.7 Interface</b>   | Heading          |
| SOW-1121 | The SMMS System must interface with the current (in-service) servers of the Canadian Mission Control Centre (CMCC) for providing COSPAS-SARSAT beacon alert messages.  | Mandatory        |
| SOW-2229 | The current (in-service) servers of the CMCC for providing COSPAS-SARSAT beacon alert messages are capable of providing beacon alert messages through sFTP service.  | Information      |
| SOW-1122 | <b>5.1.8 Miscellaneous</b>   | Heading          |
| SOW-1123 | It is anticipated that the SMMS Core Application, including all its associated components, will be containerized.  | Information      |
| SOW-1124 | It is desirable to deploy the SMMS Core Application with a container deployment scheme.  | Information      |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1125 | It is desirable to utilize the Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) capabilities available to the SMMS Hosting Environment, as well as deployment scripts, to simplify the deployment and management of the SMMS System. | Information      |
| SOW-1126 | It is anticipated that multiple deployment environments will be available in the SMMS Hosting Environment, which includes Production, Development, Training and Test environments.  | Information      |
| SOW-2230 | <b>5.2 SMMS TRAINING SYSTEM REQUIREMENTS</b>  | Heading          |
| SOW-2621 | The SMMS Training System must be able to operate independently and must never impact the operational SMMS System.   | Mandatory        |
| SOW-2622 | The SMMS Training System must provide the same user interface and functionalities as the operational SMMS System.   | Mandatory        |
| SOW-2623 | The SMMS Training System must be able to generate and process simulated beacon alert messages.  | Mandatory        |
| SOW-1127 | <b>5.3 SMMS CORE APPLICATION REQUIREMENTS</b>   | Heading          |
| SOW-1128 | <b>5.3.1 General</b>  | Heading          |
| SOW-1129 | The SMMS Core Application must be accessible and supported by the commonly available standard web browsers, including but not limited to:<br>- Google Chrome version 90 and above; and<br>- Mozilla Firefox version 88 and above.                       | Mandatory        |
| SOW-1131 | <b>5.3.2 Security</b>   | Heading          |
| SOW-1132 | The SMMS Core Application must have Multi-factor authentication.  | Mandatory        |
| SOW-1133 | The SMMS Core Application must have Role-based access control (RBAC) to restrict access by different user types.  | Mandatory        |
| SOW-1134 | <b>5.3.3 Supported Languages</b>  | Heading          |
| SOW-1135 | The SMMS Core Application must support both English and French.   | Mandatory        |
| SOW-2687 | The SMMS Core Application must allow the application users to select the language of the application's Graphical User Interface (GUI).  | Mandatory        |
| SOW-2688 | The SMMS Core Application must provide GUIs in both English and French.   | Mandatory        |
| SOW-2689 | The SMMS Core Application must accept user data in both English and French. User data refers to the data that SAR operators enter to the SMMS Core Application.   | Mandatory        |
| SOW-2690 | The SMMS Core Application must maintain all user data in its original language.   | Mandatory        |
| SOW-1136 | <b>5.3.4 Interfaces with External Systems</b>   | Heading          |
| SOW-1137 | The SMMS Core Application must be capable of interfacing with external systems through Application Programming Interface (API).   | Mandatory        |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-1144 | <b>5.3.5 Functional Requirements</b>   | Heading          |
| SOW-1145 | <b>5.3.5.1 Logging</b>   | Heading          |
| SOW-1146 | The SMMS Core Application must have a log entry view window.   | Mandatory        |
| SOW-1147 | The SMMS Core Application must allow the new log creation from any window within the application.  | Mandatory        |
| SOW-1148 | Log entries must contain a free text box for the entry of data.  | Mandatory        |
| SOW-1149 | Log entries must have a means of setting the Date Time Group (DTG) automatically and manually.   | Mandatory        |
| SOW-1150 | Log entries must allow users to enter the following caller information as a minimum:   | Mandatory        |
| SOW-1151 | a. Caller name   | Mandatory        |
| SOW-1153 | b. Caller phone number   | Mandatory        |
| SOW-2414 | The SMMS Core Application must maintain a Rescue centre specific multipurpose log for each rescue centre.                                | Mandatory        |
| SOW-2413 | The SMMS Core Application must maintain incident-specific logs separate from the Rescue centre's multipurpose log.                       | Mandatory        |
| SOW-1154 | The new log window must allow the association of a log entry to a specific incident or to the Rescue Centre's specific multipurpose log. | Mandatory        |
| SOW-1155 | Incident-specific and multipurpose log windows must allow the display of edited and deleted log entries.                                 | Mandatory        |
| SOW-1156 | Logs must be searchable by complete or partial terms.  | Mandatory        |
| SOW-1157 | Log lists must be sortable by entry date and Operator name.  | Mandatory        |
| SOW-1158 | Automatically generated system entries must be filterable from incident and Multi-purpose Log.   | Mandatory        |
| SOW-1159 | Logs must be editable on a per-user basis or by higher-level designated administrator users.   | Mandatory        |
| SOW-1160 | Log list sorting must be defaulted to latest log entry at the top  | Mandatory        |
| SOW-1161 | There must be no limit on the number of log entries.   | Mandatory        |
| SOW-1162 | Log entries must be assignable to a specific incident from the creation of the log entry.  | Mandatory        |
| SOW-1163 | The SMMS Core Application must provide means to:   | Mandatory        |
| SOW-2415 | a. Assign un-assigned log entries from the Multi-purpose Log to a specific incident;   | Mandatory        |
| SOW-2416 | b. Re-assign log entries from one incident to another; and   | Mandatory        |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2417 | c. Un-assign log entries that have been assigned to a specific incident.   | Mandatory        |
| SOW-1164 | The SMMS Core Application must have a means of accessing the new log entry window through keyboard shortcuts.  | Mandatory        |
| SOW-1165 | Log entries are expected to be editable only by the user who entered it and by users with higher-level or administrative privileges.   | Information      |
| SOW-1166 | Log entries are expected to be deletable only by the user who entered it and by users with higher-level or administrative privileges.  | Information      |
| SOW-1167 | Edited and deleted log entries must be filterable but accessible for future review.  | Mandatory        |
| SOW-1179 | <b>5.3.5.2 COSPAS-SARSAT (C/S)</b>   | Heading          |
| SOW-1180 | The SMMS Core Application must accept and display the Search and Rescue Satellite-Aided Tracking (COSPAS-SARSAT) data from the Canadian Mission Control Centre (CMCC) and the United States Mission Control Centre (USMCC) in accordance with COSPAS-SARSAT Mission Control Centres Standard Interface Description (C/S A.002) and the current CMCC Concept of Operations. | Mandatory        |
| SOW-1181 | The SMMS Core Application must have the ability to only display C/S alerts that occur within a specific Search and Rescue Region (SRR). For example: a beacon activated in the Trenton SRR must only be visible in Trenton and not in other rescue centres unless if multi-centre notification is activated.   | Mandatory        |
| SOW-1182 | The SMMS Core Application must play distinct and distinctive alert sounds based on the type of message upon the arrival of Subject Indicator Type (SIT) Messages.  | Mandatory        |
| SOW-1184 | The SMMS Core Application must display beacon position on the GIS when SIT Message contains pertinent positional information.  | Mandatory        |
| SOW-1185 | The SMMS Core Application must display the content of the message in a prominent way upon reception of a SIT Message,  | Mandatory        |
| SOW-1186 | The SMMS Core Application must display SIT Message position on the General Map.  | Mandatory        |
| SOW-2418 | The SMMS Core Application must display SIT Message position on the incident-specific map when the SIT Message is associated to an incident.  | Mandatory        |
| SOW-1187 | From initial message reception, the SMMS Core Application must allow users to associate a SIT Message to an incident, acknowledge the message without further action, or start a new incident directly.  | Mandatory        |
| SOW-1188 | The SMMS Core Application must treat SIT Messages as persistent objects that can be associated to incidents or remain independent of incidents.  | Mandatory        |
| SOW-1190 | The SMMS Core Application must provide a means of re-associating SIT Messages from one incident to another and disassociating it completely when necessary.  | Mandatory        |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2419 | The application must have a means of accessing and reviewing previously received SIT Messages which differentiates Beacon SIT Messages and Narrative SIT Messages. | Mandatory        |
| SOW-2420 | The application must allow the filtering of SIT Messages by message type.  | Mandatory        |
| SOW-1191 | The Beacon SIT Message review method must display at least the following beacon information:   | Mandatory        |
| SOW-1193 | a. Hex ID  | Mandatory        |
| SOW-1195 | b. TCA DTG   | Mandatory        |
| SOW-1196 | c. SRR   | Mandatory        |
| SOW-1198 | d. Type  | Mandatory        |
| SOW-1201 | e. Last Update (DTG)   | Mandatory        |
| SOW-1202 | The SMMS Core Application must display at least the following beacon data fields within an incident or on the main C/S Viewer:                                     | Mandatory        |
| SOW-1204 | a. Alert MCC ID  | Mandatory        |
| SOW-1208 | b. Last Update (DTG)   | Mandatory        |
| SOW-1212 | c. TCA DTG   | Mandatory        |
| SOW-1215 | d. Detection Site ID   | Mandatory        |
| SOW-1221 | e. Beacon Hex ID   | Mandatory        |
| SOW-1222 | f. Beacon Type   | Mandatory        |
| SOW-1223 | g. MMSI  | Mandatory        |
| SOW-1224 | h. Country Code  | Mandatory        |
| SOW-1225 | i. Associated Incidents  | Mandatory        |
| SOW-1237 | j. Message Number  | Mandatory        |
| SOW-1238 | k. Position  | Mandatory        |
| SOW-1239 | l. SRR   | Mandatory        |
| SOW-1241 | m. Type  | Mandatory        |
| SOW-1263 | n. Registration Information:   | Mandatory        |
| SOW-1264 | n.1 Owner First Name   | Mandatory        |
| SOW-1265 | n.2 Owner Last Name  | Mandatory        |
| SOW-1266 | n.3 Owner Home City  | Mandatory        |
| SOW-1267 | n.4 Owner Home Province/State  | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2421 | The application must have the ability to only display C/S alerts to the rescue centre(s) responsible for where the alert takes place. | Mandatory        |
| SOW-1268 | <b>5.3.5.3 Main Incident Management</b>   | Heading          |
| SOW-1269 | The SMMS Core Application must, as a minimum, allow creation of an incident from:   | Mandatory        |
| SOW-1270 | a. Main application panes   | Mandatory        |
| SOW-1271 | b. Log entries  | Mandatory        |
| SOW-1272 | c. New Beacon Alerts  | Mandatory        |
| SOW-1276 | Created incidents must be displayed on a Main Incident Manager page.  | Mandatory        |
| SOW-1277 | The Main Incident Manager page must have a Main Incident Overview Table, and the table must have at least the following columns:      | Mandatory        |
| SOW-1278 | a. Incident Number  | Mandatory        |
| SOW-1279 | b. Incident Name  | Mandatory        |
| SOW-1280 | c. Incident Status  | Mandatory        |
| SOW-1281 | d. Alerted Time   | Mandatory        |
| SOW-1283 | e. Location (name)  | Mandatory        |
| SOW-1284 | f. Position (coordinates)   | Mandatory        |
| SOW-1285 | g. Incident Region (SRR)  | Mandatory        |
| SOW-1286 | h. Incident Situation   | Mandatory        |
| SOW-1287 | i. Incident Type  | Mandatory        |
| SOW-1289 | The Main Incident Overview Table must be filterable by at least the following data fields:  | Mandatory        |
| SOW-2423 | a. Incident Number  | Mandatory        |
| SOW-2422 | b. Incident Name  | Mandatory        |
| SOW-2424 | c. Incident Status  | Mandatory        |
| SOW-2425 | d. Alerted DTG  | Mandatory        |
| SOW-1290 | The Main Incident Overview Table must be sortable by at least the following data fields:  | Mandatory        |
| SOW-2426 | a. Incident Number  | Mandatory        |
| SOW-2427 | b. Incident Name  | Mandatory        |
| SOW-2428 | c. Incident Status  | Mandatory        |
| SOW-2429 | d. Alerted DTG  | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1291 | Incident number must be alpha-numeric, sequential, and clearly relatable to users.  | Mandatory        |
| SOW-1292 | Individual detailed incident management view must be accessible from the Main Incident Manager page.  | Mandatory        |
| SOW-1293 | <b>5.3.5.4 Incident-Specific View</b>   | Heading          |
| SOW-2430 | The SMMS Core Application must support simultaneous access and editing to an incident by any number of users.   | Mandatory        |
| SOW-1294 | Individual Incident Viewer must have a header section (hereafter referred to as tombstone) and an incident navigation pane from which users can navigate to key high-level sections.  | Mandatory        |
| SOW-1295 | It is expected that the Individual Incident Viewer will have a “tombstone” header that is always visible or can be expanded from a collapsed view while maintaining view on the current incident information “page” or “tab”. | Information      |
| SOW-1296 | The tombstone must contain at least the following fields:   | Mandatory        |
| SOW-1297 | a. Incident Number;   | Mandatory        |
| SOW-1298 | b. Incident Name;   | Mandatory        |
| SOW-1299 | c. Incident Status;   | Mandatory        |
| SOW-1300 | d. Alerted Time;  | Mandatory        |
| SOW-1301 | e. Location (name);   | Mandatory        |
| SOW-1302 | f. Position (coordinates);  | Mandatory        |
| SOW-1303 | g. Incident Situation;  | Mandatory        |
| SOW-1304 | h. Incident Type;   | Mandatory        |
| SOW-1305 | Incident Viewer must have at least the following high-level sections for data entry and accessible from anywhere within the incident viewer page:   | Mandatory        |
| SOW-1306 | a. Log;   | Mandatory        |
| SOW-1309 | b. Search Object Information;   | Mandatory        |
| SOW-2431 | c. Search and Rescue Units tasked;  | Mandatory        |
| SOW-1311 | d. Persons on Board;  | Mandatory        |
| SOW-1312 | e. Weather;   | Mandatory        |
| SOW-1313 | f. Incident Associated C/S Messages; and  | Mandatory        |
| SOW-1314 | g. Incident Attachments.  | Mandatory        |
| SOW-2432 | It is expected that the Incident Viewer will have the following high-level sections for data entry and accessible from anywhere within an incident viewer page:   | Information      |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2433 | a. Incident map access;  | Information      |
| SOW-2434 | b. Incident contacts; and  | Information      |
| SOW-2435 | c. Incident routes   | Information      |
| SOW-1315 | Incident Viewer must have a built-in log viewing pane.   | Mandatory        |
| SOW-1316 | Incident Viewer log must allow the sorting and filtering of log entries by DTG, keyword, and/or originator.  | Mandatory        |
| SOW-1318 | The SMMS Core Application must have a free text box in which users can enter incident summary information within each incident.  | Mandatory        |
| SOW-1319 | <b>5.3.5.5 Search Object Information Management</b>  | Heading          |
| SOW-1320 | The SMMS Core Application must allow the creation of Search Object (SO) within specific incidents  | Mandatory        |
| SOW-1321 | The SMMS Core Application must allow the creation of specific and individual Marine and Aeronautical search objects.   | Mandatory        |
| SOW-2436 | It is expected that the SMMS Core Application will also allow the creation of specific Humanitarian search objects.  | Information      |
| SOW-1322 | The SMMS Core Application must allow users to query external databases for Search Object information based on the following relevant fields, as a minimum:                                       | Mandatory        |
| SOW-1323 | a. Vessel Name;  | Mandatory        |
| SOW-1324 | b. MMSI;   | Mandatory        |
| SOW-1325 | c. IMO#;   | Mandatory        |
| SOW-1326 | d. Registration Number;  | Mandatory        |
| SOW-1327 | e. Call Sign; and  | Mandatory        |
| SOW-1328 | f. Aircraft Tail Number  | Mandatory        |
| SOW-1329 | When a database query has positive returns, the SMMS Core Application must allow to automatically populate all available search object data fields from the information returned from the query. | Mandatory        |
| SOW-1330 | The SMMS Core Application must allow users to edit any search object data fields once entered either manually or from a database.  | Mandatory        |
| SOW-1331 | The SMMS Core Application must allow the deletion of search objects.   | Mandatory        |
| SOW-1332 | The SMMS Core Application must provide a warning to the user that a SO is about to be deleted and information will be lost.  | Mandatory        |
| SOW-1333 | The SMMS Core Application must have at least the following categorization of information for marine search objects:  | Mandatory        |
| SOW-1334 | a. Vessel Particulars;   | Mandatory        |

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| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1335 | b. Contact Information;   | Mandatory        |
| SOW-1339 | c. Motor/Engine Information;  | Mandatory        |
| SOW-1340 | d. Navigation and Communications Equipment; and   | Mandatory        |
| SOW-1342 | e. Safety/Survival Equipment  | Mandatory        |
| SOW-1343 | The SMMS Core Application must have at least the following marine search object information data fields within the parent categories: | Mandatory        |
| SOW-1344 | a. Vessel Particulars:  | Mandatory        |
| SOW-1345 | a.1 Name  | Mandatory        |
| SOW-1346 | a.2 Call Sign   | Mandatory        |
| SOW-1347 | a.3 MMSI  | Mandatory        |
| SOW-1348 | a.4 IMO Number  | Mandatory        |
| SOW-1349 | a.5 Registration Number   | Mandatory        |
| SOW-1350 | a.6 Number of Person On Boards (POB)  | Mandatory        |
| SOW-1351 | a.7 License Number  | Mandatory        |
| SOW-1352 | a.8 Beacon ID (HEX Code)  | Mandatory        |
| SOW-1353 | a.9 Satellite/Inmarsat Contact Numbers  | Mandatory        |
| SOW-1354 | a.10 Phone Number   | Mandatory        |
| SOW-1355 | a.11 Fax Number   | Mandatory        |
| SOW-2458 | a.12 Cruising Speed (kts) (or Speed of Advance)   | Mandatory        |
| SOW-2457 | a.13 Activity   | Mandatory        |
| SOW-2456 | a.14 Nationality/Flag   | Mandatory        |
| SOW-2455 | a.15 Home Port  | Mandatory        |
| SOW-2454 | a.16 Vessel Type  | Mandatory        |
| SOW-2453 | a.17 Rigging  | Mandatory        |
| SOW-2452 | a.18 Length   | Mandatory        |
| SOW-2451 | a.19 Width  | Mandatory        |
| SOW-2450 | a.20 Draught  | Mandatory        |
| SOW-2449 | a.21 Tonnage  | Mandatory        |
| SOW-2448 | a.22 Hull Colour  | Mandatory        |
| SOW-2461 | a.23 House Colour   | Mandatory        |

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| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2447 | a.24 Structure Colour   | Mandatory        |
| SOW-2446 | a.25 Deck Colour  | Mandatory        |
| SOW-2445 | a.26 Sail Colour  | Mandatory        |
| SOW-2444 | a.27 Crane Colour   | Mandatory        |
| SOW-2443 | a.28 Bottom Colour  | Mandatory        |
| SOW-2442 | a.29 Motor Colour   | Mandatory        |
| SOW-2441 | a.30 Trim   | Mandatory        |
| SOW-2440 | a.31 Marking  | Mandatory        |
| SOW-2439 | a.32 Number of Engines  | Mandatory        |
| SOW-2438 | a.33 Engine Model Name  | Mandatory        |
| SOW-2437 | a.34 Manufacturer Name  | Mandatory        |
| SOW-2460 | a.35 Engine Type  | Mandatory        |
| SOW-2459 | a.36 Horsepower/Thrust (HP)   | Mandatory        |
| SOW-1357 | b. Contact Information:   | Mandatory        |
| SOW-1359 | b.1 Owner Name  | Mandatory        |
| SOW-1360 | b.2 Company or Agent Name   | Mandatory        |
| SOW-1361 | b.3 Address   | Mandatory        |
| SOW-2627 | b.4 Phone number  | Mandatory        |
| SOW-1362 | b.5 City  | Mandatory        |
| SOW-1363 | b.6 Province/State  | Mandatory        |
| SOW-1364 | b.7 Postal Code/Zip Code  | Mandatory        |
| SOW-1411 | c. Navigation and Communications Equipment:   | Mandatory        |
| SOW-1412 | c.1 Communication Equipment   | Mandatory        |
| SOW-2462 | c.2 Navigation Equipment  | Mandatory        |
| SOW-1420 | d. Safety/Survival Equipment:   | Mandatory        |
| SOW-1421 | d.1 Survival Equipment  | Mandatory        |
| SOW-1422 | d.2 Other safety/survival equipment (food and water duration)   | Mandatory        |
| SOW-1434 | The SMMS Core Application must have at least the following categorization of information for aeronautical search objects: | Mandatory        |
| SOW-1438 | a. Aircraft Particulars   | Mandatory        |

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| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1439 | b. Contact Information  | Mandatory        |
| SOW-1440 | c. Aircraft Description   | Mandatory        |
| SOW-1441 | d. Engine Information   | Mandatory        |
| SOW-1442 | e. Navigation and Communication Equipment   | Mandatory        |
| SOW-1443 | f. Safety/Survival Equipment  | Mandatory        |
| SOW-1444 | The SMMS Core Application must have at least the following aeronautical search object information data fields within the parent categories: | Mandatory        |
| SOW-1445 | a. Aircraft Particulars:  | Mandatory        |
| SOW-1446 | a.1 Name  | Mandatory        |
| SOW-1447 | a.2 Call Sign   | Mandatory        |
| SOW-1448 | a.3 Tail Number   | Mandatory        |
| SOW-1449 | a.4 Registration Number   | Mandatory        |
| SOW-1451 | a.5 Number of POBs  | Mandatory        |
| SOW-1452 | a.6 Length and Wingspan   | Mandatory        |
| SOW-1453 | a.7 Primary Colour  | Mandatory        |
| SOW-1454 | a.8 Secondary Colour  | Mandatory        |
| SOW-1455 | a.9 Markings  | Mandatory        |
| SOW-1457 | b. Contact Information:   | Mandatory        |
| SOW-1459 | b.1 Owner Name  | Mandatory        |
| SOW-1460 | b.2 Company or Agent Name   | Mandatory        |
| SOW-2628 | b.3 Phone number  | Mandatory        |
| SOW-1461 | b.4 Address   | Mandatory        |
| SOW-1462 | b.5 City  | Mandatory        |
| SOW-1463 | b.6 State/Province  | Mandatory        |
| SOW-1464 | b.7 Postal Code   | Mandatory        |
| SOW-1465 | c. Aircraft Description:  | Mandatory        |
| SOW-1466 | c.1 Manufacturer Name   | Mandatory        |
| SOW-1467 | c.2 Model Name  | Mandatory        |
| SOW-1472 | c.3 Activity  | Mandatory        |
| SOW-1476 | c.4 Aircraft Type   | Mandatory        |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-1477 | c.5 Aircraft Category  | Mandatory        |
| SOW-1479 | c.6 Landing Gear   | Mandatory        |
| SOW-1490 | d. Engine Information:   | Mandatory        |
| SOW-1491 | d.1 Number of Engines  | Mandatory        |
| SOW-1494 | d.2 Engine Type  | Mandatory        |
| SOW-1497 | e. Navigation and Communication Equipment:   | Mandatory        |
| SOW-1498 | e.1 Communication Equipment  | Mandatory        |
| SOW-2467 | e.2 Navigation Equipment   | Mandatory        |
| SOW-2466 | e.3 Nav Means  | Mandatory        |
| SOW-1509 | f. Safety/Survival Equipment:  | Mandatory        |
| SOW-1510 | f.1 Survival Equipment   | Mandatory        |
| SOW-1511 | f.2 Other Safety/Survival Equipment  | Mandatory        |
| SOW-2468 | It is expected that the SMMS Core Application will also have the following aeronautical search object information data fields:   | Information      |
| SOW-2469 | a. Owner Type  | Information      |
| SOW-2473 | b. Signal Equipment  | Information      |
| SOW-2471 | c. Receive-only Frequency  | Information      |
| SOW-1520 | The SMMS Core Application must have at least the following categorization of information for humanitarian search objects:  | Mandatory        |
| SOW-2147 | a. Person Details  | Information      |
| SOW-2148 | b. Associated SRU  | Information      |
| SOW-2149 | c. Description and Survival Model  | Information      |
| SOW-2150 | d. Contact Information   | Information      |
| SOW-2151 | e. Medevac Information   | Information      |
| SOW-1521 | It is expected that the SMMS Core Application will also have some or all of the following humanitarian search object information data fields within the parent categories: | Information      |
| SOW-2152 | a. Person Details  | Information      |
| SOW-2162 | a.1 Name   | Information      |
| SOW-2163 | a.2 Category   | Information      |
| SOW-2164 | a.3 Activity   | Information      |

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| ID       | Requirements             | Requirement Type |
|----------|--------------------------|------------------|
| SOW-2165 | a.4 Tracking Status      | Information      |
| SOW-2166 | a.5 Final Status         | Information      |
| SOW-2167 | a.6 Nature of Request    | Information      |
| SOW-2154 | b. Biometric Information | Information      |
| SOW-2170 | b.1 Sex                  | Information      |
| SOW-2171 | b.2 Age                  | Information      |
| SOW-2172 | b.3 Height               | Information      |
| SOW-2173 | b.4 Weight               | Information      |
| SOW-2174 | b.5 Fatigue              | Information      |
| SOW-2155 | c. Clothing              | Information      |
| SOW-2175 | c.1 PFD Details          | Information      |
| SOW-2176 | c.2 Garment Worn         | Information      |
| SOW-2177 | c.3 Immersion            | Information      |
| SOW-2160 | d. Contact Information   | Information      |
| SOW-2181 | d.1 Address              | Information      |
| SOW-2182 | d.2 City                 | Information      |
| SOW-2183 | d.3 Province             | Information      |
| SOW-2184 | d.4 Country              | Information      |
| SOW-2185 | d.5 Postal Code          | Information      |
| SOW-2186 | d.6 Home Telephone       | Information      |
| SOW-2187 | d.7 Cellular Telephone   | Information      |
| SOW-2188 | d.8 Email                | Information      |
| SOW-2157 | e. Next of Kin           | Information      |
| SOW-2189 | e.1 Name                 | Information      |
| SOW-2190 | e.2 Relationship         | Information      |
| SOW-2191 | e.3 Home Telephone       | Information      |
| SOW-2192 | e.4 Cellular Telephone   | Information      |
| SOW-2193 | e.5 Email                | Information      |
| SOW-2156 | f. Diagnosis             | Information      |
| SOW-2194 | f.1 Physician            | Information      |

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| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2195 | f.2 Telephone   | Information      |
| SOW-2196 | f.3 Diagnosis and Details   | Information      |
| SOW-2477 | The SMMS Core Application must have a means of producing a survivability estimate based on parameters and environmental factors for individual persons separate from the search object. | Mandatory        |
| SOW-2478 | The SMMS Core Application have at least the following fields when displaying Survivability modeling information:  | Mandatory        |
| SOW-2479 | a. Person's Age   | Mandatory        |
| SOW-2480 | b. Person's Sex   | Mandatory        |
| SOW-2487 | c. Person's Weight  | Mandatory        |
| SOW-2486 | d. Person's Clothing  | Mandatory        |
| SOW-2485 | e. Air Temperature  | Mandatory        |
| SOW-2484 | f. Water Temperature  | Mandatory        |
| SOW-2483 | g. Sea State  | Mandatory        |
| SOW-2482 | h. Wind Speed   | Mandatory        |
| SOW-1522 | The SMMS Core Application must provide a means of displaying a table of, and tracking, any number of persons in distress within an incident.  | Mandatory        |
| SOW-1524 | The SMMS Core Application must have at least the following fields when displaying POB information:  | Mandatory        |
| SOW-1525 | a. Name   | Mandatory        |
| SOW-1527 | b. Age  | Mandatory        |
| SOW-1528 | c. Gender   | Mandatory        |
| SOW-1533 | d. Medical Condition  | Mandatory        |
| SOW-1547 | The SMMS Core Application must have at least the following fields as part of POB associated SRU information:  | Mandatory        |
| SOW-1548 | a. SRU Name   | Mandatory        |
| SOW-1550 | b. Date Entry Made (Read-only DTG)  | Mandatory        |
| SOW-1551 | <b>5.3.5.6 Sightings and Detections Management</b>  | Heading          |
| SOW-1552 | The SMMS Core Application must treat all Sighting as persistent objects that can exist within and without an incident.  | Mandatory        |
| SOW-1553 | The SMMS Core Application must allow the creation of and display of airborne emergency signal detection radio horizon.  | Mandatory        |
| SOW-1554 | The SMMS Core Application must allow the editing of and display of airborne emergency signal detection radio horizon.   | Mandatory        |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-1555 | The SMMS Core Application must allow the deletion of and display of airborne emergency signal detection radio horizon.   | Mandatory        |
| SOW-1556 | The SMMS Core Application must display a table of airborne emergency signal within incidents and in a General sightings tab with at least the following information: | Mandatory        |
| SOW-1557 | a. DTG of report   | Mandatory        |
| SOW-1558 | b. Altitude of reporting station (feet)  | Mandatory        |
| SOW-1559 | c. Radius (Nautical Miles)   | Mandatory        |
| SOW-1560 | d. Location (name)   | Mandatory        |
| SOW-1561 | e. Position (Latitude/Longitude coordinates)   | Mandatory        |
| SOW-1563 | f. Comments  | Mandatory        |
| SOW-1564 | The SMMS Core Application should display a table of sightings separate from C/S Alerts in both Incident and General Views.   | Mandatory        |
| SOW-2488 | The SMMS Core Application must provide a means of filtering sightings from C/S Alerts using two or fewer User Actions.   | Mandatory        |
| SOW-1565 | The Sightings Table must display at least the following Sighting information:  | Mandatory        |
| SOW-1566 | a. Sighting DTG  | Mandatory        |
| SOW-1567 | b. Received DTG  | Mandatory        |
| SOW-1570 | c. Object Type   | Mandatory        |
| SOW-1571 | d. Location  | Mandatory        |
| SOW-1572 | e. Position  | Mandatory        |
| SOW-1573 | f. Description   | Mandatory        |
| SOW-1574 | The SMMS Core Application must have at least the following fields when displaying sighting information:  | Mandatory        |
| SOW-2490 | a. Sighting DTG  | Mandatory        |
| SOW-2491 | b. Received DTG  | Mandatory        |
| SOW-1579 | c. Report Type   | Mandatory        |
| SOW-1580 | d. Object Type   | Mandatory        |
| SOW-1581 | e. Location  | Mandatory        |
| SOW-1582 | f. Position  | Mandatory        |
| SOW-1583 | g. Description   | Mandatory        |
| SOW-1585 | h. Action Taken  | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1588 | i. Reporting Person's Name  | Mandatory        |
| SOW-1589 | j. Reporting Person's Address   | Mandatory        |
| SOW-1590 | k. Reporting Person's Phone number  | Mandatory        |
| SOW-1593 | l. Reporting Person's Position  | Mandatory        |
| SOW-1594 | m. Received by  | Mandatory        |
| SOW-1596 | n. Relayed by   | Mandatory        |
| SOW-1597 | o. Assessed Validity  | Mandatory        |
| SOW-1606 | p. Object Height  | Mandatory        |
| SOW-1576 | q. Sighting DTG   | Mandatory        |
| SOW-1577 | r. Received DTG   | Mandatory        |
| SOW-1638 | The SMMS Core Application must allow users to assign and un-assign Sightings from incidents.  | Mandatory        |
| SOW-1639 | <b>5.3.5.7 Contacts Management</b>  | Heading          |
| SOW-2526 | The SMMS Core Application must allow users to create, edit, and manage contact information that is accessible throughout the application. | Mandatory        |
| SOW-1640 | Incident Viewer must have incident-specific contacts management.  | Mandatory        |
| SOW-1641 | Incident-specific contacts must be accessible only from its parent incident and not be added to global contacts.                          | Mandatory        |
| SOW-1642 | The SMMS Core Application must allow the creation of any number of incident contacts.   | Mandatory        |
| SOW-1643 | The SMMS Core Application must have at least the following fields when displaying Contact information:                                    | Mandatory        |
| SOW-1644 | a. Contact Name   | Mandatory        |
| SOW-1645 | b. Agency/Organization  | Mandatory        |
| SOW-1646 | c. Telephone number   | Mandatory        |
| SOW-1651 | The SMMS Core Application must allow users to search the list of incident contacts from complete or partial terms.                        | Mandatory        |
| SOW-1652 | The SMMS Core Application must allow users to edit contacts information from the incident contact list.                                   | Mandatory        |
| SOW-1653 | The SMMS Core Application must allow users to delete contacts from the incident contact list.   | Mandatory        |
| SOW-1658 | <b>5.3.5.8 Routing</b>  | Heading          |
| SOW-1659 | The SMMS Core Application must allow users to create routes graphically and textually that can be displayed on the GIS.                   | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1660 | The SMMS Core Application must allow users to edit routes graphically and textually.  | Mandatory        |
| SOW-1661 | The SMMS Core Application must allow users to add multiple routes to individual incidents.  | Mandatory        |
| SOW-1662 | The SMMS Core Application must allow users to delete routes.  | Mandatory        |
| SOW-1663 | The SMMS Core Application must have at least the following fields when displaying, creating, or editing a route:                    | Mandatory        |
| SOW-1665 | a. Route name   | Mandatory        |
| SOW-1669 | b. Cruising Speed (or Speed of Advance -SOA)  | Mandatory        |
| SOW-1670 | c. Fuel Exhaustion DTG  | Mandatory        |
| SOW-1671 | d. Fuel on board (HH:MM)  | Mandatory        |
| SOW-1681 | e. Arrive DTG   | Mandatory        |
| SOW-1683 | f. Position   | Mandatory        |
| SOW-1684 | g. LKP  | Mandatory        |
| SOW-1687 | h. Comment  | Mandatory        |
| SOW-1688 | <b>5.3.5.9 Search and Rescue Resource Unit Management</b>   | Heading          |
| SOW-1689 | The SMMS Core Application must allow users to manage SAR Resource Units (SRUs) on a per-SRR basis.                                  | Mandatory        |
| SOW-1690 | The SMMS Core Application must allow users to differentiate between asset types (e.g., CCG assets, RCAF assets, CCGA assets, etc.). | Mandatory        |
| SOW-1691 | The SMMS Core Application must display all available assets.  | Mandatory        |
| SOW-1699 | The SMMS Core Application must allow users to sort and filter SRU by at least the following information:                            | Mandatory        |
| SOW-2492 | a. Asset Name   | Mandatory        |
| SOW-2493 | b. Asset Status   | Mandatory        |
| SOW-2494 | c. Assigned Incident  | Mandatory        |
| SOW-2498 | d. Type   | Mandatory        |
| SOW-2497 | e. Call Sign  | Mandatory        |
| SOW-2496 | f. Agency   | Mandatory        |
| SOW-2495 | g. Location   | Mandatory        |
| SOW-1700 | The SMMS Core Application must allow users to add, edit, and delete Assets from their specific SRR.                                 | Mandatory        |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-1701 | The SMMS Core Application must allow users to input and display the following key SRU information, as a minimum:                 | Mandatory        |
| SOW-1703 | a. Agency  | Mandatory        |
| SOW-1704 | b. SRU Name  | Mandatory        |
| SOW-2499 | c. Type  | Mandatory        |
| SOW-1705 | d. Call sign   | Mandatory        |
| SOW-1706 | e. Tail number   | Mandatory        |
| SOW-1707 | f. MMSI  | Mandatory        |
| SOW-1708 | g. Registration number   | Mandatory        |
| SOW-1710 | h. Category  | Mandatory        |
| SOW-2500 | i. SRU Status  | Mandatory        |
| SOW-1712 | j. SRU Location (User entered position or latest known position)   | Mandatory        |
| SOW-1714 | k. SRU Capability  | Mandatory        |
| SOW-1715 | k.1 Search Speed   | Mandatory        |
| SOW-1717 | k.2 Endurance  | Mandatory        |
| SOW-1718 | k.3 Minimum Range  | Mandatory        |
| SOW-1719 | k.4 Maximum Range  | Mandatory        |
| SOW-1720 | k.5 Towing Capacity  | Mandatory        |
| SOW-1721 | k.6 Means of Navigation  | Mandatory        |
| SOW-1722 | l. SRU Contacts  | Mandatory        |
| SOW-1734 | m. SRU Home Base/Port  | Mandatory        |
| SOW-1735 | m.1 Location Name  | Mandatory        |
| SOW-1736 | m.2 Location Position  | Mandatory        |
| SOW-1737 | m.3 SRR  | Mandatory        |
| SOW-1738 | m.4 Region   | Mandatory        |
| SOW-1740 | The SMMS Core Application must filter SRU based on user SRR by default.  | Mandatory        |
| SOW-1741 | It is expected that the SMMS Core Application will prevent users from tasking SRUs which are not assigned to their SRR.          | Information      |
| SOW-1742 | It is expected that the SMMS Core Application will allow users to view all SRUs, even those which are not assigned to their SRR. | Information      |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-1743 | The SMMS Core Application must allow users to assign any number of SRUs to incidents concurrently.   | Mandatory        |
| SOW-1744 | The SMMS Core Application must allow users to task SRUs to multiple incidents simultaneously.  | Mandatory        |
| SOW-1745 | The SMMS Core Application must have at least the following fields when displaying SRU sortie times with incidents to allow users to create and edit SRU sortie times for each SRU tasked to an incident:   | Mandatory        |
| SOW-1746 | a. Tasking time  | Mandatory        |
| SOW-1747 | b. Departure Time  | Mandatory        |
| SOW-1748 | c. On scene time   | Mandatory        |
| SOW-1749 | d. Off Scene Time  | Mandatory        |
| SOW-1750 | e. Return Time   | Mandatory        |
| SOW-1751 | f. Release Time  | Mandatory        |
| SOW-1752 | The SMMS Core Application must calculate the following SRU sortie time based on entered user data:   | Mandatory        |
| SOW-1753 | a. Transit Time  | Mandatory        |
| SOW-1754 | b. SAR Time  | Mandatory        |
| SOW-1755 | c. Total Mission Time  | Mandatory        |
| SOW-2651 | Notes on the terminology above:<br>- "Transit Time" is the sum of departure time to on scene time and off scene time to return time;<br>- "SAR Time" is off scene time minus on scene time; and<br>- "Total Mission Time" is defined as the sum of Transit Time and SAR Time, or Return Time minus Departure Time. | Information      |
| SOW-1756 | The SMMS Core Application must allow users to remove SRUs from an incident.  | Mandatory        |
| SOW-1757 | The SMMS Core Application must issue an notification message when the user is trying to delete an SRU from an incident including an option to cancel said action.  | Mandatory        |
| SOW-1758 | The SMMS Core Application must allow the automated creation of an SRU-specific mission briefing base on incident information.  | Mandatory        |
| SOW-1760 | The SMMS Core Application must allow users to create, edit, and delete SRU specific contact information to be managed within the SRU management pane.  | Mandatory        |
| SOW-1761 | <b>5.3.5.10 Weather data Management</b>  | Heading          |
| SOW-1762 | The SMMS Core Application must provide a capability to add any number of incident related weather reports separate from incident logs.   | Mandatory        |

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| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1763 | The SMMS Core Application must provide a capability to display a Weather Report content which has already been entered into an incident.                | Mandatory        |
| SOW-1764 | The SMMS Core Application must provide a capability to modify a Weather Report content which has already been entered into an incident.                 | Mandatory        |
| SOW-1765 | The SMMS Core Application must provide a capability to display all distinct Weather Reports that have been entered into an incident.                    | Mandatory        |
| SOW-1766 | The SMMS Core Application must provide a capability to delete any Weather Report that has been entered into an incident.                                | Mandatory        |
| SOW-1767 | The SMMS Core Application must allow users to input and display at least the following key weather information:   | Mandatory        |
| SOW-1770 | a. Weather DTG  | Mandatory        |
| SOW-1772 | b. Observed/Forecasted  | Mandatory        |
| SOW-1775 | c. Source   | Mandatory        |
| SOW-1777 | d. Location   | Mandatory        |
| SOW-1778 | e. Position   | Mandatory        |
| SOW-1780 | f. Sky conditions   | Mandatory        |
| SOW-1781 | g. Other descriptors  | Mandatory        |
| SOW-1783 | h. Wind direction   | Mandatory        |
| SOW-1784 | i. Wind speed   | Mandatory        |
| SOW-1786 | j. Cloud Cover  | Mandatory        |
| SOW-1787 | k. Air Temperature  | Mandatory        |
| SOW-1790 | l. Ice  | Mandatory        |
| SOW-1791 | m. Visibility   | Mandatory        |
| SOW-1792 | n. Ceiling Height   | Mandatory        |
| SOW-1793 | o. Water temperature  | Mandatory        |
| SOW-1794 | p. Air pressure   | Mandatory        |
| SOW-1795 | q. Tide state and/or Sea state and/or Wave Height   | Mandatory        |
| SOW-1797 | r. Comments free text box.  | Mandatory        |
| SOW-1798 | <b>5.3.5.11 Attachment Management</b>   | Heading          |
| SOW-1799 | The SMMS Core Application must provide a capability to add attachments to an existing incident while maintaining the attached document's file format. . | Mandatory        |
| SOW-1800 | The SMMS Core Application must provide a capability to display a list of all the attachments attached to an incident.                                   | Mandatory        |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-1801 | The SMMS Core Application must provide a capability to open an attachment based on the software configuration of the user's PC.                                  | Mandatory        |
| SOW-1802 | The SMMS Core Application must provide a capability to download an attachment on the user's PC Hard Disk Drive (HDD) based on the PC settings and configuration. | Mandatory        |
| SOW-1803 | The SMMS Core Application must provide a capability to delete an attachment from incidents.  | Mandatory        |
| SOW-1805 | It is expected that the SMMS Core Application will automatically number attachments using sequential natural numbers.  | Information      |
| SOW-1806 | It is expected that the SMMS Core Application will display and allow the sorting of attachments based on the following:  | Information      |
| SOW-1807 | a. Attachment Number   | Information      |
| SOW-1808 | b. Name  | Information      |
| SOW-1809 | c. Description   | Information      |
| SOW-1810 | d. DTG Received  | Information      |
| SOW-1811 | e. Originator  | Information      |
| SOW-1812 | f. File Type   | Information      |
| SOW-2629 | It is expected that the SMMS Core Application will allow the display of "deleted" attachments.   | Information      |
| SOW-1813 | <b>5.3.5.12 Geographic Information System (GIS)</b>  | Heading          |
| SOW-1814 | <b>5.3.5.12.1 General</b>  | Heading          |
| SOW-1815 | The SMMS Core Application must have a GIS display to show maps, aerial imagery, and GIS data objects to facilitate SAR operation.                                | Mandatory        |
| SOW-1817 | The SMMS Core Application must provide incident-specific maps.   | Mandatory        |
| SOW-1818 | The SMMS Core Application must allow for multiple incident maps to be actively in use simultaneously as well as the overview map.                                | Mandatory        |
| SOW-1819 | The SMMS Core Application must allow multiple users to access and interact with the same map simultaneously.   | Mandatory        |
| SOW-1820 | The SMMS Core Application must allow for filtering of Overview map displayed information by SRR showing current activity within a user's SRR.                    | Mandatory        |
| SOW-1821 | The SMMS Core Application's overview map must display resources, active incident locations, and active beacon alert location.                                    | Mandatory        |
| SOW-1822 | The SMMS Core Application incident map must display search area, tasking area, and search patterns.  | Mandatory        |
| SOW-1823 | The SMMS Core Application overview map must allow the display of unassociated sightings.   | Mandatory        |

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| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-1824 | If sightings are associated to an incident, then the sightings must be displayed on the incident map.  | Mandatory        |
| SOW-1825 | The SMMS Core Application must allow users to perform actions on an incident map without affecting other active maps.  | Mandatory        |
| SOW-1826 | The SMMS Core Application must display incident position both on the overview map and incident-specific map based on inputted incident position.   | Mandatory        |
| SOW-1827 | The SMMS Core Application must allow users to create, edit, and delete search areas as defined by IAMSAR Volume II and CAMSAR Volume II chapter 4 and display them on the incident-specific map. | Mandatory        |
| SOW-2501 | The SMMS Core Application must at least be capable of creating, editing, and deleting the following types of search area as defined in IAMSAR Volume II and CAMSAR Volume II Chapter 4:          | Mandatory        |
| SOW-2502 | a. Buffered around a route   | Mandatory        |
| SOW-2506 | b. Circular  | Mandatory        |
| SOW-2505 | c. Square  | Mandatory        |
| SOW-2504 | d. Rectangular   | Mandatory        |
| SOW-2503 | e. Polygonal (User defined shape)  | Mandatory        |
| SOW-1828 | The SMMS Core Application must allow users to create tasking areas from parent search areas and display them on the incident-specific map.   | Mandatory        |
| SOW-1829 | The SMMS Core Application must allow users to create search patterns as per IAMSAR into parent tasking areas and display them on the incident-specific map.                                      | Mandatory        |
| SOW-2507 | The SMMS Core Application must at least be capable of creating, editing, and deleting the following types of search pattern as defined in IAMSAR Volume II:                                      | Mandatory        |
| SOW-2508 | a. Expanding Square  | Mandatory        |
| SOW-2511 | b. Sector Search   | Mandatory        |
| SOW-2510 | c. Creeping Line Ahead   | Mandatory        |
| SOW-2509 | d. Track Crawl   | Mandatory        |
| SOW-1830 | The SMMS Core Application must allow users to order search areas (and associated tasking areas and search patterns) by Day of search.  | Mandatory        |
| SOW-1831 | Search areas, tasking areas, and search patterns must be graphically and textually editable by users without having to delete them.  | Mandatory        |
| SOW-1832 | The SMMS Core Application must allow users to delete Search Areas, Tasking Areas, and Search Patterns.   | Mandatory        |
| SOW-1833 | The SMMS Core Application must allow users to name Search Areas and Tasking Areas.   | Mandatory        |

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| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1855 | The SMMS Core Application must display a hierarchy of search area with the top level being a separation by Day, then by Search Area name, the Tasking Areas associated to their specific Search Area, with Search patters below their specific Tasking Areas. | Mandatory        |
| SOW-1834 | The SMMS Core Application must display SRU position on the GIS using distinct and distinctive icons based on asset type.  | Mandatory        |
| SOW-1835 | The SMMS Core Application must provide and display separate icons for at least the following sighting types:  | Mandatory        |
| SOW-1836 | a. Aircraft   | Mandatory        |
| SOW-1837 | b. Crash site   | Mandatory        |
| SOW-1838 | c. Debris   | Mandatory        |
| SOW-1839 | d. Flare  | Mandatory        |
| SOW-1840 | e. Ice  | Mandatory        |
| SOW-1841 | f. Life Preserver   | Mandatory        |
| SOW-1842 | g. Life Raft  | Mandatory        |
| SOW-1843 | h. Person in Water (PIW)  | Mandatory        |
| SOW-1844 | i. Vessel   | Mandatory        |
| SOW-1845 | j. Other/Unknown  | Mandatory        |
| SOW-1847 | The SMMS Core Application must display different icon symbols on both incident and overview maps for C/S Beacon locations based on at least the following criteria:   | Mandatory        |
| SOW-1848 | a. Beacon Type  | Mandatory        |
| SOW-1849 | b. Confirmed Position   | Mandatory        |
| SOW-1850 | c. Within or without SRR boundaries   | Mandatory        |
| SOW-1852 | d. Acknowledged status  | Mandatory        |
| SOW-2512 | Upon Incident Closure, the SMMS Core Application must no longer display C/S beacons associated with the incident.   | Mandatory        |
| SOW-1870 | The SMMS Core Application must provide an ordered layer tree manager allowing users to turn on & off selected layers.   | Mandatory        |
| SOW-1856 | The SMMS Core Application must allow users to change Map projection between the following projections:  | Mandatory        |
| SOW-1857 | a. Polar  | Mandatory        |
| SOW-1858 | b. Azimuthal Polar  | Mandatory        |
| SOW-1859 | c. Mercator   | Mandatory        |

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| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1860 | d. Plate Carée  | Mandatory        |
| SOW-1861 | The SMMS Core Application must display the coordinates of the position where the cursor is pointing.  | Mandatory        |
| SOW-1862 | The SMMS Core Application must supply standard GIS functionalities to users in both incident-specific maps and Overview map to at least include:  | Mandatory        |
| SOW-1863 | a. Pan  | Mandatory        |
| SOW-1864 | b. Zoom in/out  | Mandatory        |
| SOW-1865 | c. Drawing Routes   | Mandatory        |
| SOW-1866 | d. Drawing Search and Tasking Areas   | Mandatory        |
| SOW-1867 | e. Drawing Points   | Mandatory        |
| SOW-1868 | f. Add/Edit/Delete Labeled Annotations  | Mandatory        |
| SOW-1869 | g. Measure Distance   | Mandatory        |
| SOW-1871 | The SMMS Core Application must allow users to work independently on the same incident without having users affecting each other GIS view and settings.  | Mandatory        |
| SOW-1872 | The SMMS Core Application must display all selected active incidents on the Overview Map.   | Mandatory        |
| SOW-1874 | The SMMS Core Application must show which layers are active and inactive.   | Mandatory        |
| SOW-1875 | The SMMS Core Application must supply a searchable database module of locations in the form of a gazetteer from which users can search for location information and display locations onto the GIS Map. | Mandatory        |
| SOW-1878 | <b>5.3.5.12.2 Maps</b>  | Heading          |
| SOW-1879 | The SMMS Core Application must provide a minimum map set that includes street mapping and aerial imagery.   | Mandatory        |
| SOW-1873 | The SMMS Core Application must display Canadian aeronautical and marine navigation charts.  | Mandatory        |
| SOW-1880 | The SMMS Core Application must allow additional maps and imagery to be integrated to The SMMS Core Application.   | Mandatory        |
| SOW-1881 | The SMMS Core Application must allow additional geographic datasets to be integrated to the application.  | Mandatory        |
| SOW-1882 | The SMMS Core Application must support integration with external map servers with standard WMS, WFS, and WMTS interfaces.   | Mandatory        |
| SOW-1883 | <b>5.3.5.12.3 Weather Information</b>   | Heading          |
| SOW-1884 | The SMMS Core Application must provide a means of sourcing and displaying current, recent past, and forecast weather information.   | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1887 | The SMMS Core Application must allow additional weather datasets from external data sources to be integrated to the application.  | Mandatory        |
| SOW-1888 | <b>5.3.5.13 Survivability Modeling (SM)</b>   | Heading          |
| SOW-1889 | The SMMS Core Application must use scientifically rigorous methods of survivability modeling to determine the Functional and Survival time of a person exposed to the elements. Scientific rigour is defined as the strict application of the scientific method to ensure robust and unbiased experimental design, methodology, analysis, interpretation, and reporting of results. | Mandatory        |
| SOW-1895 | It is expected that the SMMS Core Application will at least have the following data fields as part of the inputs for exposure survival modeling groups:   | Information      |
| SOW-1897 | a. Sex  | Information      |
| SOW-1898 | b. Age  | Information      |
| SOW-1901 | c. Weight   | Information      |
| SOW-1908 | d. Garment Worn   | Information      |
| SOW-1911 | e. Immersion State  | Information      |
| SOW-1914 | f. Weather  | Information      |
| SOW-1915 | g. Air Temperature  | Information      |
| SOW-1916 | h. Water Temperature  | Information      |
| SOW-1917 | i. Wind   | Information      |
| SOW-1919 | j. Sea State  | Information      |
| SOW-1927 | <b>5.3.5.14 Reports</b>   | Heading          |
| SOW-1928 | The SMMS Core Application must enable the creation of incident-specific reports to at least include SRU Briefing Report and SITREPs.  | Mandatory        |
| SOW-1929 | The SMMS Core Application must allow users to select the completed reports to be generated as PDF or MS Word documents.   | Mandatory        |
| SOW-1959 | The SMMS Core Application must include all pertinent information as per the IAMSAR SITREP Standard.   | Mandatory        |
| SOW-1960 | <b>5.3.5.15 General Interface</b>   | Heading          |
| SOW-1961 | The SMMS Core Application must allow users to move between fields by use of keyboard tab key and cursor selection.  | Mandatory        |
| SOW-1962 | The SMMS Core Application must allow editing of DTG field manually, by use of calendar widget, and by auto completion method.   | Mandatory        |
| SOW-1963 | The SMMS Core Application must default position inputs to Degree Decimal Minutes (DDM) and allow alternate unit change at a minimum to Degree Minute Second (DMS) and Degree Decimal (DD).  | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1964 | The SMMS Core Application must default distance inputs to Nautical Miles and allow on-the-fly changes to Kilometers, Statute Miles, Meters, and Feet.   | Mandatory        |
| SOW-1965 | The SMMS Core Application must be cable of interfacing with and retrieving information from databases such as the Canadian Beacon Registry, Transport Canada Aircraft and vessel registries, and Service Canada pleasure craft licensing database.  | Mandatory        |
| SOW-1025 | <b>6 FULL SMMS CORE APPLICATION</b>   | Heading          |
| SOW-1026 | <b>6.1 GENERAL</b>  | Heading          |
| SOW-2704 | The Contractor must not rely on any assumption that Canada will proceed with any of the intentions to award work or implement any of the capabilities described in ID SOW-1025 (section 6, page 60). Notwithstanding the intentions described in this section, Canada will be under no obligation to award any Task Authorizations relating to Phase 2 or the Full SMMS Core Application.           | Mandatory        |
| SOW-1027 | Canada's intent is to work with the Contractor to further enhance the SMMS Core Application accepted in Phase 1 to provide all or most of the features specified in ID SOW-2005 (section 6.2, page 61). This is to be done by working collaboratively with the Contractor to identify and prioritize groups of features to be implemented and released together in new versions of the application. | Information      |
| SOW-2550 | The capability statements and features specified in ID SOW-2005 (section 6.2, page 61) are not mandatory requirements. They are provided for informational purposes and for providing context to the work for Phase 2.  | Information      |
| SOW-1029 | Canada intends to achieve the SMMS Full Capability through an iterative process in Phase 2. One or multiple Task Authorization(s) will be issued to address the work required.  | Information      |
| SOW-1030 | Each Task Authorization will have a defined objective and focus on a number of enhancements to the SMMS Core Application. It will address all the work required for the deployment of the enhanced application, including systems engineering, software development, testing, integration, deployment support, updating manuals and documentation, and training support.                            | Information      |
| SOW-1031 | Upon the completion of each Task Authorization and acceptance of the enhanced version of the SMMS Core Application, the Contractor is anticipated to support to deploy the application to the SMMS Hosting Environment for operation and training.  | Information      |
| SOW-1032 | Canada will collaborate with the Contractor to identify and prioritize groups of features within ID SOW-2005 (section 6.2, page 61) and establish scope of new application versions.  | Information      |
| SOW-1033 | Changes to the SMMS Core Application for Phase 2 should not negatively impact the baseline performance of the Core Application.   | Information      |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2005 | <b>6.2 FULL CAPABILITY HIGH-LEVEL SPECIFICATIONS</b>   | Heading          |
| SOW-2006 | <b>6.2.1 Second Generation Beacon Support</b>  | Heading          |
| SOW-2007 | The Full SMMS Core Application will support COSPAS-SARSAT second generation beacons as described in C/S 002.   | Information      |
| SOW-2009 | <b>6.2.2 Integration with 911 telephony system</b>   | Heading          |
| SOW-2010 | The Full SMMS Core Application will integrate with the in-service 911 telephony system to automatically log incoming phone calls and initiate outgoing phone calls using an established Application Programming Interfaces (API) provided by Canada. | Information      |
| SOW-2011 | The Full SMMS Core Application will be able to identify the caller number and identification (ID), and process Enhanced 9-1-1 data.  | Information      |
| SOW-2015 | The Full SMMS Core Application will support the NG-911 telephony system to be deployed in 2023.  | Information      |
| SOW-2639 | <b>6.2.3 Integration with telephony system</b>   | Heading          |
| SOW-2014 | The Full SMMS Core Application will log all communication and append the records to appropriate log entries.   | Information      |
| SOW-2013 | The Full SMMS Core Application will be able to receive text messages.  | Information      |
| SOW-2012 | The Full SMMS Core Application will be able to initiate single and multi number calls.   | Information      |
| SOW-2016 | <b>6.2.4 Integrated Chat Function</b>  | Heading          |
| SOW-2017 | The Full SMMS Core Application will provide an integrated chat functionality to facilitate communication between users in a centre and between users of other centres.   | Information      |
| SOW-2018 | The chat functionality will have general and incident-specific chat function with appropriate user notification.   | Information      |
| SOW-2019 | The chat functionality will log all chat discussions for incident-specific discussions.  | Information      |
| SOW-2020 | <b>6.2.5 Integration with External Service and Data Providers</b>  | Heading          |
| SOW-2021 | <b>6.2.5.1 CANSARP</b>   | Heading          |
| SOW-2022 | The Full SMMS Core Application will be enhanced to integrate with the current version of Canadian Search and Rescue Planning Software Application (CANSARP) through an established API provided by Canada.   | Information      |
| SOW-2023 | The Full SMMS Core Application will provide a user interface for users to enter pertinent information and data for CANSARP.  | Information      |
| SOW-2024 | The Full SMMS Core Application will be able to display data results provided by CANSARP textually and onto the GIS.  | Information      |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2025 | <b>6.2.5.2 Canadian Coast Guard Auxiliary (CCGA)</b>  | Heading          |
| SOW-2026 | The Full SMMS Core Application will be enhanced to integrate with Canadian Coast Guard Auxiliary (CCGA) to share SAR mission coordination information.  | Information      |
| SOW-2027 | <b>6.2.5.3 Civil Air Search and Rescue Association (CASARA)</b>   | Heading          |
| SOW-2028 | The Full SMMS Core Application will be enhanced to integrate with the Civil Air Search and Rescue Association (CASARA) to share SAR mission coordination information.   | Information      |
| SOW-2533 | <b>6.2.5.4 Other Services and Data Providers</b>  | Heading          |
| SOW-1138 | The SMMS Core Application will provide access to the Canadian COSPAS-SARSAT Beacon Registries.  | Information      |
| SOW-1141 | The SMMS Core Application will provide access to Vessel Registries.   | Information      |
| SOW-1142 | The SMMS Core Application will provide access to flight plans and flight data.  | Information      |
| SOW-2227 | The SMMS Core Application will have a geospatial server that allows customized geospatial data and maps provided by Canada to be integrated into the application.   | Information      |
| SOW-2228 | The SMMS Core Application will provide access to weather and environmental data from third-party data provider.   | Information      |
| SOW-2029 | <b>6.2.6 Support for COSPAS-SARSAT ELT Distress Tracking (ELT-DT)</b>   | Heading          |
| SOW-2663 | The Full SMMS Core Application will support COSPAS-SARSAT ELT-DT as described in C/S 002.   | Information      |
| SOW-2030 | <b>6.2.7 Integration of Customized Maps</b>   | Heading          |
| SOW-2031 | The Full SMMS Core Application will integrate customized map sets provided by Canada.   | Information      |
| SOW-2032 | <b>6.2.8 Business Rules Management</b>  | Heading          |
| SOW-2033 | The Full SMMS Core Application will include Canada's business rule in management of SAR incidents and the associated data. For instance, in order to collect valid SAR statistical information for long-term monitoring of the Canadian SAR system, Canada anticipates that the Full SMMS Core Application will apply business rules at incident close-out to ensure that all appropriate fields have been filled with valid information (e.g., if the incident is marine and of classification 1, POB count should be greater than 0). | Information      |
| SOW-2034 | <b>6.2.9 Flare Sighting Tool</b>  | Heading          |
| SOW-2035 | The Full SMMS Core Application will provide a Flare Sighting Tool to calculate the location(s) with the highest likelihood of a sighted distress flare.   | Information      |
| SOW-2036 | The Full SMMS Core Application will provide a user interface for users to enter pertinent information and data for the flare sighting.  | Information      |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2037 | The Full SMMS Core Application will be able to determine the highest likelihood location for a sighted distress flare and to display the results on the GIS display as validated with IAMSAR Vol II tables.   | Information      |
| SOW-2038 | <b>6.2.10 Enhanced GIS capability</b>   | Heading          |
| SOW-2640 | The Full SMMS Core Application will integrate a "Go To" function to the GIS.  | Information      |
| SOW-2641 | The Full SMMS Core Application will allow rapid coordinate conversion to UMS.   | Information      |
| SOW-2039 | The Full SMMS Core Application will be enhanced to allow seamless interaction between the map sets and the users.   | Information      |
| SOW-2040 | The Full SMMS Core Application will have geofencing for beacons and alerts.   | Information      |
| SOW-2041 | <b>6.2.11 Automated Handling of COSPAS SARSAT Beacons</b>   | Heading          |
| SOW-2042 | The Full SMMS Core Application will be able to handle COSPAS SARSAT beacon updates automatically. When a C/S beacon distress signal comes in, the application will be able to determine whether there is a current active incident for the given beacon, if there is, the beacon will be automatically attached to the associated incident and display a pop up notification that this has occurred.  | Information      |
| SOW-984  | <b>7 TRAINING</b>   | Heading          |
| SOW-985  | <b>7.1 MANUALS</b>  | Heading          |
| SOW-986  | The Contractor must deliver up-to-date user manual(s) of the SMMS Core Application in English and French in electronic format.  | Mandatory        |
|          | Note: This requirement to deliver user manual(s) in both English and French supersedes that of paragraph 3 in article 09 ("Software Documentation ") of Standard Acquisition Clauses and Conditions (SACC) 4003 (2010-08-16) - Licensed Software.   |                  |
| SOW-987  | The Contractor must deliver up-to-date administrator manual(s) of the SMMS Core Application in English in electronic format.  | Mandatory        |
| SOW-988  | <b>7.2 TRANSITION TRAINING</b>  | Heading          |
| SOW-989  | Transition Training sessions are to provide current SAR Mission Coordinators (SMC), who are experienced in the legacy SMMS system, with the training required to quickly transition to the new SMMS Core Application. Given the necessity to maintain SMCs on watch at all times, Canada anticipates the Contractor to provide multiple non-concurrent sessions of transition training to ensure all current SMCs and assistant SMCs are trained. | Information      |
| SOW-990  | Transition Training sessions must be delivered in-person in the language specified and on-site at the locations below:  | Mandatory        |
| SOW-2142 | JRCC Victoria, BC: in English;  | Mandatory        |
| SOW-2143 | JRCC Halifax, NS: in English;   | Mandatory        |

| ID       | Requirements   | Requirement Type |
|----------|--|------------------|
| SOW-2144 | JRCC Trenton, ON: in English;  | Mandatory        |
| SOW-2145 | MRSC St Johns, NL: in English; and   | Mandatory        |
| SOW-2146 | MRSC Quebec, QC: in French.  | Mandatory        |
| SOW-2691 | The Contractor must provide a minimum of two (2) Transition Training sessions at each of the locations listed in ID SOW-990 (section 7.2, page 63).  | Mandatory        |
| SOW-995  | Canada will provide the venues and the equipment required to support the Transition Training at the sites listed above.  | Information      |
| SOW-996  | The Contractor must prepare and deliver the training material required for the transition training in both English and French in electronic format.  | Mandatory        |
| SOW-997  | <b>7.3 SYSTEM ADMINISTRATOR TRAINING</b>   | Heading          |
| SOW-998  | The objective of the system administrator training is to provide the administration team of the SMMS System with the training required to administer and manage the SMMS Core Application.   | Information      |
| SOW-999  | The system administrator training session must be delivered in-person and on-site at a facility in Canada to be specified by Canada.   | Mandatory        |
| SOW-1000 | Canada will provide the venue and the equipment required to support the system administrator training.   | Information      |
| SOW-1001 | The Contractor must prepare and deliver the training material required for the system administrator training in English in electronic format.  | Mandatory        |
| SOW-1002 | <b>7.4 TRAIN-THE-TRAINER TRAINING</b>  | Heading          |
| SOW-1003 | The objective of the Train-the-Trainer training is to develop competence and knowledge of the SMMS Core Application in the SAR training community. Upon completion of this training, the SAR trainers are expected to have sufficient understanding of the application to develop and deliver training programs and courses for the certification of new SMCs. | Information      |
| SOW-1004 | The Train-the-trainer Session must be delivered in-person and on-site at a facility in Canada to be specified by Canada.   | Mandatory        |
| SOW-1005 | Canada will provide the venue and the equipment required to support the Train-the-Trainer training session.  | Information      |
| SOW-1006 | The Contractor must prepare and deliver the training material required for the Train-the-Trainer training in English in electronic format.   | Mandatory        |
| SOW-1009 | <b>8 INTERIM IN-SERVICE SUPPORT (ISS)</b>  | Heading          |
| SOW-2208 | <b>8.1 GENERAL</b>   | Heading          |
| SOW-2647 | The Contractor must deliver an Interim In-Service Support (ISS) Program that meets all of the requirements described in ID SOW-1009 (section 8, page 64) for the Interim SMMS Core Application.  | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2201 | Canada intends to work with the Contractor to develop and implement a Full ISS program that augments the Interim ISS requirements described herein as needed to fully meet Canada's requirements for the SMMS Core Application over the long term. This is to be done by working collaboratively with the Contractor to identify and elaborate short- and long-term ISS requirements beyond those herein. | Information      |
| SOW-2202 | The Contractor must work collaboratively with Canada to determine the requirements for the Full ISS program beyond those described in this SOW.   | Mandatory        |
| SOW-1010 | <b>8.2 INTERIM ISS PLAN</b>   | Heading          |
| SOW-1011 | The Contractor must prepare, deliver, maintain and update an Interim In-Service Support (ISS) Plan in accordance with ID SOW-1080 (section 3.14.2.6, page 20).  | Mandatory        |
| SOW-2599 | <b>8.3 INTERIM ISS PROGRAM</b>  | Heading          |
| SOW-2600 | The Contractor must implement and maintain an Interim ISS Program in accordance with the approved ISS Plan for the duration of the SMMS Contract.   | Mandatory        |
| SOW-1981 | <b>8.4 INTERIM ISS REQUIREMENTS</b>   | Heading          |
| SOW-1982 | <b>8.4.1 Support Services</b>   | Heading          |
| SOW-1983 | The Contractor must establish a helpdesk support service to support the on-going operation of the SMMS Core Application.  | Mandatory        |
| SOW-1984 | The Contractor must provide and manage an on-line ticketing system for Canada as part of the helpdesk support service.  | Mandatory        |
| SOW-1985 | The helpdesk support must be accessible 24 hours per day, seven (7) days per week by email, toll-free number, and ticketing system.   | Mandatory        |
| SOW-2237 | The Contractor must monitor the SMMS Core Application 24 hours per day, seven (7) days per week, and address any incidents identified during the monitoring in accordance with the requirements stated in ID SOW-2664 (section 8.4.2, page 65).   | Mandatory        |
| SOW-2710 | Note that the requirements in ID SOW-1982 (section 8.4.1, page 65) are in addition to the requirements of article 05 ("Support Services") of Standard Acquisition Clauses and Conditions (SACC) 4004 (2013-04-25) - Maintenance and Support Services for Licensed Software.   | Information      |
| SOW-2664 | <b>8.4.2 Incident Response Program</b>  | Heading          |
| SOW-2665 | The Contractor must implement an Incident Response Program as part of the Interim ISS Program to manage incidents of various severity levels associated with the SMMS Core Application. An incident is defined as unplanned interruption to the SMMS Core Application or a reduction in the responsiveness, capability, or quality of the application.  | Mandatory        |
| SOW-2666 | Incidents are categorized into the following severity levels:   | Information      |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-2667 | a. <u>Critical (Severity 1)</u> : Issues that halt the use of the application in SAR operation with no procedural workaround exists;  | Information      |
| SOW-2668 | b. <u>Major (Severity 2)</u> : Application is operational but its major functionality is impacted, resulting in significant performance degradation or severe restriction on SAR operation, with a workaround being available; or a major security issue is identified, as determined by Canada;        | Information      |
| SOW-2669 | c. <u>Medium (Severity 3)</u> : Application is operational with partial loss of its capability, with the issue causing medium to low impact on SAR operation; or, a minor security issue is identified, as determined by Canada;  | Information      |
| SOW-2670 | d. <u>Low (Severity 4)</u> : Routine technical or cosmetic issues that have no impact on SAR operations.  | Information      |
| SOW-2671 | The Contractor's Incident Response Program must meet the following initial incident response times:   | Mandatory        |
| SOW-2672 | a. <u>Critical (Severity 1)</u> : Within one (1) hour, 24 hours/day and 7 days/week;  | Mandatory        |
| SOW-2673 | b. <u>Major (Severity 2)</u> : Within eight (8) hours, 24 hours/day and 7 days/week;  | Mandatory        |
| SOW-2676 | c. <u>Medium (Severity 3)</u> : Within five (5) business days, 8 hours/day and 5 days/week;   | Mandatory        |
| SOW-2674 | d. <u>Low (Severity 4)</u> : Within ten (10) business days, 8 hours/day and 5 days/week.  | Mandatory        |
| SOW-2675 | The Contractor must provide a workaround for the various levels of incidents within the timeframes defined below:   | Mandatory        |
| SOW-2678 | a. <u>Critical (Severity 1)</u> : Within eight (8) hours; and   | Mandatory        |
| SOW-2679 | b. <u>Major (Severity 2)</u> : Within five (5) business days.   | Mandatory        |
| SOW-2682 | The Contractor must provide software update or patch to address the various levels of incidents within the timeframes defined below:  | Mandatory        |
| SOW-2680 | a. <u>Critical (Severity 1)</u> : Within five (5) calendar days;  | Mandatory        |
| SOW-2681 | b. <u>Major (Severity 2)</u> : Within twenty (20) business days;  | Mandatory        |
| SOW-2683 | c. <u>Medium (Severity 3)</u> : As part of the next periodic update.  | Mandatory        |
| SOW-2711 | Note that the severity definitions and response and correction time requirements in ID SOW-2664 (section 8.4.2, page 65) supersede those of paragraphs 2 and 3 in article 02 ("Software Error Correction Services") of SACC 4004 (2013-04-25) - Maintenance and Support Services for Licensed Software. | Information      |
| SOW-1986 | <b>8.4.3 Technical Resources</b>  | Heading          |
| SOW-1987 | The Contractor must maintain sufficient level of technical resources that is appropriate for the Interim ISS Program.   | Mandatory        |

| ID       | Requirements  | Requirement Type |
|----------|---|------------------|
| SOW-1993 | <b>8.4.4 Security Assessment and Authorization (SA&amp;A)</b>   | Heading          |
| SOW-2649 | The Contractor must maintain the SA&A Management Program in accordance with the approved PMP for the Interim ISS Program.   | Mandatory        |
| SOW-1994 | The Contractor must maintain the SMMS Core Application to ensure its continuous compliance to Canada's SA&A process as part of the Interim ISS Program.   | Mandatory        |
| SOW-1999 | <b>8.4.5 Ticketing System</b>   | Heading          |
| SOW-2000 | The Contractor must use a ticketing system to capture and manage all issues raised for the SMMS Core Application.   | Mandatory        |
| SOW-2705 | If and as requested by Canada, the Contractor must provide Canada with relevant excerpts of the ticketing system to assist in Canada's monitoring of issues that have been raised.                                      | Mandatory        |
| SOW-2001 | <b>8.4.6 Licence Management</b>   | Heading          |
| SOW-2002 | The Contractor must provide and maintain the licensing of all the software components and packages and third-party services delivered as part of the SMMS Core Application to support on-going operations and training. | Mandatory        |
| SOW-2003 | <b>8.4.7 Configuration Management</b>   | Heading          |
| SOW-2004 | The Contractor must maintain and adhere to the approved Configuration Management Program for all deliverables, including documentation and all components of the SMMS Core Applications.                                | Mandatory        |

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