



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada

1713 Bedford Row

Halifax, N.S./Halifax, (N.É.)

Halifax

Nova Scotia

B3J 1T3

Bid Fax: (902) 496-5016

REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

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

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

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

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du

fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Atlantic Region Acquisitions/Région de l'Atlantique
Acquisitions

1713 Bedford Row

Halifax, N.S./Halifax, (N.É.)

Halifax

Nova Scot

B3J 1T3

Title - Sujet Software Development Support Software Development Support to Research Systems	
Solicitation No. - N° de l'invitation W7707-216856/B	Date 2021-10-05
Client Reference No. - N° de référence du client W7707-21-6856	
GETS Reference No. - N° de référence de SEAG PW-\$HAL-219-11372	
File No. - N° de dossier HAL-0-84114 (219)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM Atlantic Daylight Saving Time ADT on - le 2021-11-16 Heure Avancée de l'Atlantique HAA	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Richard, Linda K.	Buyer Id - Id de l'acheteur hal219
Telephone No. - N° de téléphone (902) 402-9059 ()	FAX No. - N° de FAX (902) 496-5016
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF NATIONAL DEFENCE DRDC ATLANTIC 9 GROVE STREET DARTMOUTH NOVA SCOTIA B3A 3C5 CANADA	

Instructions: See Herein

Instructions: Voir aux présentes

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



Item Article	Description	Dest. Code Dest.	Inv. Code Fact.	Qty Qté	U. of I. U. de D.	Unit Price/Prix unitaire FOB/FAM Destination	Plant/Usine	Delivery Req. Livraison Req.	Del. Offered Liv. offerte
1	Software Development Support	W7707	W7707	1	Lot	\$	XXXXXXXXXXXX	See Herein – Voir ci-inclus	

This bid solicitation cancels and supersedes previous bid solicitation number W7707-216856/A dated May 20, 2021 with a closing of June 10, 2021 at 2:00 p.m. ADT. A debriefing or feedback session will be provided upon request to bidders/offerors/suppliers who bid on the previous solicitation.

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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, 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, the Basis of Payment, the Security Requirements Checklist, the Electronic Payment Instruments, the Federal Contractors Program for Employment Equity - Certification, the Insurance Requirements, the Task Authorization Form DND 626 Task Authorization Form and any other annexes.

1.2 Summary

- 1.2.1 Defence Research and Development Canada – Atlantic Research Centre (DRDC-ARC) has a number of systems that have been developed over the course of several years that are used to support a variety of research tasks. There is a requirement for software development support for a wide variety of tasks to support the expansion and maintenance of those systems, as well as support to scientific work that does not rely directly on those systems. The main focus of this work will be on research in the Underwater Warfare (UWW) planning domain through the Command Reconnaissance Area Coordination and Control Environmental Network CRACCEN) project.,

The period of performance for this Task Authorization Contract begins on the date of Contract award for three years.

- 1.2.2 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 organization security screening or security clauses, Bidders should refer to the [Contract Security Program](http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html) of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.
- 1.2.3 The Federal Contractors Program (FCP) for employment equity applies to this procurement; refer to Part 5 – Certifications and Additional Information, Part 7 - Resulting Contract Clauses and the annex titled Federal Contractors Program for Employment Equity – Certification.

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

1.3 Debriefings

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

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

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

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

The [2003](#) (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Delete: 60 days
Insert: 90 days

2.2 Submission of Bids

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

Note: For bidders choosing to submit using epost Connect for bids closing at the Bid Receiving Unit in Nova Scotia the email address is:

TPSGC.RAReceptionSoumissionsNE-ARBidReceivingNS.PWGSC@tpsgc-pwgsc.gc.ca

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

Facsimile: 902-496-5016

2.3 Former Public Servant

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

Definitions

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

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

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

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

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

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the

published proactive disclosure reports in accordance with [Contracting Policy Notice: 2019-01](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

Work Force Adjustment Directive

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

If so, the Bidder must provide the following information:

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

2.4 Enquiries - Bid Solicitation

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

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

2.5 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____ (*insert the name of the province or territory*).

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

2.6 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained 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 favor 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 Basis for Canada's Ownership of Intellectual Property

The Department of National Defense has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, for the following reasons, as set out in the [Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts](#): the main purpose of the Contract, or of the deliverables contracted for, is to deliver a not-yet fully developed component or subsystem that will be incorporated into a complete system at a later date, as a prerequisite to the planned transfer of the complete system to the private sector, through licensing or assignment of ownership, for the purposes of Commercial Exploitation

2.8 Bid Challenge and Recourse Mechanisms

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

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

- a. If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

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

Section I: Technical Bid
Section II: Financial Bid
Section III: Certifications
Section IV: Additional Information

If the Bidder chooses to submit its bid in hard copies, Canada requests that the Bidder submits its bid in separately bound sections as follows:

Section I: Technical Bid (1 hard copy)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

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

If the Bidder is simultaneously providing copies of its bid using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy provided through epost Connect service, the wording of the electronic copy provided through epost Connect service will have priority over the wording of the other copies.

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

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

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

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

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573) (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

b. Submission of Only One Bid:

- i. A Bidder, including related entities, will be permitted to submit only one bid in response to the 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 two (2) working days to identify the single bid to be considered by Canada. Failure to meet this deadline will result in all the affected bids being disqualified.
- 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.

c. 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.

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 of 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 experiencing 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.

Section I: Technical Bid

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 in a thorough, concise and clear manner for carrying out the work.

The technical bid should 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 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.

- a. **Substantiation of Technical Compliance:** The technical bid must substantiate the compliance with the Statement of Work at Annex A. The substantiation must not simply be a repetition of the requirement(s), but must explain and demonstrate how the Bidder meets the requirements. Simply stating that the Bidder meets the experience requirements is not sufficient. Where Canada determines that the substantiation is not complete, the Bidder will be considered non-responsive and disqualified. The substantiation may refer to additional documentation submitted with the bid - this information can be referenced in the "Cross Reference" column of Attachment 1 to Part 4, where bidders are requested to indicate where in the bid the reference material can be found, including the title of the document, and the page and paragraph numbers; where the reference is not sufficiently precise, Canada may request that the Bidder direct Canada to the appropriate location in the documentation.
- b. **For Previous Similar Projects:** Where the bid must include a description of previous similar projects: (i) a project must have been completed by the Bidder itself (and cannot include the experience of any proposed subcontractor or any affiliate of the Bidder); (ii) a project must have been completed by the bid closing date; and (iii) if more similar projects are provided than requested, Canada will decide in its discretion which projects will be evaluated. A project will be considered "similar" to the Work to be performed under any resulting contract if the project was for the performance of work that closely matches the descriptions of the Resource Categories identified in Annex "A". (iv) Work will be considered to "closely match" if the work in the provided project is described in at least of 50% of the points of.
- c. **For Proposed Resources:** The technical bid must include résumés for the resources as identified in Attachment 1 to Part 4. The Technical bid 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 Bidder or employers of a subcontractor, or these individuals may be independent contractors to whom the Bidder would subcontract a portion of the Work.
 - b. For educational requirements for a particular degree, designation or certificate, Canada will only consider educational programmes that were successfully completed by the resource by the time of bid closing. If the degree, designation or certification was issued by an educational institution outside of Canada, the Bidder must provide a copy of the results of the academic credential assessment and qualification recognition service issued by an agency or organization recognized by the Canadian Information Centre for International Credentials (CICIC).
 - c. For requirements relating to professional designation or membership, the resource must have the required designation or membership by the time of bid closing and must

continue, where applicable, to be a member in good standing of the profession or membership throughout the evaluation 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 solicitation. If the entity is not specified, the issuer must be an accredited or otherwise recognized body, institution or entity at the time the document was issued. If the degree, diploma or certification was issued by an educational institution outside of Canada, the Bidder must provide a copy of the results of the academic credential assessment and qualification recognition service issued by an agency or organization recognized by the Canadian Information Centre for International Credentials (CICIC).

- d. For work experience, Canada will not consider experience gained as part of an educational programme, except for experience gained through a formal cooperative 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 technical bid 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. For work experience to be considered by Canada, the technical bid 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. 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.

Section II: Financial Bid

3.1.1 Bidders must submit their financial bid in accordance with the Basis of Payment in Annex "B".

- a. **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. 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.
- b. **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.

3.1.2 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex "1" to Part 3 Electronic Payment Instruments, to identify which ones are accepted.

If Annex "1" to Part 3 Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

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

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3.1.3 Exchange Rate Fluctuation

C3011T (2013-11-06), Exchange Rate Fluctuation

Section III: Certifications

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

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

4.1.1 Technical Evaluation

4.1.1 Technical Evaluation

Mandatory and point rated technical evaluation criteria are included in Annex 1 to Part 4 – Evaluation Procedures and Basis of Selection.

4.1.2 Financial Evaluation

4.1.2.1 Mandatory Financial Criteria

SACC Manual Clause [A0220T](#) (2014-06-26), Evaluation of Price-Bid

SACC Manual Clause [A0222T](#) (2014-06-26), Evaluation of Price-Canadian/Foreign Bidders

4.2 Basis of Selection

See Annex 1 to Part 4 – Evaluation Procedures and Basis of Selection

ANNEX 1 TO PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

Estimated Number of Resources Required

Stream	Resource Category	Level of Expertise	Estimated Number of Resources Required
1	A.7 Programmer/Analyst	Level 1 (<5 years of experience)	2
1	A.7 Programmer/Analyst	Level 2 (5 ≤ 10 years of experience)	1
1	A.7 Programmer/Analyst	Level 3 (10+ years of experience)	1
3	I.4 Database Modeller/Information Management Modeller	Level 1 (<5 years of experience)	1
3	I.1 Data Conversion Specialist	Level 2 (5 ≤ 10 years of experience)	1
4	B.14 Technical Writer	Level 2 (5 ≤ 10 years of experience)	1
5	P.9 Project Manager	Level 1 (<5 years of experience)	1

1. MANDATORY EVALUATION CRITERIA

In their proposals, bidders must demonstrate they meet the following mandatory criteria. Failure to meet any of the mandatory criteria will render the bid non-compliant and it will be given no further consideration.

For Proposed Resources:

The technical bid must include résumés for the resources as identified in Annex “(E)”. The Technical bid must demonstrate that each proposed individual meets the qualification requirements described (including any educational requirements, work experience requirements, and professional designation or membership requirements).

1.1 Bidder Experience

	Criteria	Please Cross Reference to Specific Pages in your Proposal
M1	<p>The Bidder must have previous experience managing two similar* contracts within the past 120 months.</p> <p>The Bidder must provide a summary of each contract, including:</p> <ul style="list-style-type: none">the value and length of the contract;a description of the work;	

	<ul style="list-style-type: none"> the number of resources managed per year; a description of the strategies used to manage the contract. <p>*For Previous Similar Projects: Where the bid must include a description of previous similar projects: (i) a project must have been completed by the Bidder itself (and cannot include the experience of any proposed subcontractor or any affiliate of the Bidder); (ii) a project must have been completed] by the bid closing date; (iii) each project description must include, at minimum, the name and either the telephone number or e-mail address of a customer reference; and (iv) if more similar projects are provided than requested, Canada will decide in its discretion which projects will be evaluated. A project will be considered "similar" to the Work to be performed under any resulting contract if the project was for the performance of work that closely matches the descriptions of the Resource Categories identified in Annex "(A)". (v) Work will be considered to "closely match" if the work in the provided project is described in at least 50% of the points of responsibility listed in the description of the given Resource Category.</p>	
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1.2 Programmer/Analyst – Level 1, Level 2 and Level 3

	Criteria	Please Cross Reference to Specific Pages in your Proposal
M2	<p>The Bidder must propose resources with a combined minimum of 12 months experience in the last 60 months in developing with Unity.</p> <p>Each resource counted for this requirement must have at least 3 months experience within the last 60 months.</p>	
M3	<p>The Bidder must propose resources with a combined minimum of 24 months experience in the last 120 months working with and developing for the Windows 10 and Windows Server 2012 (or higher) platform.</p> <p>Each resource counted for this requirement must have at least 6 months experience within the last 120 months.</p>	

M4	<p>The Bidder must propose resources with a combined minimum of 24 months experience within the last 120 months, working with and developing for, at least one of the following Linux distributions:</p> <ul style="list-style-type: none"> • RedHat; • CentOS; and • Ubuntu. <p>Each resource counted for this requirement must have at least 6 months experience within the last 120 months.</p>	
M5	<p>The Bidder must propose resources with a combined minimum of 24 months experience within the last 120 months in developing with C++.</p> <p>Each resource counted for this requirement must have at least 12 months experience within the last 120 months.</p>	
M6	<p>The Bidder must propose a resources with a combined minimum of 12 months experience within the last 60 months with Kubernetes, or they must have formal training.</p> <p>Each resource counted must have at least 3 months experience within the last 60 months. Formal training will be accepted if it was included in a university course or was a minimum 3-day course.</p>	
M7	<p>The Bidder must propose resources with a combined minimum of 12 months experience within the last 60 months developing applications that use Apache ActiveMQ, Apache Kafka, or other Java Messaging System implementation.</p> <p>Each resource counted for this requirement must have at least 3 months experience within the last 60 months.</p>	
M8	<p>The Bidder must propose resources with a combined minimum of 12 months experience within the last 60 months developing HTML5 web applications including the use of CSS and JavaScript.</p> <p>Each resource counted for this requirement must have at least 6 months experience within the last 60 months.</p>	
M9	<p>The Bidder must propose resources with a combined minimum of 12 months experience within the last 60 months developing HTML5 web applications including the use of CSS and JavaScript.</p>	

	Each resource counted for this requirement must have at least 6 months experience within the last 60 months.	
M10	<p>The Bidder must propose resources with a combined minimum of 12 months experience within the last 120 months developing applications that make use of Web Mapping Services (WMS) and Web Feature Services (WFS).</p> <p>Each resource counted for this requirement must have at least 3 months experience within the last 120 months.</p>	
M11	<p>The Bidder must propose resources with a combined minimum of 12 months experience within the last 120 months, developing applications that make use of Web Mapping Services (WMS) and Web Feature Services (WFS).</p> <p>Each resource counted for this requirement must have at least 3 months experience within the last 120 months.</p>	
M12	<p>The Bidder must propose resources with a combined minimum of 12 months experience within the last 36 months, applying machine learning techniques to practical problems.</p> <p>Each resource counted for this requirement must have at least 6 months experience within the last 36 months.</p>	
M13	<p>The Bidder must propose resources with a minimum of 6 months experience within the past 120 months developing software for Distributed Interactive Simulation (DIS).</p> <p>Each resource counted for this requirement must have at least 3 months experience within the last 120 months.</p>	
M14	<p>The Bidder must propose resources with a minimum of 6 months experience within the last 120 months developing software for the High Level Architecture (HLA) simulation interoperability standard.</p> <p>Each resource counted for this requirement must have at least 3 months experience within the last 120 months.</p>	

1.3 Database Modeller/Information Management Modeller – Level 1

	Criteria	Please Cross Reference to Specific Pages in your Proposal
M15	The Bidder must propose a minimum of one resource with a minimum of 12 months experience in the last 60 months in data modelling.	

1.4 Data Conversion Specialist – Level 2

	Criteria	Please Cross Reference to Specific Pages in your Proposal
M16	The Bidder must propose a minimum of one resource with a minimum of 60 months experience in the last 180 months working with meteorological, oceanographic, and/or other geospatial data. The bidder must give 3 examples of the resource's work, including the general type of data, the conversion done to it, and the intended end use.	

1.5 Technical Writer – Level 2

	Criteria	Please Cross Reference to Specific Pages in your Proposal
M17	The Bidder must demonstrate that the proposed resource has produced the following kinds of technical documentation: <ul style="list-style-type: none">• software user guides;• user training materials;• developer documentation (including for APIs);• architecture and design documentation;• specification sheets and overview brochures.	

	The Bidder must also provide one document from each of two of the listed types, produced by the proposed resource within the last 60 months.	
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1.6 Project Manager – Level 1

	Criteria	Please Cross Reference to Specific Pages in your Proposal
M18	The Bidder must demonstrate that the proposed resource has been a project manager for similar types of contract within the past 120 months.	

2. POINT-RATED EVALUATION CRITERIA

In their proposals, bidders must demonstrate they obtain the required minimum points specified in criteria P8, P11 and P12 and obtain a minimum of 130 points overall.

Failure to meet these minimum points will render the bid non-compliant and it will be given no further consideration.

2.1 Programmer/Analyst – Level 1, Level 2 and Level 3

Data Conversion Specialist – Level 2

	Point-Rated Evaluation Criteria	Point Breakdown Structure	Min.	Max.	Please Cross Reference to Specific Pages in your Proposal
P1	The Bidder should demonstrate that the proposed resource(s) have experience developing in C within the last 120 months. <i>Points are awarded per resource up to the maximum points listed.</i>	Points per resource: 0-6 months = 0 points 7-11 months = 5 points 12 or more months = 10 points	0	20	

P2	<p>The Bidder should demonstrate that the proposed resource(s) have experience developing in Python 3 within the last 60 months.</p> <p><i>Points are awarded per resource, up to the maximum points listed.</i></p>	<p>Points per resource: 0-3 months = 0 points 4-6 months = 5 points 7 or more months = 10 points</p>	0	30	
P3	<p>The Bidder should demonstrate that the proposed resource(s) have experience developing in MatLab within the past 60 months.</p> <p><i>Points are awarded per resource up to the maximum points listed.</i></p>	<p>Points per resource: 0-3 months = 0 points 4-6 months = 5 points 7 or more months = 10 points</p>	0	10	
P4	<p>The Bidder should demonstrate that the proposed resource(s) have developed at least one application that uses the GeoJSON data format to exchange information with other applications.</p>	<p>1 or more applications = 10 points</p>	0	10	
P5	<p>The Bidder should demonstrate that the proposed resource(s) have developed at least one application that makes use of Web Feature Service (WFS).</p>	<p>10 points per application up to the maximum</p>	0	20	
P6	<p>The Bidder should demonstrate that the proposed resource(s) have experience working with oceanographic data.</p> <p>Points are awarded per resource, up to the maximum points listed.</p>	<p>Points per resource: 0-6 months = 0 7-11 months = 5 12 or more months = 10</p>	0	20	
P7	<p>The Bidder should demonstrate that the proposed resource(s) have experience working with meteorological data.</p>	<p>Points per resource: 0-6 months = 0 7-11 months = 5 12 or more months = 10</p>	0	20	

	Points are awarded per resource, up to the maximum points listed.				
P8	The Bidder should demonstrate that proposed resource(s) have experience working with geospatial data. Points are awarded per resource, up to the maximum points listed.	Points per resource: 0-6 months = 0 7-11 months = 5 12 or more months = 10	10*	30	
P9	The Bidder should demonstrate that proposed resource(s) have experience working with AIS data. <i>Points are awarded per resource, up to the maximum points listed.</i>	Points per resource: 0-6 months = 0 7-11 months = 5 12 or more months = 10	0	20	
P10	The Bidder should demonstrate that proposed resource(s) experience working with S57 / S63 chart data. Points are awarded per resource, up to the maximum points listed.	Points per resource: 0-6 months = 0 7-11 months = 5 12 or more months = 10	0	20	
*Must meet the minimum for P8 to be compliant			10	200	

2.2 Database Modeller/Information Management Modeller – Level 1

	Point-Rated Evaluation Criteria	Point Breakdown Structure	Min.	Max.	Please Cross Reference to Specific Pages in your Proposal
P11	The Bidder should demonstrate that proposed resource has experience working with SQL databases.	Less than 12 months = 0 12-23 months = 10 24 or more months = 20	10*	20	
P12	The Bidder should demonstrate that proposed resource has experience with geospatial databases.	Less than 12 months = 0 12-23 months = 10 24 or more months = 20	10*	20	
P13	The Bidder should demonstrate that proposed resource has experience with database design and implementation for big data applications.	Less than 12 months = 0 12-23 months = 10 24 or more months = 20	0	20	
*Must meet the minimums for P11 and P12 to be compliant			20	60	

2.3 Overall Points for Tables 2.1 and 2.2

	Min.	Max.
Minimum and Maximum points for 2.1 and 2.2	130	260

3. BASIS OF SELECTION

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation; and
 - b. meet all mandatory criteria; and
 - c. obtain the required minimum of 130 points overall for the technical evaluation criteria which are subject to point rating.
The rating is performed on a scale of 260 points.
2. Bids not meeting (a) or (b) or (c) will be declared non-responsive.
3. 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.
4. 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 %.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 40 %.
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. 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 table below illustrates an 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 260 and the lowest evaluated price is \$145,000.

		Bidder 1	Bidder 2	Bidder 3
Overall Technical Score		200/260	240/260	235/260
Bid Evaluated Price		\$155,000	\$150,000	\$145,000
Calculations	Technical Merit Score	$200/260 \times 60 = 46.15$	$240/260 \times 60 = 55.38$	$235/260 \times 60 = 54.23$
	Pricing Score	$145000/155000 \times 40 = 37.42$	$145000/150000 \times 40 = 38.67$	$145000/145000 \times 40 = 40$
Combined Rating		83.57	94.05	94.23
Overall Rating		3rd	2nd	1st

(c) Reference Checks

- (i) For reference checks, Canada will conduct the reference check in writing by e-mail. Canada will send all e-mail reference check requests to contacts supplied by all the bidders within a 48-hour period using the e-mail address provided in the bid. Canada will not award any points unless the response is received within five working days of the date that Canada's e-mail was sent.
- (ii) (ii) On the third working day after sending out the reference check request, if Canada has not received a response, Canada will notify the Bidder by email, to allow the Bidder to contact its reference directly to ensure that it responds to Canada within five working days. If the individual named by a Bidder is unavailable when required during the evaluation period, the Bidder may provide the name and email address of an alternate contact person from the same customer. Bidders will only be provided with this opportunity once for each customer, and only if the originally named individual is unavailable to respond (i.e., the Bidder will not be provided with an opportunity to submit the name of an alternate contact person if the original contact person indicates that he or she is unwilling or unable to respond). The Bidder will have 24 hours to submit the name of a new contact. That contact will again be given five working days to respond once Canada sends its reference check request.
- (iii) Wherever information provided by a reference differs from the information supplied by the Bidder, the information supplied by the reference will be the information evaluated.
- (iv) Points will not be allocated and/or a bidder will not meet the mandatory experience requirement (as applicable) if (1) the reference customer states that he or she is unable or unwilling to provide the information requested, or (2) the customer reference is not a customer of the Bidder itself (for example, the customer cannot be the customer of an affiliate of the Bidder instead of being a customer of the Bidder itself). Nor will points be allocated or a mandatory considered met if the customer is itself an affiliate or other entity that does not deal at arm's length with the Bidder.
- (v) Whether or not to conduct reference checks is discretionary. However, if PWGSC chooses to conduct reference checks for any given rated or mandatory requirement, it will check the references for that requirement for all bidders who have not, at that point, been found non-responsive.

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

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

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

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

5.1 Certifications Required with the Bid

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

5.1.1 Integrity Provisions - Declaration of Convicted Offences

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

5.2 Certifications Precedent to Contract Award and Additional Information

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

5.2.1 Integrity Provisions – Required Documentation

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

5.2.2 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](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) 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.

5.2.3 Additional Certifications Precedent to Contract Award

5.2.3.1 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

5.2.3.2 Education and Experience

5.2.3.2.1 SACC Manual clause [A3010T](#) (2010-08-16) Education and Experience

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5.2.3.3 Certification of Language – English Essential

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

PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

6.1 Security Requirements

1. Before award of a contract, the following conditions must be met:
 - (a) the Bidder must hold a valid organization security clearance as indicated in Part 7 - Resulting Contract Clauses;
 - (b) 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;
 - (c) the Bidder must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites;
2. Bidders are reminded to obtain the required security clearance promptly. Any delay in the award of a contract to allow the successful Bidder to obtain the required clearance will be at the entire discretion of the Contracting Authority.
2. For additional information on security requirements, Bidders should refer to the [Contract Security Program](http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html) of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.

6.2 Financial Capability

- a) SACC Manual clause A9033T (2012-07-16) Financial Capability; 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 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 the parent company 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 Controlled Goods Requirement

6.3.1 SACC Manual Clause A9130T (2019-11-28) Controlled Goods Program

- 6.3.2 In the case of a joint venture bidder, each member of the joint venture must meet the requirements of the Controlled Goods Program.

PART 7 - RESULTING CONTRACT CLAUSES

7.1 Requirement

- (a) _____ (the "Contractor") agrees to supply to the Client the services described in the Contract, including the Statement of Work, in accordance with, and at the prices set out in, the Contract. This includes providing professional services, as and when requested by Canada to one or more locations to be designated by Canada, excluding any locations in areas subject to any of the Comprehensive Land Claims Agreements.
- (b) **Client:** Under the Contract, the "Client" is the Department of National Defence – DRDC Atlantic.
- (c) **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.
- (d) **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. Any reference to an Identified User in the Supply Arrangement is a reference to the Client.

7.2 Task Authorization Process

- (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 a Task Authorization (TA). The Work described in the 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.
- (b) Process of Issuing a TA:
1. The Technical Authority will provide the Contractor with a description of the task using the DND 626, Task Authorization Form specified in Annex E .
 2. The Task Authorization (TA) will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The TA will also include the applicable basis(bases) and methods of payment as specified in the Contract.
 3. The Contractor must provide the Technical Authority, within 2 calendar days of its receipt, the proposed total estimated cost for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract.
 4. The Contractor must not commence work until a TA authorized by the Technical Authority has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been received will be done at the Contractor's own risk.
 5. Authority to Issue a TA: Any TA with a value less than or equal to \$250,000.00 may be issued by the Technical Authority or the Contracting Authority. Any TA with a value greater than this amount

must be issued directly by the Contracting Authority. By providing written notice to the Contractor, the Contracting Authority may suspend the Technical Authority's authority to issue TAs at any time.

6. Charges for Work under a TA: The Contractor must not charge Canada anything more than the price set out in the Task Authorization unless Canada has issued a TA amendment authorizing the increased expenditure. Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before being incorporated into the Work.
7. TA Amendment: A TA amendment means a modification to an approved TA. Canada may, for any reason, seek the consent of the Contractor to modify the content of an approved TA, which modification will be evidenced by a TA Amendment.
8. Consolidation of TAs for Administrative Purposes: The Contract may be amended from time to time to reflect all Task Authorizations issued and approved by the Contracting Authority to date, to document the Work performed under those TAs for administrative purposes.
9. Periodic Usage Reports: The Contractor must compile and maintain records on its provision of services to the federal government under authorized TA's issued under the Contract. The Contractor must provide this data to Canada in accordance with the reporting requirements detailed in Annex D. If any required information is not available the Contractor must indicate the reason. If services are not provided during a given period, the Contractor must still provide a "NIL" report. The Contractor must submit the periodic usage reports on a monthly basis to the Technical Authority. From time to time, the Technical may also require an interim report during a reporting period. Data must be submitted to the Technical Authority no later than 10 calendar days after the first day of each month.
10. Period of Services: No Task Authorizations may be entered into after the expiry date of the Contract

7.3 Minimum Work Guarantee

- (a) In this clause,
- (i) "Maximum Contract Value" means the amount specified in the "Limitation of Expenditure" clause set out in the Contract (excluding Applicable Taxes); and
 - (ii) "Minimum Contract Value" means 3% of the Maximum Contract Value on the date the Contract is first issued.
- (b) Canada's obligation under the Contract is to request Work in the amount of the Minimum Contract Value or, at Canada's option, to pay the Contractor at the end of the Contract in accordance with sub-article (c) subject to sub-article (d). In consideration of such obligation, the Contractor agrees to stand in readiness throughout the Contract period to perform the Work described in the Contract. Canada's maximum liability for work performed under the Contract must not exceed the Maximum Contract Value, unless an increase is authorized in writing by the Contracting Authority.
- (c) In the event that Canada does not request work in the amount of the Minimum Contract Value during the period of the Contract, Canada must pay the Contractor the difference between the Minimum Contract Value and the total cost of the Work requested.
- (d) Canada will have no obligation to the Contractor under this article if Canada terminates the entire Contract:
- (i) for default;
 - (ii) for convenience as a result of any decision or recommendation of a tribunal or court that the contract be cancelled, re-tendered or awarded to another supplier; or
 - (iii) for convenience within sixty business days of Contract award.

7.4 Standard Clauses and Conditions

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

7.4.1 General Conditions

[2035 \(2020-05-28\)](#), General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

With respect to Article 30 of General Conditions 2035, sub article 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.

7.4.2 Supplemental General Conditions

4002 (2010-08-16) Software Development or Modification Services
4007 (2010-08-16) Canada to Own Intellectual Property Rights in Foreground Information

7.5 Security Requirements

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

1. The contractor/offeror must, at all times during the performance of the contract/standing offer, hold a valid facility security clearance at the level of secret, with approved document safeguarding at the level of secret, issued by the Contract Security Program (CSP), Public Works and Government Services Canada (PWGSC)
2. This contract includes access to controlled goods. Prior to access, the contractor must be registered in the Controlled Goods Program of CSP, PWGSC
3. The contractor/offeror personnel requiring access to protected/classified information, assets or sensitive work site(s) must **each** hold a valid personnel security screening at the level of **reliability status** or **secret** as required, granted or approved by the CSP, PWGSC
4. The contractor must not utilize its Information Technology systems to electronically process, produce or store any sensitive protected/classified information until CSP, PWGSC has issued written approval. After approval has been granted, these tasks may be performed up to the level of secret
5. Subcontracts which contain security requirements are not to be awarded without the prior written permission of CSP, PWGSC
6. The contractor/offeror must comply with the provisions of the:
 - a. Security Requirements Check List and security guide (if applicable), attached at Annex
 - b. Contract Security Manual (latest edition)

7.5.2 Multiple Levels of Personnel Screening: Security Classification Guide

Multiple Levels of Personnel Screening: Security Classification Guide			
Level of Personnel Clearance (e.g. Reliability, Secret)	Position / Description/Task	Access to sites and/or information. Levels of Information to be accessed.	Citizenship Restriction (if any)
Secret	Programmer/ Analyst - Level 1	Up to Secret	
Secret	Programmer/ Analyst - Level 2	Up to Secret	
Secret	Programmer/ Analyst - Level 3	Up to Secret	
Reliability	Database Modeller/ Information Management Modeller - Level 1	Unclassified	
Secret	Data Conversion Specialist - Level 2	Up to Secret	
Reliability	Technical Writer - Level 2	Unclassified	

7.6 Term of Contract

7.6.1 Period of the Contract

The period of the Contract is from date of Contract for a period of 3 years.

7.6.2 Option to Extend the Contract

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to two (2) additional one-year year periods under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor 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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7.7 Authorities

7.7.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Linda Richard
Title: Supply Specialist
Public Works and Government Services Canada
Acquisitions Branch

Telephone: 902-402-9059
Facsimile: 902-496-5016
E-mail address: linda.k.richard@pwgsc-tpsgc.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.

7.7.2 Technical Authority

The Technical Authority for the Contract is: (To be named upon award of contract)

Name: _____
Title: _____
Organization: _____
Address: _____
Telephone: ____-____-____
Facsimile: ____-____-____
E-mail: _____.

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

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7.7.3 Contractor's Representative

Name: _____

Title: _____

Organization: _____

Procurement Business Number: _____

Address: _____

Telephone: ____ - ____ - ____

Facsimile: ____ - ____ - ____

E-mail: _____.

7.8 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 websites as part of the published proactive disclosure reports, in accordance with [Contracting Policy Notice: 2019-01](#) of the Treasury Board Secretariat of Canada.

7.9 Payment

7.9.1 Basis of Payment

- (i) **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 Annex "B", Applicable taxes extra. Partial days will be prorated based on actual hours worked based on a 7.5-hour workday
- (ii) **Pre-Authorized Travel and Living Expenses:** Canada will reimburse the Contractor for its pre-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, private vehicle and incidental expenses provided in Appendices B, C and D of the Treasury Board 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. The Contractor will be able to charge for time spent travelling at the per diem rates set out in the Contract.
- (iii) **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.
- (iv) **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 after a resource is added to the Contract through the TA process the Contractor does not provide that individual as described in the Contract within the time described in the Contract (or proposes instead to provide someone from an alternate resource category at a different rate), 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's from bidding on future requirements.
- (v) **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 are described elsewhere in the Contract

7.9.2 Limitation of Expenditure

7.9.2 Limitation of Expenditure - Cumulative Total of all Task Authorizations

- (i) Canada's total liability to the Contractor under the Contract must not exceed the amount set out on page one of the Contract, less any Applicable Taxes. With respect to the amount set out on page one of the Contract, Customs duties are excluded and Goods and Services Tax or Harmonized Sales Tax is included, if applicable. 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 when:

1. (A) it is 75 percent committed, or
2. (B) 4 months before the Contract expiry date, or
3. (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.

7.9.3 Monthly Payment

Canada will pay the Contractor on a monthly basis for work performed during the month covered by the invoice 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 performed has been accepted by Canada.

7.9.4 SACC Manual Clauses

SACC Manual Clause C2000C (2007-11-30) Taxes – Foreign-based Contractor
SACC Manual Clause C2605C (2008-05-12) Canadian Customs Duties and Sales Tax - Foreign-based Contractor

7.9.5 Electronic Payment of Invoices – Contract

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

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

7.9.6 Time Verification

SACC Manual Clause C0711C (2008-05-12) Time Verification

7.10 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Each invoice must be supported by:
 - a. a copy of time sheets to support the time claimed;
 - b. a copy of the release document and any other documents as specified in the Contract;
 - c. a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses;
 - d. a copy of the monthly progress report.
3. Invoices must be distributed as follows:
 - a. The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

7.11 Certifications and Additional Information

7.11.1 Compliance

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

7.12 Applicable Laws

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

7.13 Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the supplemental general conditions 4002 (2010-08-16) Software Development or Modification Services
- (c) the supplemental general conditions 4007 (2010-08-16) Canada to Own Intellectual Property Rights in Foreground Information
- (d) the general conditions 2035 (2020-05-28), General Conditions - Higher Complexity - Services
- (e) Annex A, Statement of Work;
- (f) Annex B, Basis of Payment;
- (g) Annex C, Security Requirements Check List;
- (h) Annex D, Insurance Requirements
- (i) the signed Task Authorizations (including all of its annexes, if any);
- (j) the Contractor's bid dated _____, (*insert date of bid*, as clarified on _____, as amended on _____ *and insert date(s) of clarification(s) or amendment(s)*).

7.14 Defence Contract

SACC Manual clause A9006C (2012-07-06) Defence Contract

7.15 Foreign Nationals (Canadian Contractor or Foreign Contractor)

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

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

7.16 Insurance

The Contractor must comply with the insurance requirements specified in Annex D . The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.

The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.

The Contractor must forward to the Contracting Authority within ten (10) days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. For Canadian-based Contractors, coverage must be placed with an Insurer licensed to carry out business in Canada, however, for Foreign-based Contractors, coverage must be placed with an Insurer with an A.M. Best Rating no less than "A-". The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

7.17 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.

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

7.18 SACC Manual Clauses

SACC Manual clause A9062C (2011-05-16) Canadian Forces Site Regulations

ANNEX "A"

STATEMENT OF WORK

1. TITLE

SOFTWARE DEVELOPMENT SUPPORT TO RESEARCH SYSTEMS

2. BACKGROUND

Defence Research and Development Canada – Atlantic Research Centre (DRDC-ARC) has a number of systems that have been developed over the course of several years that are used to support a variety of research tasks. We require software development support for a wide variety of tasks to support the expansion and maintenance of these systems, as well as support to scientific work that does not reply directly on these systems.

The main focus of this work will be on research in the Underwater Warfare (UWW) planning domain through the Command Reconnaissance Area. Coordination and Control Environmental. Network (CRACCEN) project.

A list of tools, technologies, data, and standards that will be used in the Task Authorizations (TA) under this contract is included as Annex A to this document.

3. ACRONYMS

AI	Artificial Intelligence
AR	Augmented Reality
CG	Controlled Goods
CRACCEN	Command Reconnaissance Area. Coordination and Control Environmental. Network
DND	Department of National Defence
DRDC-ARC	Defence Research and Development Canada –Atlantic Research Centre
GFE	Government Furnished Equipment
GSM	Government Supplied Material
SQL	Structured Query Language
TAC	Task Authorization Contract
TA	Task Authorization
UWW	Underwater Warfare
VR	Virtual Reality

4. RESOURCE CATEGORY LIST

Stream	Resource Category	Level of Expertise	Estimated Number of Resources Required
1	A.7 Programmer/ Analyst	Level 1 (<5 years of experience)	2
1	A.7 Programmer/ Analyst	Level 2 (5 - < 10 years of experience)	1
1	A.7 Programmer/ Analyst	Level 3 (10+ years of experience)	1
3	I.4 Database Modeler/Information Management Modeler	Level 1 (<5 years of experience)	1
3	I.1 Data Conversion Specialist	Level 2 (5-<10 years of experience)	1
4	B.14 Technical Writer	Level 2 (5-< 10 years of experience)	1
5	P.9 Project Manager	Level 1 (< 5 years of experience)	1

Resource Descriptions

A.7 Programmer/Analyst

Experience levels

- Level 1: < 5 years of experience
- Level 2: 5- < 10 years of experience
- Level 3: 10+ years of experience

Responsibilities could include but are not limited to

- Create and modify code and software
- Create and modify 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 forms, manuals, programs, data files, and procedures for systems and/or applications

I.4 Database Modeller / Information Management Modeller

Experience level

- Level 1: < 5 years of experience

Responsibilities could include but are not limited to

- The Data Architect has both strategic and tactical responsibility for developing and maintaining the Architecture and Data Models for corporate and project specific initiatives. This responsibility includes the identification of data most valuable to the department, the integration of this data, and the development of core relating data models. The resulting data models will be based on data architecture and modeling design principles and tenets
- Design, develop and maintain Logical Data Models
- Analyze proposed changes to databases from the context of the Logical Data Model.
- Provide technical expertise in the use and optimization of data modeling techniques to team members
- Provide technical assistance, guidance and direction in terms of data analysis and modeling to team members
- Provide assistance to project team and business users relating to data issues and data analysis concepts
- Participate in the development of data modeling and metadata policies and procedures
- Participate in data analysis as a result of new/updated requirements
- Apply approved changes to logical data models
- Comply with corporate data architectures, strategies and frameworks, including enterprise data warehouse activities
- Analyze and evaluate alternative data architecture solutions to meet business problems/requirements to be incorporated into the corporate data architecture
- Review corporate architecture strategies and directions, data requirements, and business information needs and devise data structures to support them
- Improve modeling efficiency through recommendations on how to better utilize current metadata repositories
- Comply with corporate repository metadata directions
- Provide input to refinement of data architectures
- Participate in data architecture refinement
- Define access strategies
- Construct, monitor and report on work plans and schedules

I.1 Data Conversion Specialist

Experience level

- Level 2: 5- < 10 years of experience

Responsibilities could include but are not limited to

- Oversee all facilities of the conversion process.
- Complete mapping, interfaces, mock conversion work, enhancements, actual conversion, and verify completeness and accuracy of converted data.
- Establish a strong working relationship with all clients, interact effectively with all levels of client personnel, and provide conversion support.
- Analyze and coordinate data file conversions
- Work with importing files from heterogeneous platforms

B.14 Technical Writer

Experience level

- Level 2: 5- < 10 years of experience

Responsibilities could include but are not limited to

- Document help text, user manuals, technical documentation, web page content, etc
- Review documentation standards and the existing project documentation
- Determine documentation requirements and makes plans for meeting them
- Gather information concerning the features and functions provided by the developers
- Assess the audience for the documents/manuals which are required and prepare a statement of purpose and scope for each
- Develop a table of content for each document/manual and write or edit the required content
- Investigate the accuracy of the information collected by making direct use of the material being documented
- Prepare or coordinate the preparation of any required illustrations and diagrams
- Design the layout of the documents/manuals
- Use word-processing, desk-top publishing and graphics software packages to produce final camera-ready copy

P.9 Project Manager

Experience level

- Level 1: < 5 years of experience

Responsibilities

Responsibilities could include but are not limited to:

- Manage several Project Managers, each responsible for an element of the project and its associated project team
- 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

5. APPLICABLE DOCUMENTS & REFERENCES

None

6. TASKS

The scope of the proposed work is to provide support to experimental system development as and when required. Multiple TA's may be assigned concurrently. Annex A-1 includes a list of existing and anticipated technologies, tools, data formats, and standards currently used in the research systems this work applies to.

Under the terms of this Task Authorization Contract (TAC), the Contractor will be required to perform some or all the following tasks on an as and when requested basis.

Individual Task Authorizations under this contract will include a detailed scope of work using the Department of National Defence (DND)-626 Task form.

6.1 New Software Development

The Contractor must develop new software for experimental systems.

6.2 Modification of existing software

The Contractor must modify existing software to meet project requirements. This will include work on Crown owned applications, Open Source Projects, and code from other sources for which the Crown has the source code and the right to alter it.

6.3 Creation of software bridges and gateways

The Contractor must develop and modify software used to connected disparate systems together and allow them to interoperate and / or exchange data.

6.4 Database design and implementation

Design and implementation of databases for handling structured and unstructured data, including for use in Artificial Intelligence (AI), data mining, machine learning, deep learning, and traditional Structured Query Language (SQL) type applications.

6.5 Augmented Reality (AR) and Virtual Reality (VR) software

The Contractor must design and implement applications for AR and VR, including both user interfaces and back-end connections to data sources and integration with existing systems.

6.6 Library and tool-kit development and maintenance

The Contractor must develop libraries and software development toolkits to be used to simplify application development for various research systems as required. This includes existing software, contributions to Open Source Projects, and new libraries and toolkits.

6.7 Development of data visualisation and conversion libraries, scripts, and applications.

The Contractor must develop a new or modify an existing software for data visualisation and conversion.

6.8 Technical Writing.

The Contractor must write design documents, user guides, programmer's guides or any other technical documentation related to the preceding tasks.

7. DELIVERABLES

The deliverables will be defined in the individual Task Authorization (DND 626) documentation, but may include some or all of the following:

- Source code for software developed under the TA,
- Contributions to open source projects,
- Executable software,
- Art assets to be used in software deliverables (3D models, audio, icons etc),
- Software design documentation,
- Software user guides,
- Developer oriented documentation for software and libraries.
- Cross platform video demos of software developed,
- PowerPoint slides for use in DND presentations about the work,
- Publications for conference, scientific journals, and technical publications
- Contractor reports detailing the work done, lessons learned, items of scientific interest, and other

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relevant information not otherwise captured in this list.

All document deliveries must be made as Microsoft Office documents in an editable form but may follow the contractor's own formatting scheme. Publications for scientific literature and conferences must conform to the format of the journal or conference.

Art assets must be provided in a format that will be agreed upon by the contractor and the Technical Authority on a case-by-case basis for each TA. In general, open formats usable in any development environment are preferred. Both the ready-to-use asset and the source file are to be provided, for example, a 3D model might be provided as both a ready-to-use FBX file and a Blender file. This is the same principle as providing both source code and executable version for software.

Third party software libraries and art may only be used to create a deliverable if the Crown may then redistribute the resulting product freely and without fees.

8. DATE OF DELIVERY

The date of delivery will be defined in the individual Task Authorization (DND 626) documentation. The Period of Performance for this TAC begins on the date of Contract award for a period of three years, with the option for two additional periods of one-year duration at the same terms and conditions.

9. LANGUAGE OF WORK

All deliverables and work must be provided in English.

10. LOCATION OF WORK

The location of work will be defined in the individual Task Authorization (DND 626) documentation.

In general, the location of work will be the Contractor's facilities, but may include DRDC Atlantic Research Centre, or other DND facilities.

DRDC Atlantic Research Center
9 Grove St.
Dartmouth, Nova Scotia
B3A 3C5 Canada

11. TRAVEL

Travel is authorized when in support of individual tasks, and as detailed within the individual Task Authorization (DND 626). Individual task documentation must indicate possible travel to support that task.

The National Joint Council Travel Directive will apply for any travel, accommodation and living expenses.

12. MEETINGS

Meeting requirements will be specified in each Task Authorization (DND 626).

Meetings may be held via video teleconference, audio teleconference, via Internet meeting applications, in person at the Contractor's facilities, at DND facilities, or other sites as appropriate. The Contractor may be required to attend Task-related meetings upon seventy-two (72) hours' notice, including where such meetings are held in-person at DND facilities.

13. GOVERNMENT SUPPLIED MATERIAL (GSM)

Any GSM will be defined in the individual Task Authorization (DND 626).

14. GOVERNMENT FURNISHED EQUIPMENT (GFE)

Any GFE will be defined in the individual Task Authorization (DND 626)

15. SPECIAL CONSIDERATIONS

While most of the anticipated work is expected to be UNCLASSIFIED, the Contractor must be able to perform work and handle data at the SECRET level in the Contractor's facilities without incurring travel costs specific to the security requirement. The Contractor must also be capable of working with Controlled Goods (CG) at the Contractor's facilities without incurring travel costs specific to the requirement to handle CG.

ANNEX A-1: LIST OF TECHNOLOGIES AND STANDARDS CURRENTLY IN USE FOR WORK UNDER THIS CONTRACT

The following list is an outline of the technologies, data formats, and development tools that the Contractor will work with. This outline reflects the current state of the experimental systems, and specific Task Authorizations (DND 626) may require use of software, data, and standards not listed here. These changes may be as a result of development on the systems by DRDC, or as solutions proposed by the Contractor to a specific Task Authorisation.

1. Programming languages and development environments
 - a. Open Java Development Kit
 - b. C
 - c. C++
 - d. .NET
 - e. Python
 - f. Unity 3D
 - g. MatLab
2. Platforms
 - a. Linux (RedHat, CentOS, Ubuntu)
 - b. Windows 10
 - c. Windows Server, various versions
 - d. Oracle VirtualBox
 - e. RedHat virtualization
3. Software and technologies
 - a. Docker
 - b. Kubernetes
 - c. Apache ActiveMQ
 - d. Apache Kafka
 - e. Apache CAMEL
 - f. Rti DDS
 - g. CORBA
 - h. Javascript
 - i. HTML5
 - j. Open Layers
 - k. CSS
 - l. MapServer
 - m. ArcGIS Server
 - n. Web Mapping Service (WMS) / Web Feature Sservice (WFS)
 - o. Xtensible Mark-up Language (XML)
 - p. Distributed Interactive Simulation (DIS)
 - q. High Level Architecture (HLA) – simulation interoperability
 - r. Machine learning techniques

4. Data and standards

- a. OTH-Gold
- b. GCI+
- c. S57/S63 chart data
- d. AIS
- e. Oceanographic data
- f. Meteorological data
- g. JSON / GeoJSON
- h. Geospatial data

5. Database specific

- a. Design of databases for “big data”
- b. Design of conventional databases
- c. Data analytics
- d. SQL Programming
- e. Geospatial databases
- f. MongoDB

ANNEX "B"

BASIS OF PAYMENT

In respect of the "Estimated Number of Days" listed below in (C*), the estimated number of days is for evaluation purposes only during the solicitation process and does not represent a commitment of the future usage.

INITIAL CONTRACT PERIOD

Date of Contract for 3 years

Year 1

Resource Category	(B) Level of Expertise	(C) Estimated Number of Days	(D) Firm Per Diem Rate	(E) Total Cost (C x D)
A.7 Programmer/Analyst	Level 1	174	\$	\$
A.7 Programmer/Analyst	Level 2	181	\$	\$
A.7 Programmer/Analyst	Level 3	87	\$	\$
I.4 Database Modeller/Information Management Modeller	Level 1	65	\$	\$
I.1 Data Conversion Specialist	Level 2	87	\$	\$
B.14 Technical Writer	Level 2	26	\$	\$
P.9 Project Manager	Level 1	31	\$	\$
Total Price Initial Contract Period Year 1				\$

Year 2

Resource Category	(B) Level of Expertise	(C) Estimated Number of Days	(D) Firm Per Diem Rate	(E) Total Cost (C x D)
A.7 Programmer/Analyst	Level 1	174	\$	\$
A.7 Programmer/Analyst	Level 2	181	\$	\$
A.7 Programmer/Analyst	Level 3	87	\$	\$
I.4 Database Modeller/Information Management Modeller	Level 1	65	\$	\$
I.1 Data Conversion Specialist	Level 2	87	\$	\$
B.14 Technical Writer	Level 2	26	\$	\$
P.9 Project Manager	Level 1	31	\$	\$
Total Price Initial Contract Period Year 2				\$

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Year 3

Resource Category	(B) Level of Expertise	(C) Estimated Number of Days	(D) Firm Per Diem Rate	(E) Total Cost (C x D)
A.7 Programmer/Analyst	Level 1	174	\$	\$
A.7 Programmer/Analyst	Level 2	181	\$	\$
A.7 Programmer/Analyst	Level 3	87	\$	\$
I.4 Database Modeller/Information Management Modeller	Level 1	65	\$	\$
I.1 Data Conversion Specialist	Level 2	87	\$	\$
B.14 Technical Writer	Level 2	26	\$	\$
P.9 Project Manager	Level 1	31	\$	\$
Total Price Initial Contract Period Year 3				\$

OPTION YEARS

Option Year 1

Resource Category	(B) Level of Expertise	(C) Estimated Number of Days	(D) Firm Per Diem Rate	(E) Total Cost (C x D)
A.7 Programmer/Analyst	Level 1	174	\$	\$
A.7 Programmer/Analyst	Level 2	181	\$	\$
A.7 Programmer/Analyst	Level 3	87	\$	\$
I.4 Database Modeller/Information Management Modeller	Level 1	65	\$	\$
I.1 Data Conversion Specialist	Level 2	87	\$	\$
B.14 Technical Writer	Level 2	26	\$	\$
P.9 Project Manager	Level 1	31	\$	\$
Total Price Initial Contract Period Year 3				\$

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Option Year 2

	(B)	(C)	(D)	(E)
Resource Category	Level of Expertise	Estimated Number of Days	Firm Per Diem Rate	Total Cost (C x D)
A.7 Programmer/Analyst	Level 1	174	\$	\$
A.7 Programmer/Analyst	Level 2	181	\$	\$
A.7 Programmer/Analyst	Level 3	87	\$	\$
I.4 Database Modeller/Information Management Modeller	Level 1	65	\$	\$
I.1 Data Conversion Specialist	Level 2	87	\$	\$
B.14 Technical Writer	Level 2	26	\$	\$
P.9 Project Manager	Level 1	31	\$	\$
Total Price Initial Contract Period Year 3				\$

FOR EVALUATION PURPOSES

Year 1 Total \$ _____
Year 2 Total \$ _____
Year 3 Total \$ _____
Option Year 1 Total \$ _____
Option Year 2 Total \$ _____

GRAND TOTAL \$ _____

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ANNEX “C”

SECURITY REQUIREMENTS CHECK LIST

Please see attached

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ANNEX “1” to PART 3 OF THE BID SOLICITATION

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)

ANNEX "1" to PART 5 OF THE BID SOLICITATION

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 Equity visit [Employment and Social Development Canada \(ESDC\) – Labour's](#) 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)

ANNEX "D"

INSURANCE REQUIREMENTS

1. Commercial General Liability

1. The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$2,000,000 per accident or occurrence and in the annual aggregate.
2. The Commercial General Liability policy must include the following:
 - a. Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
 - b. Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.
 - c. Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.
 - d. Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.
 - e. Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
 - f. Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
 - g. Employees and, if applicable, Volunteers must be included as Additional Insured.
 - h. Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)
 - i. Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.
 - j. Notice of Cancellation: The Contractor will provide the Contracting Authority thirty (30) days prior written notice of policy cancellation or any changes to the insurance policy.
 - k. If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.

- I. Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.
- m. Non-Owned Automobile Liability - Coverage for suits against the Contractor resulting from the use of hired or non-owned vehicles.
- n. Litigation Rights: Pursuant to subsection 5(d) of the [Department of Justice Act](#), S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

For the province of Quebec, send to:

*Director Business Law Directorate,
Quebec Regional Office (Ottawa),
Department of Justice,
284 Wellington Street, Room SAT-6042,
Ottawa, Ontario, K1A 0H8*

For other provinces and territories, send to:

*Senior General Counsel,
Civil Litigation Section,
Department of Justice
234 Wellington Street, East Tower
Ottawa, Ontario K1A 0H8*

A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

2. Errors and Omissions Liability Insurance

1. The Contractor must obtain Errors and Omissions Liability (a.k.a. Professional Liability) insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature but for not less than \$1,000,000 per loss and in the annual aggregate, inclusive of defence costs.
2. If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.
3. The following endorsement must be included:

Notice of Cancellation: The Contractor will provide the Contracting Authority thirty (30) days prior written notice of policy cancellation or any changes to the insurance policy.

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ANNEX “E”

DND 626 TASK AUTHORIZATION FORM

Please see attached

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ANNEX F

INFORMATION TECHNOLOGY SECURITY REQUIREMENTS DOCUMENT

Please see attached.

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ANNEX G

AIR-GAP COMPUTER DOCUMENT

Please see attached



Contract Number / Numéro du contrat W7707-216856
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 Department of National Defence		2. Branch or Directorate / Direction générale ou Direction ADM S&T / DRDC Atlantic Research Center
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 Software development to support Research Systems.		
5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées?		<input type="checkbox"/> No / Non <input checked="" type="checkbox"/> 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 type="checkbox"/> No / Non <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> 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 <input type="checkbox"/> 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 <input type="checkbox"/> 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"/> Not releasable À ne pas diffuser <input type="checkbox"/> Restricted to: / Limité à: <input type="checkbox"/> Specify country(ies): / Préciser le(s) pays:	All NATO countries Tous les pays de l'OTAN <input type="checkbox"/> Restricted to: / Limité à: <input type="checkbox"/> Specify country(ies): / Préciser le(s) pays:	No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/> Restricted to: / Limité à: <input type="checkbox"/> Specify country(ies): / Préciser le(s) pays:
7. c) Level of information / Niveau d'information		
PROTECTED A PROTÉGÉ A <input checked="" type="checkbox"/> PROTECTED B PROTÉGÉ B <input checked="" type="checkbox"/> PROTECTED C PROTÉGÉ C <input type="checkbox"/> CONFIDENTIAL CONFIDENTIEL <input checked="" type="checkbox"/> SECRET SECRET <input checked="" type="checkbox"/> TOP SECRET TRÈS SECRET <input type="checkbox"/> TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>	NATO UNCLASSIFIED <input type="checkbox"/> NATO NON CLASSIFIÉ <input type="checkbox"/> NATO RESTRICTED NATO DIFFUSION RESTREINTE <input type="checkbox"/> NATO CONFIDENTIAL NATO CONFIDENTIEL <input type="checkbox"/> NATO SECRET <input type="checkbox"/> COSMIC TOP SECRET <input type="checkbox"/> COSMIC TRÈS SECRET <input type="checkbox"/>	PROTECTED A <input type="checkbox"/> PROTÉGÉ A <input type="checkbox"/> PROTECTED B <input type="checkbox"/> PROTÉGÉ B <input type="checkbox"/> PROTECTED C <input type="checkbox"/> PROTÉGÉ C <input type="checkbox"/> CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/> SECRET <input type="checkbox"/> SECRET <input type="checkbox"/> TOP SECRET <input type="checkbox"/> TRÈS SECRET <input type="checkbox"/> TOP SECRET (SIGINT) <input type="checkbox"/> TRÈS SECRET (SIGINT) <input type="checkbox"/>

**PART A (continued) / PARTIE A (suite)**

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 COTE DE FIABILITÉ	<input type="checkbox"/> CONFIDENTIAL CONFIDENTIEL	<input checked="" type="checkbox"/> SECRET SECRET	<input type="checkbox"/> TOP SECRET TRÈS SECRET
<input type="checkbox"/> TOP SECRET- SIGINT TRÈS SECRET - SIGINT	<input type="checkbox"/> NATO CONFIDENTIAL NATO CONFIDENTIEL	<input type="checkbox"/> NATO SECRET NATO SECRET	<input type="checkbox"/> COSMIC TOP SECRET COSMIC TRÈS SECRET
<input type="checkbox"/> SITE ACCESS 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 work?
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 assets?
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

**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.

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

Category Catégorie	PROTECTED PROTÉGÉ			CLASSIFIED CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL CONFIDENTIEL	SECRET	TOP SECRET TRÈS SECRET	NATO RESTRICTED NATO DIFFUSION RESTREINTE	NATO CONFIDENTIAL NATO CONFIDENTIEL	NATO SECRET	COSMIC TOP SECRET COSMIC TRÈS SECRET	PROTECTED PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET TRÈS SECRET
											A	B	C			
Information / Assets Renseignements / Biens Production					✓											
IT Media / Support TI					✓											
IT Link / Lien électronique																

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
Non



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
Non



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 intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).



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Security Classification / Classification de sécurité UNCLASSIFIED

PART D - AUTHORIZATION / PARTIE D - AUTORISATION

13. Organization Project Authority / Chargé de projet de l'organisme

Name (print) - Nom (en lettres moulées) Sean Kavanaugh	Title - Titre Project Manager	Signature KAVANAUGH, SEAN 224	Digitally signed by KAVANAUGH, SEAN 224 Date: 2020.10.02 15:33:37 -03'00'
Telephone No. - N° de téléphone 902-266-7612	Facsimile No. - N° de télécopieur n/a	E-mail address - Adresse courriel sean.kavanaugh@forces.gc.ca	Date 02 OCT 2020

14. Organization Security Authority / Responsable de la sécurité de l'organisme

Name (print) - Nom (en lettres moulées) Sasa Medjovic	Title - Titre Senior security analyst	Signature MEDJOVIC, SASHA 234	Digitally signed by MEDJOVIC, SASHA 234 DN: cn=CA, o=GC, ou=ONDS-MON, ou=Personnel, ou=INTERN, cn=MEDJOVIC, # SASHA234 Reason: I am the author of this document Location: your signing location here Date: 2020-10-09 09:47:00 Foxit PhantomPDF Version: 10.0.1
Telephone No. - N° de téléphone 613-996-0286	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel sasa.medjovic@forces.gc.ca	Date

15. Are there additional instructions (e.g. Security Guide, Security Classification Guide) attached? Des instructions supplémentaires (p. ex. Guide de sécurité, Guide de classification de la sécurité) sont-elles jointes?	<input type="checkbox"/> No Non	<input type="checkbox"/> Yes Oui
---	------------------------------------	-------------------------------------

16. Procurement Officer / Agent d'approvisionnement

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature	
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel	Date

17. Contracting Security Authority / Autorité contractante en matière de sécurité

Name (print) - Nom (en lettres moulées) Jacques Saumur	Title - Titre Quality Assurance Officer	Signature Saumur, Jacques 0	Digitally signed by Saumur, Jacques 0 Date: 2019.10.30 08:34:20 -04'00'
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel jacques.saumur@tpsgc-pwgsc.gc.ca	Date

Department of National Defence (DND)

Information Technology Security Requirements Document

for

Contract W7707-216856

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1. INTRODUCTION

1.1 The IT Security Requirements Document. This "Contract W7707-216856 IT Security Requirements Document" is being provided in accordance with the instructions for completion of Part C, Section 11.d of the Treasury Board Secretariat (TBS) Form 350-103 which states:

"Will the supplier be required to use its IT systems to electronically process and/or produce or store PROTECTED and/or CLASSIFIED information and/or data? If Yes, . . . The client department and/or organization will be required to specify the IT security requirements for this procurement in a separate technical document. . ."

Each IT Security Requirements Document applies only to the contract it is written for; accordingly this "Contract W7707-216856 IT Security Requirements Document " is specific to Contract W7707-216856.

1.2 DND's IT Security Requirements. This document outlines the Department of National Defence's (DND) Information Technology (IT) security requirements for the electronic processing, production, and/or storage of this contract's Proprietary Information up to and including the level of SECRET.

1.3 Proprietary Information. Throughout this document the term "Proprietary Information" is defined - as paraphrased from Section 100 of the PSPC Industrial Security Manual (ISM) - as: "any government information and/or assets, provided to or produced by private organizations and where security is administered by the PSPC Contract Security Program."

1.4 Connectivity Criteria for IT Link. In the event that the Information System (IS) used to electronically process, produce and/or store this Proprietary Information is required to electronically connect to DND's infrastructure (i.e. the Security Requirements Check List (SRCL) Part C, Section 11.e is checked as "YES"), a separate IT Link "Connectivity Criteria" document will be completed by the Project Officer (PO) for the DND Project Management Office (PMO), and this link will require validation and authorization from Canadian Industrial Security Directorate (CISD).

1.5 Layers of Security Protection. Security is based upon layers of protection; in order for IT security requirements to effectively safeguard information they must be preceded and supported by other aspects of security and their associated policies. Contracting efforts should be preceded by the implementation of physical, personnel, procedural, information, and IT Security safeguards.

1.6 Additional Information. The Industrial Security Manual (ISM), available from Public Services and Procurement Canada (PSPC), prescribes the procedures to be applied by Canadian-based organizations for the safeguarding of government information and assets. Additional security information is available on the internet from the Canadian Industrial Security Directorate (CISD) of Public Services and Procurement Canada (PSPC), the Communications Security Establishment (CSE), the Canadian Centre for Cyber Security (Cyber Centre), and the Royal Canadian Mounted Police (RCMP).

2. MANDATORY PREREQUISITES

2.1 PSPC Validation

2.1.1 Industrial Security Manual. All security requirements in the Industrial Security Manual must be met, as well as the additional requirements stated in this document.

2.1.2 Contractor Sites. The contractor must inform CISD and the DND PO of all physical sites where this contract's SECRET Proprietary Information will be processed, produced and/or stored. This includes any applicable main and/or alternate contractor offices, construction sites, back-up storage locations, partners, all levels of sub-contractors offices, etc.

2.1.3 Site Requirements. Every site used to electronically process, produce and/or store this contract's Proprietary Information must be granted a Facility Security Clearance (FSC) as well as either a Designated Organization Screening (DOS) or a Document Safeguarding Capability (DSC), as applicable. Every site must also be cleared by CISD prior to being authorized to electronically process, produce and/or store Proprietary Information.

2.1.4 Emanation Security (EMSEC). As this contract has been evaluated at the SECRET level, the contractor is required to conform to Emanation Security (EMSEC) specifications as depicted in the CSE/Cyber Centre "*Emission Security (EMSEC) Guidance (ITSG-11A)*". This publication can be obtained from CISD or the DND PO.

2.2 Physical Security

2.2.1 Facility Authorization. Processing, production and/or storage of this contract's Proprietary Information must only be performed in facilities which have been authorized by CISD. All data must be processed, produced and/or stored in a secure manner that prevents unauthorized viewing, access, or manipulation.

2.2.2 Physical Security Zones. In accordance with the RCMP's "*G1-026 Guide to the Application of Physical Security Zones*", the IS - identified herein for this document only as the Contractor Command Reconnaissance Area Coordination and Control Environmental Network System (Contractor CRACCEN System) - will be installed and operating in a Security zone or in a temporary Security zone.

2.2.3 Physical Security Zone - Access Control List. Access to the Security zone will be controlled by an Access Control List (ACL); a copy of the ACL will be affixed inside the Security zone where the IS is installed and operating. This ACL will be updated by the Company Security Officer (CSO) or the Alternate Company Security Officer (ACSO) whenever there is a change of personnel who are authorized to access this area.

2.2.4 Proprietary Information Outside of Canada. Processing, production and/or storage of Proprietary Information outside of Canada is not authorized under this contract.

2.2.5 Mobile Computing/Teleworking. Mobile computing/teleworking involving the IS or Proprietary Information is not authorized under this contract.

2.3 Personnel Security

2.3.1 Security Screening Level of Personnel. All contractor personnel who have access to any Proprietary Information must:

2.3.1.1 hold - at minimum - a valid Secret (Level II) Security Clearance which must be granted and be tracked by CISD;

2.3.1.2 be assigned system privileges on the criteria of least privilege; this means applying the most restrictive set of privileges and the need-to-know principle (i.e. limiting access to information only to those whose duties require such access) necessary for the performance of authorized tasks; and

2.3.2 Access to the Physical Security Zone. No visitors, foreign nationals or unauthorized personnel shall have access to the Proprietary Information, the Contractor CRACCEN System, or the zone where the Proprietary Information is being processed, produced and/or stored unless they possess a valid Secret (Level II) Security Clearance and are escorted by an authorized contractor employee. An audit log must be maintained of all visitors, foreign nationals or unauthorized personnel accessing the SECURITY zone.

2.3.3 IT Security Awareness Training. All contractor personnel handling Proprietary Information must be provided training and/or briefing sessions coordinated and delivered by the CSO or the ACSO. This training must, at minimum, make reference to the Government of Canada (GC) "Industrial Security Manual" (ISM) and other security information as determined by the DND PO as well as the IT Security Orders and Standard Operating Procedures (SOP) for the Contractor CRACCEN System. Training should also cover social engineering, use of social media, and situational awareness.

2.4 Procedural Security

2.4.1 IT Security Orders and Standard Operating Procedures. The contractor must create System specific IT Security Orders for the Contractor CRACCEN System and SOPs relating to the operation and maintenance of the Contractor CRACCEN System. These documents must - at minimum - address:

2.4.1.1 roles and responsibilities (e.g. CSO, technical authority, and/or system administrator(s) for the IS);

2.4.1.2 access management for the SECURITY zone and the IS;

2.4.1.3 acceptable use of the IS;

2.4.1.4 incident management procedures;

2.4.1.5 any other subject identified in this document and

2.4.1.6 any other issue(s) identified by the DND PO or the DND PMO.

2.4.2 User Agreement Form. All personnel having access to the IS must read the System specific IT Security Orders for the Contractor CRACCEN System and sign an associated User Agreement Form, as produced and tracked by the CSO or ACSO. All changes to the System IT Security Orders, SOPs and/or User Agreement Form must be promulgated to all personnel having access to the IS.

2.4.3 System Administrator - Personnel Security Screening Level. The IS must be administered and maintained internally by individual(s) possessing - at minimum - a valid Secret (Level II) Security Clearance.

2.4.4 IS Continuous Monitoring. The contractor must continually monitor its overall security posture including physical, personnel, procedural, information, and IT security. The contractor must inform CISC and the DND PO of any issues that could potentially impact the security of the Proprietary Information or the IS.

2.5 Information Security

2.5.1 Document Marking. All documents - hardcopy (paper) and softcopy (electronic) - containing Proprietary Information must be marked with the highest security level of the information contained in the document, and be afforded a unique identifier to ensure positive control and tracking.

2.5.2 Information at Rest. The contractor must protect the security of the Proprietary Information at rest through physical and/or IT security measures:

2.5.2.1 When unattended, all hardcopy documents containing Proprietary Information (e.g. paper printouts, etc.) must be physically locked in GC-approved security container(s) appropriate to the information's sensitivity level. The container(s) must be in accordance with the RCMP's "G1-001 - Security Equipment Guide"; as this Guide is not available to the general public, the contractor can contact the PO for information.

2.5.2.2 When unattended all removable IT media used to process, produce and/or store Proprietary Information must be physically locked in GC-approved security container(s) as detailed in the RCMP's "G1-001 - Security Equipment Guide". Or the removable media must be encrypted using GC-approved encryption technology appropriate for the sensitivity level of the Proprietary Information it contains.

2.5.2.3 Only contractor personnel authorized to have access to the Proprietary Information will have the ability to unencrypt electronic documents and/or have access to the key(s) and/or combination(s) for the approved secure container(s).

2.5.3 Exchange of Proprietary Information. When exchanging Proprietary Information between DND and all levels of contractors/sub-contractors via hard copy and/or removable IT media, all hard copy documents and removable IT media must be handled and transported/transmitted in accordance with GC guidelines as depicted in the ISM or the RCMP's "*G1-009 Transport and Transmittal of Protected and Classified Information*". When transported/transmitted, all electronic media must be encrypted using GC encryption technology approved for the sensitivity level of the information contained in the electronic media.

2.5.4 Exchange of Proprietary Information - Packaging. All hard copy documents and IT media must be packaged appropriately and transported/transmitted with a covering letter as well as a transmittal form or circulation slip which must indicate:

2.5.4.1 the highest sensitivity level of information contained in the package;

2.5.4.2 the date of transport/transmission;

2.5.4.3 the unique identifier for each document/IT media in the package;

2.5.4.4 the printed name and phone number of the originator;

2.5.4.5 the signature of the originator

2.5.4.6 the physical street address of the destination;

2.5.4.7 the printed name and phone number of the recipient; and

2.5.4.8 the signature of the recipient.

2.5.5 Authorization of IT Link. Exchange of Proprietary Information with partners, sub-contractors or DND must not be done via IT links.

2.5.6 Segregation of Proprietary Information. All Proprietary Information (e.g. hard copy documents, IT media, and electronic documents, etc.) must be segregated from other contractual

and corporate information in a way that allows all Proprietary Information to be securely destroyed or wiped, immediately upon request from CISD or the DND PO as indicated in the Cyber Centre's publication "*IT Media Sanitization (ITSP.40.006)*".

2.5.7 Controlled Goods. For this contract, the contractor will require access to Controlled Goods information or equipment.

2.5.7.1 All GC Controlled Goods data (hard and soft copy) must be marked in accordance with DND Defence Administrative Orders and Directives (DAOD) 3003-1. The contractor must abide by all GC Controlled Goods regulations including Controlled Technology Access and Transfer (CTAT) and International Traffic in Arms Regulations (ITAR), where applicable. Additional information can be obtained from the *Controlled Goods Regulations (SOR/2001-32)* (<https://laws-lois.justice.gc.ca/eng/regulations/SOR-2001-32/>), the DND CTAT office through the DND PO, or the PSPC Controlled Goods Program by email to dmc-cgd@tpsgc-pwgsc.gc.ca.

2.5.7.2 If any Controlled Goods regulations differ from the Information Technology Security Requirements in this document, the most stringent regulation/requirement is to be applied.

2.5.8 Sub-contractors. The contractor must inform the DND PO and officially register with CISD any partners and all levels of partnership and sub-contractors involved in this contract. The contractor is ultimately responsible for ensuring that all security requirements and all relevant and/or associated security documentation relating to this contract are provided to the contractor's partners and all levels of sub-contractors.

2.5.9 IT Security Requirements for Sub-Contracts. All applicable IT security requirements in this contract must also be included in any sub-contracts.

3. MINIMUM IT SECURITY REQUIREMENTS

3.1 IT Security Policy Compliance and Monitoring

On a frequency and schedule to be determined by the DND IT Security Authority, DND retains the right to conduct inspections of every contractor's facility involved in this contract to ensure compliance with the IT Security requirements herein as well as compliance with GC standards and policies concerning the prevention, detection, response, and recovery requirements.

3.2 IT System Configuration

3.2.1 Basic system configuration. The basic system configuration is anticipated to be a network of servers and workstations (PCs / laptops / tablets). Information will be uploaded to/downloaded from the system using external hard disks or DVDs; an Air Gap Computer will be used to scan this removable media for viruses and malware. USB sticks will not be allowed on the IS.

3.2.2 Type of System. The IS must be configured as a closed LAN: a Local Area Network with no external connection (i.e. workstation(s) and/or server(s) located in the same room/building with no connection to any other system or the Internet).

3.2.3 Separate Network. The IS must be configured as a separate closed network.

3.2.4 Type of Equipment. The equipment used to process, produce and/or store the Proprietary Information can consist of Commercial-Off-The-Shelf (COTS) equipment if the system is operating in an EMSEC zone. If not operating in an EMSEC zoned location the equipment must be TEMPEST. This equipment must be labelled commensurate with the highest sensitivity level of Proprietary Information to be processed on it.

3.2.5 IS Hard Drives. Processing equipment must be configured with removable hard drives unless the entire device (e.g. laptop or tablet) is small enough to fit in an approved storage container. Examples of processing equipment for this IS include workstations (PCs, laptops, tablets), servers, IT storage devices (network-attached storage (NAS), storage area network (SAN)), printers, scanners, etc.

3.2.6 Operating System. The IS must operate on a supported Operating System (OS); i.e. the vendor of the OS must be creating and providing current security patches for the OS. OS security patches must be installed regularly, at least monthly. The OS must be configured to disable unnecessary processes, services, and ports. The IS SOP must provide details on the OS configuration and identify the frequency and the method used to update the OS security patches.

3.2.7 Anti-virus/Anti-malware Software. A supported anti-virus/anti-malware application must be installed and operating on all workstations and servers (as applicable). Anti-virus/anti-malware definition files must be updated regularly and kept current. The IS SOP must provide details on the configuration of the anti-virus application as well as identify the frequency and the method used to update the anti-virus/anti-malware definition files. Configuration of the anti-virus/anti-malware application must:

3.2.7.1 allow changes made only by the system administrator(s);

3.2.7.2 automatically scan all Contractor CRACCEN System workstations/servers at power-on or on a set interval, at least weekly; and

3.2.7.3 scan every new file introduced to the IS workstations/servers for malicious code.

3.2.8 Software and Applications. Only applications required under this contract must be installed on the IS. Application patches must be kept up to date and be managed through a defined configuration management process. The IS SOP must list every installed application and its version, as well as identify the application patch management process.

3.2.9 Logging and Auditing. OS logging must be active and the log files must be reviewed by the Contractor CRACCEN System - system administrator at least monthly. The review must consist of - but not be limited to - successful logins; unsuccessful login attempts; unauthorized changes to the system hardware, firmware, and software; unusual system behaviour; unplanned disruption(s) of systems and/or services; system errors; etc. Only the system administrator(s) shall be allowed to modify or delete log files and only after being authorized by the CSO or ACSO. The IS SOP must identify the frequency and the method used to review the OS log files.

3.3 IT Equipment

3.3.1 Equipment Inventory. A list of all equipment forming the IS must be maintained by the contractor. This equipment list must contain - at minimum - the equipment's description, make, model, and quantity. If requested, this equipment list must be made available to CISD and the DND PO.

3.3.2 Changes to IT Equipment. The contractor must inform CISD and the DND PO of any major change(s) to the Contractor CRACCEN System IT equipment.

3.3.3 Wireless or Wi-Fi. The use of wireless or Wi-Fi capabilities on the IS is strictly prohibited.

3.3.4 Cloud Technology. The use of "cloud" technology to process, produce, and/or store Proprietary Information is strictly prohibited.

3.3.5 Network Interconnectivity. All network equipment interconnectivity:

3.3.5.1 can use shielded CAT 6 cable or fibre optic cable to connect the IS equipment;

3.3.5.2 must be identifiable from any other system wiring;

3.3.5.3 must be controlled and monitored to prevent inadvertent or deliberate connection to any unauthorized equipment, network or infrastructure; and

3.3.5.4 must be installed in separate metal conduits.

3.3.6 Topology Diagram. A topology diagram of the Contractor CRACCEN System must be provided, upon request, to CISD and/or the DND PO. The diagram must consist of a high-level system design and include any IT links to other entities and/or connections to other networks and/or systems, where applicable.

3.3.7 IT Equipment Maintenance and Disposal. Maintenance and disposal of any IT equipment used to process, produce and/or store Proprietary Information (e.g. workstations, servers, printers, plotters, scanners, photocopiers and/or Multi-Function Devices (MFDs)/Multi-Function Printer (MFPs), etc.) must follow the instructions provided in the "Disposal" section, below.

3.4 Authorization and Access Control

3.4.1 List of Authorized Personnel. The contractor must maintain a list of authorized individuals who have access to the IS. This list must be updated whenever there is a change of personnel or a change to an individual's information that is contained on the list. The list must include, at minimum:

3.4.1.1 the individual's name

- 3.4.1.2 the individual's approved clearance level;
- 3.4.1.3 the date the individual's clearance expires; and
- 3.4.1.4 the type of access (e.g. user, power user, administrator, etc.).

3.4.2 System Accounts.

3.4.2.1 An individual Administrator account must be created for each system administrator. If an individual requires both administrator access and regular user access, the individual must have two separate accounts on the IS. Administrator accounts must not be used for standard day-to-day operations or non-administrative issues.

3.4.2.2 An individual User account must be created for each user; each account must have a unique name/identifier, and this name/identifier cannot be used by any other account holder for the life of the system. User accounts must be configured for limited privileges and must allow access only to the files and folders required by the user to perform their specific duties.

3.4.2.3 The IS must not contain:

- 3.4.2.3.1 any generic accounts,
- 3.4.2.3.2 any guest accounts,
- 3.4.2.3.3 any temporary accounts, or
- 3.4.2.3.4 shared accounts of any kind.

3.4.3 Passwords.

3.4.3.1 Each account must be protected by a password with an enforced minimum password complexity, as follows:

3.4.3.1.1 the password must contain a minimum of eight (8) characters;

3.4.3.1.2 the password must contain three of the following four criteria:

- at least one uppercase letter (A through Z),
- at least one lowercase letter (a through z),
- at least one number (0 through 9), and
- at least one special character (e.g. !, \$, #, %);

3.4.3.1.3 password lifetime restrictions: minimum of one day and maximum of 90 days;

3.4.3.1.4 password reuse is prohibited for the previous ten (10) passwords; and

3.4.3.1.5 the account must lock after four (4) consecutive failed logon attempts.

3.4.3.2 Any password used to access the IS must:

- 3.4.3.2.1 be changed at first login;
- 3.4.3.2.2 be changed whenever there is any suspicion of compromise;
- 3.4.3.2.3 not be saved or remembered by the OS or any application accessed by the OS; and
- 3.4.3.2.4 never be shared with anyone.

3.4.3.3 The original local administrator password on all IT equipment forming the IS must be changed; vendor default passwords must not be used. Each time a local administrator password is changed it must be written down and placed in a sealed envelope which has been signed and dated over the flap by the CSO, ACSO or system administrator. The envelope must be locked in an approved container and safeguarded commensurate with the highest sensitivity level of data processed on the system.

3.4.4 IS Access Control List. All network elements (physical and/or virtual) of the IS must be tracked and be accessible (e.g. via access control list (ACL), Active Directory, etc.) only to authorized personnel.

3.4.5 Authorization and Access Control in SOP. The IS SOP must include an Authorization and Access Control process depicting the procedures for adding, disabling, and deleting user accounts.

3.5 IT Media

3.5.1 Disposal of IT Media. Throughout the duration of this contract, all IT media used to process, produce and/or store Proprietary Information must be disposed of in accordance with the "Disposal" section of this document.

3.5.2 Removal of IT Media. In the event that equipment requires maintenance, support or replacement, **no IT media containing any Proprietary Information** (e.g. internal hard drives, removable IT media, etc.) will be given or made available to any outside vendor, service provider or other unauthorized personnel.

3.5.3 Identification of IT Media. All IT media (e.g. internal hard drives, removable hard drives, external hard drives, CDs/DVDs, USB sticks, etc.) used to process, produce and/or store Proprietary Information must:

- 3.5.3.1 be dedicated to this contract only;
- 3.5.3.2 be given a unique identifier to ensure positive control and tracking;
- 3.5.3.3 be identified and inventoried by:
 - 3.5.3.3.1 the type of media (e.g. CD/DVD, USB stick, etc.);
 - 3.5.3.3.2 the information sensitivity level,
 - 3.5.3.3.3 the release-ability caveat (if applicable),
 - 3.5.3.3.4 the model and serial number (if applicable), and
 - 3.5.3.3.5 the IT media's unique identifier;
- 3.5.3.4 be labelled with:
 - 3.5.3.4.1 the highest sensitivity level of the data it contains,

3.5.3.4.2 the government department (in this case DND),

3.5.3.4.3 the contract number, and

3.5.3.4.4 the IT media's unique identifier.

3.5.3.5 If a label cannot be affixed directly on the IT media, the label must be attached to the IT media by other means (e.g. string, etc.).

3.5.4 Safeguarding of IT Media. All IT media must be safeguarded commensurate with the highest sensitivity level of the data it contains. When not being used all removable IT media - including failed, life cycled and long-term use media (e.g. backup media, etc.) - must be locked in a secure container approved to the information sensitivity level of the data that it contains.

3.5.5 Air Gap Computer. If the IS is required to interact with untrusted sources (e.g. the internet, another network, removable IT media from another source, etc.) the contractor will be required to provide a standalone Air Gap computer. Data transfer security requirements and related instructions for the Air Gap computer will be provided by the DND PO in a separate technical document; a template for this is available from DIM Secur upon request.

3.5.6 Logging of Removable IT Media. The location of all removable IT media must be tracked and controlled via the use of a log book. The log book must contain, at minimum:

3.5.6.1 the type of media (e.g. CD/DVD, USB stick, removable hard drive, backup tape, etc.);

3.5.6.2 the IT media's unique identifier;

3.5.6.3 the date and time it was removed;

3.5.6.4 the name, or initials, and signature of the individual who signed it out;

3.5.6.5 the date and time it was returned; and

3.5.6.6 the name, or initials, and signature of the individual who returned the media.

3.6 Personal IT Devices (PITDs)

3.6.1 The contractor must ensure that all Personal IT Devices (e.g. cell phones, smart watches, fit bits, etc.) are kept a minimum of one (1) metre away from the Contractor CRACCEN System.

3.7 Document Printing and/or Reproduction

3.7.1 Printing/Reproduction Authorization. The contractor is:

3.7.1.1 authorized to print and/or reproduce any Proprietary Information within the contractor's premises; and

3.7.1.2 not authorized to use external printing and/or reproduction services.

Use of either of these services to print and/or reproduce any Proprietary Information must first be approved and authorized by CISD and the DND PO.

3.7.2 Printing/Reproduction Device Hard Drives. Hard drives in devices used to reproduce Proprietary Information (e.g. printers, plotters, scanners, photocopiers, MFDs/MFPs, etc.) must

be equipped with removable hard drives. If a device does not support removable hard drives a different device, with no hard drive or with a removable hard drive, must be used.

3.7.3 Printer Connections. Unless the IS is configured as a segment of the contractor's corporate network, all printers, plotters, scanners, photocopiers and/or MFDs/MFPs must only be connected to the IS. Connection to other devices or networks is strictly prohibited.

3.7.4 Connection of Telephone Lines. The connection of telephone lines to any MFD/MFP used to process Proprietary Information is strictly prohibited.

3.7.5 Reproduction of Particularly Sensitive Information. For any particularly sensitive Proprietary Information, printing/reproduction of each document must first be approved by the DND PO; and if approved, every copy must be afforded a unique identifier to ensure positive control and tracking.

3.8 Recovery

3.8.1 IS Backups. The Proprietary Information must be backed up regularly, at least once a week; and the backups must be safeguarded at a remote location (i.e. another building). If the contractor does not have a remote location to safeguard the backups, arrangements can be made with the DND PO. If backups are to be safeguarded by a private organization other than the contractor, this must be addressed through a sub-contract. The IS SOP must include details on the back-up frequency, methodology and storage.

3.8.2 Testing of Backups. The IS backups should be tested on a regular basis. The IS Standard Operating Procedures should include details on the back-up testing frequency, methodology and reporting of errors.

3.8.3 Disaster Recovery Plan. The contractor must develop, and document a Disaster Recovery Plan (DRP) for the IS. This DRP must include details on the recovery, restoration, testing frequency, and methodology.

3.9 Disposal

3.9.1 Authorization for Disposal. The disposal of all IT media used on this contract - including removable media, internal and external hard drives - must be authorized in advance by the DND PO and must be documented and tracked. This includes for example, IT media that has failed, is being life cycled, is no longer required, etc. If hard drives cannot be removed from devices used to process, produce and/or store Proprietary Information (e.g. tablets, etc.) then the devices must be returned to the DND PO.

3.9.2 On-Site Disposal. Disposal of IT media on-site at the contractor's facility is authorized under the following conditions:

3.9.2.1 the contractor must dispose of all IT media in accordance with CSE's "ITSP.40.006 - IT Media Sanitization";

3.9.2.2 if the contractor does not have the required disposal means, arrangements must be made with the DND PO for disposal of IT media; and

3.9.2.3 on-site disposal must first be approved and authorized by CISD and the DND PO.

3.9.3 Disposal of IT Media - Tracking. The disposal of IT media must be tracked via the use of a "Certificate of Destruction" (if applicable) and a "Transit and Receipt Form"; the DND PO will provide templates for these documents. The contractor must retain a copy of all IT disposal

documents as evidence that the IT media has been properly disposed of. The contractor must make these IT disposal documents available to CISC and the DND PO upon request.

3.9.4 Return of All Proprietary Information. At the end of the contract all Proprietary Information (hard copies and electronic) must be returned to the DND PO. This includes all paper copies of documents as well as any IT media used to process, produce and/or store Proprietary Information (e.g. internal hard drives (used in workstations, laptops, servers, photocopiers, MFDs/MFPs, etc.); CDs/DVDs; USB sticks; SD cards; external hard drives; etc.). If hard drives cannot be removed from devices used to process, produce and/or store Proprietary Information (e.g. tablets, etc.) then the devices must be returned to the DND PO.

3.9.5 Procedures Prior to Removal of IT Equipment. If maintenance and/or disposal of IT equipment is necessary, the following procedures must be applied prior to removing any IT equipment used to process, produce and/or store Proprietary Information; this process applies to all IT equipment containing IT media (e.g. servers, workstations, printers, plotters, scanners, MFDs/MFPs, etc.):

3.9.5.1 Any device used to print PC or Classified Proprietary Information on this contract:

3.9.5.1.1 must print at least 50 copies of a page completely filled with unclassified text; this is in order to remove any possible data remaining on the drums, belts or other internal components of the device; and

3.9.5.1.2 must dispose of all toner cartridges by the same method used for disposal of IT media that has failed, is being life cycled, or is no longer required. This disposal is to prevent security incidents from toner cartridges which contain built-in drums and could retain images of printed documents.

3.9.5.2 All non-volatile memory devices (internal, removable, and external hard drives, etc.) must be removed and be disposed of as indicated in this section.

3.9.5.3 Volatile memory (e.g. RAM, DRAM, SRAM, etc.) must be sanitized by removing all power for a minimum of 24 consecutive hours. The contractor must ensure there is no power to the memory (e.g. from internal batteries or through connection to another device). If there is any doubt concerning the removal of all power to volatile memory in equipment used to process, produce and/or store highly sensitive Proprietary Information, the contractor must remove the volatile memory from the device and have it destroyed.

3.9.5.4 Any stickers or security markings on the device - in connection with this contract or the IS - must be removed.

Department of National Defence (DND)

Air Gap Computer Document

for

Contract W7707-216856

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1. INTRODUCTION

1.1 This document outlines the Information Technology (IT) security requirements for Department of National Defence (DND) Contract W7707-216856 for the transfer of electronic information between the Information System (IS) - identified herein for this document only as the Contractor Command Reconnaissance Area Coordination and Control Environmental Network System (Contractor CRACCEN System) - used to process, produce, and/or store this contract's Proprietary Information up to and including the level of SECRET. The scope of this "Air Gap Computer Document for Contract W7707-216856" is to state the minimum IT security requirements necessary to transfer electronic information to and from the IS.

1.2 Throughout this document the term "Proprietary Information" is defined as "any information provided or generated pursuant to this contract, regardless of form or type, including but not limited to scientific, technical, business and/or financial information, whether or not it is included in the Public Services and Procurement Canada (PSPC) Controlled Goods Program." Additional information on the PSPC Controlled Goods Program is available on the internet from "Controlled Goods Regulations (SOR/2001-32)" at <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2001-32/> and by email to dmc-cgd@tpsgc-pwgsc.gc.ca. For this contract, the contractor will require access to Controlled Goods.

1.3 As this contract may require data inputs from untrusted sources, there is a need for an additional level of IT security to mitigate the possibility of infection or malware originating from untrusted sources. These extra steps are intended to protect not only the Contractor CRACCEN System but also any other system exchanging information with the IS. The transfer of all Proprietary Information into the IS will be required to transition through an Air Gap Computer.

1.4 The application of the IT security safeguards listed in this document are based on the mandatory requirement that the physical premises have been inspected, assessed and authorized to process, produce and/or store information up to and including SECRET. Validation must be provided by the Public Services & Procurement Canada (PSPC)/Canadian Industrial Security Directorate (CISD).

2. MANDATORY PREREQUISITES

2.1 Description

2.1.1 A standalone workstation (i.e. PC or laptop) equipped with a removable hard drive as well as two approved and supported anti-virus/anti-malware applications must be used for all electronic data transfers into the IS. The transfer of electronic data into this IS is allowed only from a system of equivalent sensitivity level or lower.

2.1.2 The transfer of electronic data from the Contractor CRACCEN System must first be authorized in writing by the DND Project Officer (PO).

2.2 Terminology

2.2.1 The following terminology will be used in this document.

Source File	The data to be transferred to the Target System; the Source File must not have a higher sensitivity level than the Target System.
Source System	The IS that the Source File came from.
Target System	The IS that the Source File will be uploaded to. The Target System is the Contractor CRACCEN System.
Source Transfer Media	<p>The removable electronic media (e.g. CDs/DVDs, USB sticks, SD cards, external hard drives, etc.) containing the Source File from the Source System.</p> <p>For the Contractor CRACCEN System the type(s) of Source Transfer Media will be external hard disks, or DVDs, as well as any other type(s) of removable media approved in writing by the DND Project Authority.</p>
Target Transfer Media	<p>The removable electronic media to be used to move the Source File from the W7707-216856 Air Gap Computer to the Target System.</p> <p>For the Contractor CRACCEN System the type(s) of Target Transfer Media will be external hard disks, or DVDs, as well as any other type(s) of removable media approved in writing by the DND Project Authority.</p>

2.3 Hardware

2.3.1 This Air Gap Computer must be located in the same physical security zone as the Contract W7707-216856 IS and use the same type of equipment as stated in section "Type of Equipment" of the "Contract W7707-216856 IT Security Requirements Document".

2.3.2 This Air Gap Computer must consist of a stand-alone PC or laptop with only a monitor, keyboard and mouse. No other peripheral equipment (e.g. printer, scanner, etc.) can be attached to the Air Gap Computer.

2.3.3 For the entire length of the contract, this Air Gap Computer must be used only for this purpose.

2.3.4 This Air Gap Computer must be owned by the contractor; be composed of Commercial-Off-the-Shelf (COTS) equipment; and be installed, configured, and operational before being inspected by CISD.

2.3.5 If using a PC, the Air Gap Computer must be equipped with a removable hard drive.

2.3.6 This Air Gap Computer must be installed and operating in the same SECURITY zone or the temporary SECURITY zone where the Contractor CRACCEN System is installed.

2.3.7 If processing Protected C and/or Classified data, this Air Gap Computer must be located at least one meter away from all IT equipment and all personal IT devices (PITDs).

2.3.8 Labelling. This Air Gap Computer and removable hard drive (if applicable) must be affixed with a label identifying the highest sensitivity level of the contract's Proprietary Information which is being transferred using this equipment.

2.3.9 Labelling of Transfer Media. The Transfer Media to be used on this Air Gap Computer must be marked with the following information:

2.3.9.1 the highest sensitivity level of the data it contains,

2.3.9.2 the government department (in this case DND),

2.3.9.3 the contract number (in this case W7707-216856),

2.3.9.4 the IT media's unique identifier, as discussed in para 3.5.3.2 of the "Contract W7707-216856 IT Security Requirements Document", and

2.3.9.5 the transfer media category (either "Source Transfer Media" or "Target Transfer Media").

2.3.10 If this information cannot be written directly on the media or if a large label (approximately 4" by 6") cannot be affixed directly on the media, the label must be attached to the IT media by other means (e.g. string, etc.).

2.3.11 The "Source Transfer Media" and the "Target Transfer Media" should be labelled with different colours (e.g. black for one, red for the other) to easily differentiate between them.



Figure 1: example labels

2.4 IT System Configuration

2.4.1 This Air Gap Computer must operate on a supported Operating System (OS) and must follow all items specified in the paragraph "Operating System" of the "Contract W7707-216856 IT Security Requirements Document". As well as disabling unnecessary processes, services, and ports, all unnecessary computer components (e.g. network card, microphone, speakers, etc.) must also be disabled.

2.4.2 Two different anti-virus/anti-malware applications must be installed on this contract's Air Gap Computer and these applications must be supported. This contract's Air Gap Computer must follow all items specified in the paragraph "Anti-virus/Anti-malware Software" of the "Contract W7707-216856 IT Security Requirements Document".

2.4.3 Any other applications installed on this contract's Air Gap Computer shall be deleted/uninstalled, and no other applications can be installed on this computer.

2.4.4 OS logging must be active on this contract's Air Gap Computer, and all items specified in the paragraph "Logging and Auditing" of the "Contract W7707-216856 IT Security Requirements Document" must be followed.

2.4.5 All accounts on this contract's Air Gap Computer must follow the applicable sections of the paragraph "Authorization and Access Control" of the "Contract W7707-216856 IT Security Requirements Document". No shared or generic accounts are authorized.

2.4.6 The following paragraphs of the "Contract W7707-216856 IT Security Requirements Document" are applicable to this Air Gap Computer and must be followed:

- "Unattended Removable Media";
- "IT Media";
- "Personal IT Devices (PITDs)"; and
- "Disposal".

2.5 Air Gap Computer and SOP

2.5.1 The Contractor CRACCEN System SOP must include the procedures and details mentioned in this "Air Gap Computer Document for Contract W7707-216856 " for all applicable aspects of this Air Gap Computer.

3. DATA TRANSFER PROCEDURES

3.1 The following process must be used to transfer electronic data from any untrusted source(s) to the IS.

3.2 These Data Transfer Procedures must be posted near the W7707-216856 Air Gap Computer.

DATA TRANSFER PROCEDURES

1. Power on the W7707-216856 Air Gap Computer and logon.
2. Ensure that the definition files for both anti-virus/anti-malware applications are current. If not current, update the necessary definition files before proceeding.
3. Copy the Source File(s) from the Source System to the Source Transfer Media. If the Source File(s) is/are already on removable electronic media (e.g. removable media received from a vendor, etc.), then this can be used as the Source Transfer Media.
4. Label the Source Transfer Media and connect it to the Air Gap Computer.
5. Scan the Source Transfer Media and all Source File(s) using both anti-virus/anti-malware applications.
 - a. If any viruses/malware are detected, STOP the procedure. Clean/delete the file(s) as directed by the anti-virus/anti-malware applications and inform the Company Security Officer (CSO) or the Alternate Company Security Officer (ACSO).
 - b. If no viruses/malware are detected, proceed to the next step.
6. Copy the Source File(s) from the Source Transfer Media onto the Air Gap Computer.
7. Remove the Source Transfer Media from the Air Gap Computer.
8. Label the Target Transfer Media and connect it to the Air Gap Computer.
9. Copy the scanned Source File(s) from the Air Gap Computer to the Target Transfer Media.
10. Remove the Target Transfer Media from the Air Gap Computer.
11. Connect the Target Transfer Media to the Target System.
12. Copy the scanned Source File(s) from the Target Transfer Media to the Target System.
13. Ensure that the scanned Source File(s) copied to the Target System can be opened and are not corrupted.
14. If the Source File(s) on the Target System is/are satisfactory:
 - a. delete the Source File(s) from the Target Transfer Media;
 - b. remove the Target Transfer Media from the Target System; and
 - c. delete the Source File(s) from the Air Gap Computer.
15. Log off and shut down the Air Gap Computer.