



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada

Defence Research and Development Canada (DRDC) Innovation Call For Proposals (CFP) 2017



DRDC | RDDC

SCIENCE, TECHNOLOGY AND KNOWLEDGE
FOR CANADA'S DEFENCE AND SECURITY

SCIENCE, TECHNOLOGIE ET SAVOIR
POUR LA DÉFENSE ET LA SÉCURITÉ DU CANADA

TABLE OF CONTENTS

PART 1 - GENERAL INFORMATION.....	1
1.1 SUMMARY.....	1
1.2 CALL FOR PROPOSALS PROCUREMENT APPROACH.....	2
1.3 TRADE AGREEMENTS.....	2
1.4 SECURITY REQUIREMENTS.....	3
1.5 CANADIAN CONTENT.....	3
1.6 CONTROLLED GOODS PROGRAM.....	3
1.7 EMPLOYMENT EQUITY.....	3
1.8 CONFLICT OF INTEREST.....	3
1.9 COMPREHENSIVE LAND CLAIMS AGREEMENTS (CLCA).....	3
1.10 TERMINOLOGY.....	3
PART 2 – BIDDERS’ INSTRUCTIONS.....	4
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS.....	4
2.2 ENQUIRIES ABOUT THE CFP.....	5
2.3 CONTRACTING AUTHORITY.....	5
2.4 APPLICABLE LAWS.....	5
2.5 COMMUNICATIONS NOTIFICATION.....	6
2.6 FUNDING.....	6
PART 3 - PROPOSAL PREPARATION INSTRUCTIONS.....	7
3.1 WHO MAY APPLY.....	7
3.2 ELECTRONIC PROPOSAL SUBMISSION FORM.....	8
3.3 CLASSIFIED PROPOSALS.....	8
3.4 TECHNICAL PROPOSAL.....	9
3.5 FINANCIAL PROPOSAL.....	9
3.6 CERTIFICATIONS.....	10
PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION.....	11
4.1 EVALUATION PROCEDURES.....	11
4.2 EVALUATION CRITERIA.....	11
4.3 POOL OF PRE-QUALIFIED PROPOSALS.....	12
4.4 PROPOSAL SELECTION.....	12
4.5 DEBRIEFING.....	13
4.6 CONTRACTING PROCESS.....	13
4.7 INTELLECTUAL PROPERTY.....	14
4.8 HUMAN AND ANIMAL ETHICS.....	14
PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION.....	15
5.1 CERTIFICATIONS REQUIRED WITH THE PROPOSAL.....	15
5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION.....	16
PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS.....	22
6.1 SECURITY CONSIDERATIONS.....	22
6.2 FINANCIAL CAPABILITY.....	22
6.3 CONTROLLED GOODS PROGRAM - BID.....	22

PART 7 - RESULTING CONTRACT CLAUSES	23
1. STATEMENT OF WORK.....	23
2. STANDARD CLAUSES AND CONDITIONS	23
3. SECURITY REQUIREMENT	24
4. TERM OF CONTRACT.....	24
5. COMPREHENSIVE LAND CLAIM AGREEMENTS (CLCAs)	24
6. AUTHORITIES.....	24
7. PROACTIVE DISCLOSURE OF CONTRACTS WITH FORMER PUBLIC SERVANTS	25
8. PAYMENT.....	25
9. INVOICING INSTRUCTIONS.....	27
10. CERTIFICATIONS	28
11. APPLICABLE LAWS	28
12. PRIORITY OF DOCUMENTS.....	28
13. FOREIGN NATIONALS (CANADIAN CONTRACTOR <i>OR</i> FOREIGN CONTRACTOR)	29
14. INSURANCE.....	29
15. CONTROLLED GOODS PROGRAM	29
16. CANADIAN FORCES SITE REGULATIONS	30
17. JOINT VENTURE	30
ANNEX A - PROJECT TYPES AND PARAMETERS.....	31
ANNEX B – S&T CHALLENGES.....	35
ANNEX C – EVALUATION CRITERIA	43
ANNEX E – DETAILED BUDGET TABLE	57
ANNEX F - PROJECT MANAGER AND KEY PROJECT TEAM MEMBERS' EXPERIENCE.....	60
ANNEX G – PARTNERSHIP SIGNATURE FORM	62
ANNEX H – TECHNOLOGY READINESS LEVELS (TRLS)	64
ANNEX I – CO-INVESTMENT INFORMATION.....	65

PART 1 - GENERAL INFORMATION

1.1 Summary

Public Works and Government Services Canada (PWGSC) is issuing a Call for Proposals (CFP) on behalf of Defence Research and Development Canada (DRDC) - an agency of Canada's Department of National Defence (DND) that provides DND, the Canadian Armed Forces, and other government departments as well as the public safety and security communities the knowledge and technological advantage needed to defend and protect Canada's interests at home and abroad.

The CFP is an invitation to bidders to submit innovative science and technology (S&T) proposals in support of Canada's defence, security and public safety.

More specifically, this CFP identifies S&T Challenges (see Annex B) for which innovative solutions are sought that relate to the following DRDC programs or clients support:

Stream A: Public Safety and Security

DRDC is looking for novel ideas and innovative solutions to resolve public safety and security S&T Challenges under the theme of "smart communities and systems". Stream A is in support of Canada's resilience primarily through the Canadian Safety and Security Program (CSSP)'s S&T investments. The CSSP is a whole-of-government initiative that strengthens Canada's ability to anticipate, prevent, mitigate, prepare for, respond to and recover from natural disasters, serious accidents, crime and terrorism through the convergence of S&T with policy, operations and intelligence.

Stream B: Support to Canada's Defence Policy "Strong, Secured, Engaged"

Stream B is in support of Canada's new Defence Policy, "Strong, Secured, Engaged", released in June 2017. This policy states that "Innovative technology, knowledge, and problem solving are critical for Canada and its allies to mitigate new threats, stay ahead of potential adversaries, and meet evolving defence and security needs, while generating economic benefits for Canada."

The S&T Challenges under Stream B will support three DND clients:

1. Canadian Special Operations Forces Command (CANSOFCOM)

One of the key initiatives of the new "Strong, Secure, Engaged" Canadian Defence Policy, is sustained long-term investments to enhance the Canadian Armed Forces' capabilities and capacity, and in particular investments in Canada's Special Operations Forces under CANSOFCOM. CANSOFCOM is a high-readiness organization, ready to deploy Special Operations Forces on very short notice to protect Canada and Canadians from threats to national interests at home and abroad. To support the CANSOFCOM mission, DND is committed to enhance next generation Special Operations Forces integrated soldier system equipment, land mobility, and maritime mobility platforms and fighting vehicle platforms.

2. All Domain Situational Awareness (ADSA) Science and Technology (S&T) Program

The new “Strong, Secure, Engaged” Canadian Defence Policy prioritizes R&D related to Arctic joint intelligence, surveillance and reconnaissance to produce innovative solutions to surveillance challenges in the North. To meet this objective, the ADSA S&T Program undertakes R&D to support development of S&T options for enhanced domain awareness of air, maritime surface and sub-surface approaches to Canada, and in particular the Arctic. Surveillance solutions explored are to support the Government of Canada’s ability to exercise sovereignty in the North, and will provide a greater whole-of-government awareness of safety and security issues, and of transportation and commercial activities in Canada’s Arctic.

3. Assistant Deputy Minister (ADM) Infrastructure and Environment (IE)

As stated in the new “Strong, Secure, Engaged” Canadian Defence Policy, a clean environment and sustainable economy are priorities for the Government of Canada. DND, through the Assistant Deputy Minister (Infrastructure & Environment), manages the largest infrastructure portfolio in the federal government, including over 20,000 buildings, 5,500 kilometers of roads and 3,000 kilometers of water works. This infrastructure portfolio is worth roughly \$26 billion and the maintenance, operation and infrastructure workforce accounts for about 10 percent of the defence budget in any given year. DND has committed to continue to modernize its infrastructure to improve efficiency, reduce greenhouse gas emissions, and support military personnel.

1.2 Call for Proposals Procurement Approach

This CFP process involves a two-stage procurement process:

Stage 1: Proposal Submission, Evaluation and Selection

Stage 2: Contracting

The information provided in Stage 1 will be used to establish a pool of pre-qualified proposals. Proposals selected for funding from the pool of pre-qualified proposals will be subject to Stage 2.

The establishment of the pool of pre-qualified proposals and the selection of proposals for funding does not constitute a guarantee on the part of Canada that a contract will be awarded.

In addition, no payment will be made for costs incurred in the preparation, submission, and contract negotiation related to a proposal under this CFP. Costs associated with these activities, including the development of any supporting documentation and any Bidder costs incurred associated with the submission of the proposal, are the sole responsibility of the Bidder.

1.3 Trade Agreements

[The Canadian Free Trade Agreement](#) (CFTA), applies to this procurement. The CFP process is organized in a manner consistent with the principles of the CFTA in terms of equal access, fairness, and transparency and is open to public and private sector entities.

This procurement is excluded from the North American Free Trade Agreement (NAFTA) as per Annex 1001.1b-2 Research and Development, all classes, excluded from the application of the World Trade Organization – Agreement on Government Procurement (WTO-AGP) under Appendix 1, Annex 4, as well as excluded from the Canada-European Union Comprehensive Economic and Trade Agreement (CETA).

1.4 Security Requirements

There may be security requirements associated with the resulting contracts. For more information on personnel and organization security screening or security clauses, Bidders should refer to the Industrial Security Program (ISP) of PWGSC at <http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng>.

1.5 Canadian Content

This procurement is conditionally limited to Canadian goods and Canadian services.

1.6 Controlled Goods Program

This procurement is subject to the Controlled Goods Program. The *Defence Production Act* defines Canadian Controlled Goods as certain goods listed in Canada's Export Control List, a regulation made pursuant to the *Export and Import Permits Act* (EIPA)."

1.7 Employment Equity

The Federal Contractors Program (FCP) for employment equity may apply to this procurement (see Part 5 – Certifications and Additional Information).

1.8 Conflict of Interest

A successful Bidder (the Contractor), its subcontractor(s) or any of their agent(s) directly or indirectly involved in the performance of the work and/or in the production of the deliverables under any resulting contract will not be precluded from bidding on any potential future CFP related to the production or exploitation of any concept or prototype developed or delivered.

1.9 Comprehensive Land Claims Agreements (CLCA)

Depending on the proposal received, the region of delivery for the goods and/or services may be in an area subject to Comprehensive Land Claims Agreements (CLCAs). If this occurs, the procurement will be subject to the applicable CLCA.

1.10 Terminology

In this document, terms identified below and their meaning referenced in the 2003 (2017-04-27) *Standard Instructions* are identified in below table.

Term (used this document)	Term (used 2003 Standard Instructions)
Call for Proposals (CFP)	Solicitation / bid solicitation
proposal	bid

PART 2 – BIDDERS' INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in this CFP by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (SACC) issued by PWGSC. (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>)

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

The *2003 (2017-04-27) Standard Instructions - Goods or Services - Competitive Requirements*, are incorporated by reference into and form part of this CFP; some sections have been amended and are listed below.

Section 04 – Definition of a Bidder, is amended as follows:

Delete: It does not include the parent, subsidiaries or other affiliates of the Bidder, or its subcontractors.

Section 05.2 (d) – Submission of Bids, is amended as follows:

Delete: The facsimile number and related instructions for bids transmitted by facsimile are provided in section 08;

Section 08 – Transmission by Facsimile and Section 09 – Customs Clearance, are amended as follows:

Delete: The following sections are deleted in their entirety:

- Section 08 Transmission by Facsimile
 - Section 09 Customs Clearance
-

Section 05 – Submission of Bids, subsection 4, is amended as follows:

Delete: Proposals will remain open for acceptance for a period of not less than 60 days from the closing date of the proposal solicitation, unless specified otherwise in the bid solicitation.

Insert: Proposals will remain open for acceptance from date of proposal submission for 12 months. The Contracting Authority may reduce this period by sending written notice to the Bidder following Canada's completion (partial or entire) of Stage 2.

Section 14 – Price Justification, is amended as follows:

Delete: In the event that the Bidder's proposal is the sole responsive proposal received, the Bidders must provide, on Canada's request, one or more of the following price justification:

Insert: For all pre-qualified proposals eligible for Contract award, the Bidders must provide, on Canada's request, one or more of the following price justification:

2.2 Enquiries about the CFP

All enquiries must be submitted in writing to the Contracting Authority no later than 10 (ten) calendar days before the CFP's closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of this CFP 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 Bidders 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.

2.3 Contracting Authority

The Contracting Authority for this CFP is:

Emily Baxter
Public Works and Government Services Canada
Acquisitions Branch
Defence Sciences Division
Telephone: 873-469-4819
E-mail address: emily.baxter@tpsgc-pwgsc.gc.ca

2.4 Applicable Laws

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

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

Solicitation No. - N° de l'invitation
W7714-17DRDC/B
Client Ref. No. - N° de réf. du client
W7714-17DRDC

Amd. No. - N° de la modif.
File No. - N° du dossier
062sv.W7714-17DRDC

Buyer ID - Id de l'acheteur
062sv
CCC No./N° CCC - FMS No./N° VME

2.5 Communications Notification

As a courtesy and in order to coordinate any public announcements pertaining to any resulting contract, Canada requests that successful Bidders notify the Contracting Authority (who will be named during the contract stage) five (5) business days in advance of their intention to make public an announcement related to a contract award. Canada retains the right to make primary contract announcements.

2.6 Funding

For this CFP, approximately \$19 million has been allocated for Stream A and \$5 million for Stream B, for an estimated \$24 million in total funding*. All proposals must be costed in Canadian dollars.

Canada reserves the right to modify project funding via one or more alternate programs or mechanisms.

*These amounts are subject to change.

PART 3 - Proposal PREPARATION INSTRUCTIONS

3.1 Who May Apply

This CFP is open to all public and private sector entities. The Bidder will assume the responsibility of submitting the proposal and serving as the point of contact for the duration of the CFP process.

3.1.1 DRDC can be listed as a partner but can neither be the Bidder nor the Lead Government Department in any proposal for this CFP.

3.1.2 Applicable to S&T Challenges for *Stream A only*. Proposals must have a minimum of two partner organizations and must satisfy the following:

- 1) Identification of a partnership that includes:
 - a) a Lead Canadian Government Department* prepared to be the project champion and, at a minimum, commit resources to initiate the requisition for contract, receive invoices/deliverables, verify milestone payments, and facilitate project reporting requirements to DRDC; and
 - b) a different Government Department from 3.1.2.1.a, or any other partner.
- 2) Submission of a complete Partnership Signature Form as set out in Annex G. The Bidders as well as all entities/organizations identified as partners involved in a proposal must sign, and at a minimum, be at a level:
 - a) of Director General or higher for the federal government; and
 - b) acceptable for a provincial/territorial/municipal government, academic institution, or a private industry to authorize the financial and operational commitment of its organization for the proposal.

* To qualify as a Canadian Government Department (federal, provincial, territorial, or municipal), a partner must fit into one of the following three categories:

- 1) Be listed under Schedules I through V of the *Financial Administration Act*; or
- 2) Be a government corporation or any other public authority designated by regulation of a Lieutenant Governor in Council; or
- 3) Satisfy each of the following criteria:
 - a) the entity was created by legislation;
 - b) the government determines the general policy or program of the entity;
 - c) the government appoints members to the board of directors of the entity;
 - d) direct control of the entity is held by possessing 100 percent of the voting equity;
 - e) the entity's assets revert back to a government in the event of liquidation or dissolution;

- f) the entity's budget is approved by the government;
- g) the entity submits an annual, audited report to a government; and
- h) the entity's financial accounts are subject to examination by an Auditor General.

3.1.2.a. Additional Canadian or international partners in the public or private sector are permitted as long as the above two requirements are satisfied.

3.2 Electronic Proposal Submission Form

3.2.1 Bidders are requested to complete and submit their proposal using the electronic Proposal Submission Form at the website specified: <https://drdc-rddc-cfp-adp-2017.fluidreview.com/>.

In order to complete and submit a proposal, Bidders must first register and obtain a username and password.

3.2.2 When a proposal is successfully submitted, an automated email is sent to the Bidder. This email serves as confirmation of receipt.

All proposals must be received by the CFP closing date and time specified on the Buy and Sell website. Proposals received after the specified period will not be evaluated.

3.2.3 If a large number of bidders access the web-based system at the same time, the electronic submission of proposals may be delayed. Bidders are solely responsible for ensuring their proposal is submitted properly in its entirety and on time.

3.2.4 Should there be technical difficulties accessing or using the online system, Bidders must use the contact information located on the website. Technical assistance is restricted to issues associated with mechanics of the online system. The personnel providing technical assistance are not associated with the CFP and are not in a position to comment on or provide interpretation on the CFP.

All non-technical assistance for proposal submission is to be directed to the Contracting Authority.

3.3 Classified Proposals

3.3.1 Bidders submitting a classified proposal must contact the Contracting Authority to obtain the Classified Submission Form (Microsoft Word format) and to arrange delivery of the proposal using procedures designed to protect the sensitivity of the content.

3.3.2 Proposals are deemed classified if they contain information related to Canada's national interest that may qualify for an exemption or exclusion under the *Access to Information Act* or *Privacy Act* and the compromise of which would reasonably be expected to cause injury to the national interest as defined in the PWGSC Supply Manual Glossary, and in accordance with the Treasury Board's Policy on Government Security. It is expected that the majority of proposals will not qualify for the exemption or exclusion and they will therefore be submitted as unclassified proposals.

3.3.2.1 *Classified Information specific to Project Management and Key Team Member expertise:*

In the event that it is not possible to demonstrate project management expertise commensurate to the proposal's complexity without providing classified information, Bidders must use the classified form for this portion of the bid. The Bidder will be required to populate a table related to project management experience using the Classified Submission Form and include a reference to the Classified Submission Form in the online form.

3.3.3 Bidders submitting a classified proposal must use and fully populate the Classified Submission Form, identify the proposal using an unclassified title, and must adhere to the word limits imposed by different sections (as applicable).

3.3.4 All classified proposals must be received by the specified CFP closing date and time indicated on the Buy and Sell website. Proposals received after the specified closing date and time will not be evaluated.

3.3.5 Due to the nature of this CFP, proposals transmitted by facsimile to PWGSC will not be accepted.

3.3.6 Canada requests that Bidders provide their proposal in separately bound sections as follows:

Section I: Technical Proposal (4 hard copies)

Section II: Financial Proposal (4 hard copies)

Section III: Certifications (1 hard copy)

Section IV: Additional Information (4 hard copies)

3.4 Technical Proposal

3.4.1 The Bidder's responses to the criteria in Part 4, which are also presented in the electronic Proposal Submission Form or the Classified Submission Form, as applicable, will form the Bidder's Technical Proposal. Bidders must respond to each criterion in a thorough, concise and clear manner within the allotted character count for each criterion. The Bidders must provide Technical Proposal content that clearly addresses in sufficient depth the points that are subject to the evaluation criteria against which the proposal will be evaluated.

3.4.2 To maintain the integrity of the evaluation, Evaluators will consider only information presented in the proposal. No information will be inferred and personal knowledge or beliefs will not be utilized in the assessment. Bidders should explicitly demonstrate, in sufficient detail, how all criteria are met.

3.5 Financial Proposal

3.5.1 Bidders must complete the Financial Proposal Cost Breakdown set out in Annex E which is presented in the electronic Proposal Submission Form, as well as the Classified Submission Form.

Responses provided in the electronic Proposal Submission Form will form the Bidder's financial proposal. All financial proposals must be in Canadian dollars.

The Bidder's financial proposal should not exceed the amounts identified in Annex A. Any dollar value exceeding the maximum funding amounts may be the Bidder's commitment of co-investment funding to a resulting contract.

3.5.2 The financial proposal submitted will be negotiated in accordance with the statement of work (SOW) to be finalized during Stage 2, and must be in accordance with the [PWGSC Contract Cost Principles 1031-2](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/1031-2/6) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/1031-2/6>), except for universities for which the costs must be in accordance with article 10.40 (a) to (i) of the PWGSC Supply Manual (<https://buyandsell.gc.ca/policy-and-guidelines/supply-manual/section/10/40>).

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

3.5.4 Eligible Costs

DRDC funds can only be used for incremental resourcing costs associated with delivering a project - for example, material and supplies, equipment rentals, subcontractors, casual or permanent employees (incremental labour costs for indeterminate employees at the federal level of the government in Canada cannot be included). Therefore, DRDC funds can only be used for expenditures that are not amortized.

Travel expenses using DRDC funding must be compliant with the [National Joint Council Travel Directive](#) and with the other provisions of the directive referring to "travellers", rather than those referring to "employees" and be justified in the work plan (see Annex D.)

3.5.5 Salary Wage Envelope Conversion for Federal Government Participants

As per Treasury Board of Canada Secretariat requirements, the Employee Benefit Plan (EBP) amount (20 percent of personnel costs) must be included in costing calculations. The EBP fee is applicable to incremental federal government salaries and does not apply to other orders of government or the private sector.

3.5.6 Ineligible Costs

DRDC funds cannot be used to pay for salaries of indeterminate employees at the federal level of government in Canada; however, indeterminate employee salaries (including the EBP amount) may be included in the proposal as an in-kind contribution.

3.5.7 Use of DRDC Resources - **Stream B only**

If any proposals under Stream B include the request to use a DRDC resource, the proposal should articulate the requirements from DRDC for the project to succeed and the mitigation and impact should DRDC be unable to fulfill those requirements.

3.6 Certifications

Required certifications and additional information are identified in Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- a) Proposals will be assessed in accordance with the entire requirement of this CFP including the technical and financial evaluation criteria.
- b) An evaluation team composed of representatives of Canada will evaluate the proposals. If required, Canada may use external Subject Matter Experts (SMEs) to evaluate any proposal. External SMEs will be required to confirm they are not in a conflict of interest, and sign a non-disclosure agreement.
- c) For each S&T Challenge, the evaluation team will determine first if there are two or more bids with a valid Canadian Content certification. In that event, the evaluation process will be limited to the bids with the certification; otherwise, all bids will be evaluated. If some of the bids with a valid certification are declared non-responsive, or are withdrawn, and less than two responsive bids with a valid certification remain, the evaluation will continue among those bids with a valid certification. If all bids with a valid certification are subsequently declared non-responsive, or are withdrawn, then all the other bids received will be evaluated.
- d) In conducting its evaluation of the proposals, Canada may, but will have no obligation to, verify any information provided by Bidders through independent research, use of any government resources or by contacting third parties.
- e) For Stream A, Canada may undertake two distinct proposal evaluation/selection processes which may not occur concurrently. Both processes are subject to steps 4.1 to 4.6 as detailed below.

4.2 Evaluation Criteria

4.2.1 Mandatory Criteria

Stream A:

Proposals for Stream A S&T Challenges must meet all mandatory criteria (MC) identified in Annex C.1 to be in compliance with the CFP. Proposals that fail to meet all mandatory criteria will be declared non-responsive.

Stream B:

Proposals for Stream B S&T Challenges must meet mandatory criteria MC 1, MC2, MC3, MC4 (*not MC5*) as identified in Annex C.1 to be in compliance with the CFP. Proposals that fail to meet these mandatory criteria will be declared non-responsive.

4.2.2 Supporting Information

In the event that the Bidder fails to submit supporting information pursuant to the mandatory criteria, the Contracting Authority may, but is not required to, request it thereafter in writing, including after the closing date of the bid solicitation. It is mandatory that the Bidder provide the

supporting information within one business day of the written request or within such period as specified or agreed to by the Contracting Authority in the written notice to the Bidder. Failure to provide the supporting information in the allotted time will render the proposal non-responsive.

4.2.3 Point-Rated Evaluation Criteria

Each proposal that meets all of the mandatory criteria will be evaluated and scored in accordance with the point-rated evaluation criteria identified in Annex C.2. Proposals must obtain a minimum score of 55 for the scientific and/or technical merit, as well as a minimum overall pass mark of 126 points out of 180 points. Proposals not meeting both specified minimum pass marks will be deemed non-responsive.

4.2.4 Evaluation of Price

The price of the proposal will be evaluated in Canadian dollars; including, applicable taxes, travel and living costs, shipping, Canadian customs duties and excise taxes.

For evaluation purposes only, the price of the proposal will be determined as detailed in Annex E.

4.3 Pool of Pre-Qualified Proposals

Proposals that satisfy all of the mandatory criteria, achieve the specified minimum pass marks, and meet all other requirements of the CFP will be considered responsive and placed in the pool of pre-qualified proposals and submitted to the Proposal Selection Committee. This is not a guarantee that a responsive proposal will be selected for funding or that a contract will be awarded.

4.4 Proposal Selection

All responsive proposals will be considered for funding in accordance with the selection steps summarized below. Both Stream A and Stream B will follow separately the steps described below.

Proposal Selection Committee (PSC): The PSC is chaired by a Director General of DRDC and is composed of representatives from DRDC, and as needed, other government department SMEs. The Contracting Authority will also participate in the PSC in an observational capacity. The PSC considers the evaluation results of the proposals and examines the distribution of investment across multiple parameters, such as:

- program priorities;
- number of proposals across priorities and S&T Challenges;
- previous years' investments;
- the strength of individual proposals;
- changes to Government of Canada priorities;
- similar S&T initiatives being funded by DRDC's partners;
- project types and technology readiness levels;
- amount of funding request for travel;
- level of co-investment, particularly cash co-investment, as an indicator of shared risk.

This results in the creation of a prioritized pool of pre-qualified proposals that are recommended to receive funding within the budget allocated for the CFP, and a list of proposals not recommended for funding. The results are then sent for endorsement by the Steering Committee.

Steering Committee (SC): The SC is chaired by the DND Assistant Deputy Minister (S&T) (DND ADM (S&T)) and is composed of representatives from DRDC and, as needed, other government department SMEs. The Contracting Authority will also participate in the SC in an observational capacity. The role of the SC is to review and endorse and/or modify the PSC's prioritized pool of pre-qualified proposals recommended and not recommended for funding. The SC will consider the same factors as the PSC. The result is a final pool of pre-qualified proposals. Canada will communicate the results of this process.

4.5 Debriefing

After communication of the finalized pool of pre-qualified proposals, Bidders may request a debriefing on the results of the CFP process (excluding Stage 2 which will be released after all contracts have been negotiated and awarded). Such a request is to be made to the Contracting Authority within 15 working days of receipt of the results of the CFP process. The debriefing may be in writing, by telephone or in person.

4.6 Contracting Process

Recommendation for contract award will be determined based on the available budget and the success in completing the following steps.

4.6.1 Financial Capability and Certifications

The Contracting Authority may undertake the following:

- a) obtain financial information to verify the Bidder's capacity to undertake the Work; and
- b) request certifications and other information required before contract award.

If a Bidder fails to demonstrate adequate financial resources to complete the Work, or fails to provide the certifications and additional information, the proposal will be considered non-responsive and given no further consideration.

4.6.2 Contract Negotiations

Upon completion of the SOW, the Contracting Authority will initiate the negotiations for the following:

- a) contract terms and conditions, as applicable;
- b) pricing and cost breakdown; and
- c) the provision by the Bidder of price support to substantiate the costs to Canada.

Failure to achieve consensus on any aspect of the negotiations will result in the proposal being set aside and not given any further consideration. If an agreement cannot be reached between Canada and the Bidder within a timeline determined to be reasonable by the Contracting

Authority to Canada reserves the right to stop negotiations with the Bidder and dissociate the prioritized funds.

4.6.3 Contract Award

Upon completion of contract negotiations, Canada will internally recommend, for approval, contracts to be awarded.

4.7 Intellectual Property

The default position of Canada is to allow contractors to retain the intellectual property (IP) rights. The IP rights could be negotiated with the Bidders. Information on IP is available from the following sources:

Definition of IP under PWGSC's *Standard Acquisition Clauses and Conditions Manual*, found at: <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/2040/17>

[Implementation Guide Policy on Title to Intellectual Property Arising under Crown Procurement Contracts](http://www.ic.gc.ca/eic/site/068.nsf/eng/h_00001.html). (http://www.ic.gc.ca/eic/site/068.nsf/eng/h_00001.html)

4.8 Human and Animal Ethics

A proposal that includes human subjects, human tissues, laboratory animals, or animal tissues, must not proceed without prior approval of the project team's Human Subjects Research Ethics Committee or the institutional Animal Care Committee and must not be conducted in contravention of the respective Committee's conditions of approval.

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the 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 proposal non-responsive, or will declare a contractor in default if any certification made is found to be untrue, whether made knowingly or unknowingly, during the proposal evaluation period or during the contract period.

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

5.1 Certifications Required with the Proposal

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

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 website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.1.2 Additional Certifications Required with the Proposal

5.1.2.1 Canadian Content Certification

This procurement is conditionally limited to Canadian goods and Canadian services.

Subject to the evaluation procedures contained in the CFP, Bidders acknowledge that only bids with a certification that the goods and services offered are Canadian goods and Canadian services, as defined in clause A3050T as modified below, may be considered.

Failure to provide this certification completed with the bid will result in the goods and services offered being treated as non-Canadian goods and non-Canadian services.

The Bidder certifies that:

() a minimum of 50 percent of the total bid price consists of Canadian goods and Canadian services as defined in paragraph 5 of clause A3050T, as amended herein.

For more information on how to determine the Canadian content for a mix of goods, a mix of services or a mix of goods and services, consult Annex 3.6.(9), Example 2, of the *Supply Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/A/A3053T/2>).

5.1.1.a SACC Manual clause A3050T (2014-11-27), Canadian Content Definition, is amended as follows:

DELETE: 80 percent

INSERT: 50 percent

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the proposal but may be submitted afterwards. If any of these required certifications or additional information are not completed and submitted as requested, the Contracting Authority will inform the Bidders 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 proposal 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 procurement agreement of the Ineligibility and Suspension Policy (<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

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the Employment and Social Development Canada (ESDC) – Labour's website (http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contract_or_program.page?&_ga=1.229006812.1158694905.1413548969#afed).

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.

For contracts receiving funds over \$1,000,000.00:

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

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

5.2.3 Federal Contractors Program for Employment Equity – Certification

A Bidder's signature constitutes a confirmation to the effect that:

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)

5.2.4 Former Public Servant Certification

Contracts awarded to former public servants (FPSs) 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.

5.2.5 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; and
- 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 FPS in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts..

5.2.6 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.

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

5.2.7 Controlled Goods

Will the resulting contract involve controlled goods?

YES () NO ()

For further information on the Controlled Goods Program, visit the website: <http://ssi-iss.tpsgc-pwgsc.gc.ca/dmc-cgd/index-eng.html>.

5.2.8 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.

5.2.9 Procurement Business Number

Suppliers are required to have a Procurement Business Number (PBN) prior to contract award in order to receive a PWGSC contract. Suppliers may register for a PBN online at Supplier Registration Information (<https://srisupplier.contractsCanada.gc.ca>). For non-Internet registration, suppliers may contact the Info Line at 1-800-811-1148 to obtain the telephone number of the nearest Supplier Registration Agent.

PBN: _____

5.2.10 Rate or Price Certification

The Bidder is requested to provide one (1) of the following certifications, as applicable, in its financial bid:

_____ The Bidder certifies that the price proposed is based on costs computed in accordance with Contract Cost Principles 1031-2, and includes an estimated amount of profit of _____.

-OR-

_____ The Bidder certifies that the price proposed

- a) is not in excess of the lowest price charged anyone else, including the Bidder's most favoured customer, for the like quality and quantity of the goods, services or both;
- b) does not include an element of profit on the sale in excess of that normally obtained by the Bidder on the sale of goods, services or both of like quality and quantity, and
- c) does not include any provision for discounts to selling agents.

-OR-

_____ The Bidder certifies that the price proposed is based on costs computed in accordance with 10.40 (a) to (i) of the *Supply Manual*, Public Works and Government Services Canada, on the pricing of research and development contracts with universities and colleges.

5.2.11 Education and Experience

The Bidder certifies that all the information provided in the résumés and supporting material submitted with its bid, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Bidder to be true and accurate. Furthermore, the Bidder warrants that every individual proposed by the Bidder for the requirement is capable of performing the Work described in the resulting contract.

5.2.12 Certification Acknowledgment

The Bidder certifies that the information submitted herein, and the information submitted in its bid, is accurate and complete.

Solicitation No. - N° de l'invitation
W7714-17DRDC/B
Client Ref. No. - N° de réf. du client
W7714-17DRDC

Amd. No. - N° de la modif.
File No. - N° du dossier
062sv.W7714-17DRDC

Buyer ID - Id de l'acheteur
062sv
CCC No./N° CCC - FMS No./N° VME

The Bidder has read, understands and acknowledges the instructions and the clauses and conditions contained in all parts of the solicitation document.

By signing below the signatory certifies the above and that he or she is an authorized signing officer of the Bidder.

Print Name:

Signature:

Date:

PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

6.1 Security Considerations

Contractors may be required to possess valid security clearances, depending on the nature of the project, in order to have access to information and/or sites necessary for its execution. DRDC will determine the level of security required and will be responsible for establishing a Security Requirements Check List (SRCL). The Contracting Authority will communicate such requirements to Bidders at Stage 2.

Bidders are reminded to obtain the required security clearance promptly. Any delay in the award of a contract to allow the successful Bidder time to obtain the required clearance will be at the discretion of the Contracting Authority.

For additional information on security requirements, Bidders should refer to the Industrial Security Program - visit the website: <http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>.

6.2 Financial Capability

SACC Manual clause A9033T (2012-07-16), Financial Capability

6.3 Controlled Goods Program - Bid

SACC Manual clause A9130T (2014-11-27), Controlled Goods Program

PART 7 - RESULTING CONTRACT CLAUSES

The instructions, clauses and conditions identified below, are provided as an example of the standard terms and conditions that could form part of any resulting Contract and do not represent a complete list. PWGSC may update, add or delete, as applicable, the standard terms and conditions contained herein.

1. Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex _____.

1.1 Work Authorization

Despite any other condition of the Contract, the Contractor is only authorized to perform the Work required to complete _____ of the Contract _____ at a cost not to exceed \$_____. Upon completion of _____, the Work will be reviewed before the Contractor is authorized to commence any Work for _____. Depending on the results of the review and evaluation of the Work, Canada will decide at its discretion whether to continue with the Work.

If Canada decides to continue with _____, the Contracting Authority will advise the Contractor in writing to commence work on _____. The Contractor must immediately comply with the notice.

If Canada decides not to proceed with _____, the Contracting Authority will advise the Contractor in writing of the decision and the Contract will be considered completed at no further costs to Canada. In no event will the Contractor be paid for any cost incurred for unauthorized work.

2. 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) found at: <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual> issued by PWGSC.

2.1 General Conditions

2040 (2016-04-04), General Conditions - Research & Development, apply to and form part of the Contract.

2.2 Supplemental General Conditions

The following supplemental general conditions apply to and form part of the Contract (*TBD for each individual contract*) :

4001 (2015-04-01), Hardware Purchase, Lease and Maintenance

4002 (2010-08-16), Software Development or Modification Services

4003 (2010-08-16), Licensed Software

4004 (2013-04-25), Maintenance and Support Services for Licensed Software

4008 (2008-12-12), Personal Information

3. Security Requirement

The following security requirements (SRCL and related clauses) apply to and form part of the Contract.

To Be Determined (TBD) or no security requirement applies.

4. Term of Contract

The Work is to be performed during the period *TBD* at the time of negotiations.

5. Comprehensive Land Claim Agreements (CLCAs)

TBD at each individual contract, as detailed in Part 1 of the CFP.

6. Authorities

6.1 Contracting Authority

The Contracting Authority for the Contract is:

TBD for each individual contract

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

6.2 Technical Authority

The Technical Authority for the Contract is:

TBD for each individual contract

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

6.3 Procurement Authority

The Procurement Authority for the Contract is:

TBD for each individual contract

The Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the Procurement Authority however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

6.4 Contractor's Representative

TBD for each individual contract

7. Proactive Disclosure of Contracts with Former Public Servants

SACC Manual Clause A3025C (2013-03-21)

8. Payment

8.1 Basis of Payment – Firm Price

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price, as specified in Annex TBD for a cost of \$ TBD . Customs duties are included and Applicable Taxes are extra, if applicable.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work.

-OR-

8.1 Basis of Payment - Ceiling Price

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the Basis of Payment in Annex TBD , to a ceiling price of \$TBD.

Customs duties, and excise taxes are included and Applicable Taxes are extra, if applicable.

The ceiling price is subject to downward adjustment so as not to exceed the actual costs reasonably incurred in the performance of the Work and computed in accordance with the Basis of Payment.

-OR-

8.1 Basis of Payment –Limitation of Expenditure

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the Basis of Payment in Annex TBD,

to a limitation of expenditure of \$TBD. Customs duties are included and Applicable Taxes are extra.

8.2 Limitation of Price

SACC Manual Clause C6000C (2011-05-16), Limitation of Price

8.3 Method of Payment

8.3.1 Progress Payments (for Ceiling Price Basis and Limitation of Expenditure Basis of Payments)

1. Canada will make progress payments in accordance with the payment provisions of the Contract, no more than once a month, for cost incurred in the performance of the Work up to TBD percent of the amount claimed and approved by Canada if:

- a) an accurate and complete claim for payment using form PWGSC-TPSGC 1111 (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>), Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b) the amount claimed is in accordance with the Basis of payment;
- c) the total amount for all progress payments paid by Canada does not exceed TBD percent of the total amount to be paid under the Contract;
- d) all certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives.

2. The balance of the amount payable will be paid in accordance with the payment provisions of the Contract upon completion and delivery of all work required under the Contract if the Work has been accepted by Canada and a final claim for the payment is submitted.

8.3 .1 Milestone Payments (for Firm Price Basis of Payment)

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in Annex TBD and the payment provisions of the Contract if:

- a) an accurate and complete claim for payment using form PWGSC-TPSGC 1111 (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>), Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b) all the certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives;
- c) all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

8.4 SACC Manual Clauses

A9117C (2007-11-30), T1204 - Direct Request by Customer Department
C0305C (2014-06-26), Cost Submission – Limitation of Expenditure or Ceiling Price
C4005C (2014-06-26), Travel and Living Expenses - National Joint Council Travel Directive

8.5 Discretionary Audit

SACC Manual Clause C0101C (2010-01-11), Discretionary Audit - Non-commercial Goods and/or Services

-OR-

SACC Manual Clause C0102C (2010-01-11), Discretionary Audit - Canadian Universities and Colleges

-OR-

SACC Manual Clause C0705C (2010-01-11), Discretionary Audit

8.6 Time Verification

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

9. Invoicing Instructions

1. The Contractor must submit a claim for progress payment using form PWGSC-TPSGC 1111 (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>), Claim for Progress Payment.

Each claim must show:

- a) all information required on form PWGSC-TPSGC 1111;
- b) all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;
- c) a list of all expenses;
- d) the description and value of the milestone claimed as detailed in the Contract.

Each claim must be supported by:

- a) a copy of time sheets to support the time claimed;
- b) a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses;
- c) a copy of the monthly progress report.

2. Applicable Taxes must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no Applicable Taxes payable as it was claimed and payable under the previous claims for progress payments.

3. The Contractor must prepare and certify an original claim on Form PWGSC-TPSGC 1111, and forward it to the Contracting Authority for certification in an electronic format to the electronic mail address identified under section entitled "Authorities" of the Contract. Portable Document Format (.pdf) format is acceptable. The Contracting Authority will then forward the certified claim, in an electronic format, to the Technical Authority for appropriate certification after inspection and acceptance of the Work takes place, and onward submission to the Payment Office for the remaining certification and payment.

4. The Contractor must not submit claims until all work identified in this claim is completed.

10. Certifications

10.1 Compliance

Compliance with the certifications (attestations) and related documentation provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the entire contract period. If the Contractor does not comply with any certification, provide the related documentation or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract.

10.2 Federal Contractors Program for Employment Equity - Default by the Contractor

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

10.3 SACC Manual Clauses

A3060C (2008-05-12), Canadian Content Certification

11. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in *(to be inserted at contract award)*.

12. 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 _____;
- c) the general conditions _____;
- d) Annex __, Statement of Work;
- e) Annex __, Basis of Payment;
- f) Annex __, Security Requirements Check List;
- g) Annex __, Insurance – Specific Requirements;
- h) the Contractor's proposal dated _____.

13. Foreign Nationals (Canadian Contractor *OR* Foreign Contractor)

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

OR

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

14. Insurance

SACC Manual clause G1005C (2016-01-28), Insurance – No Specific Requirement

OR

14. Insurance – Specific Requirements

The Contractor must comply with the insurance requirements specified in Annex _____. 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.

15. Controlled Goods Program

15.1 SACC Manual clause A9131C (2014-11-27), Controlled Goods Program - Contract

15.2 SACC Manual clause B4060C (2011-05-16), Controlled Goods

16. Canadian Forces Site Regulations

The Contractor must comply with all standing orders or other regulations, instructions and directives in force on the site where the Work is performed.

17. Joint Venture

- a) The Contractor confirms that the name of the joint venture is _____ and that it is comprised of the following members: *[list all the joint venture members named in the Contractor's original bid]*.
- b) With respect to the relationship among the members of the joint venture Contractor, each member agrees, represents and warrants (as applicable) that:
 - i. _____ has been appointed as the "representative member" of the joint venture Contractor and has fully authority to act as agent for each member regarding all matters relating to the Contract;
 - ii. by giving notice to the representative member, Canada will be considered to have given notice to all the members of the joint venture Contractor; and
 - iii. all payments made by Canada to the representative member will act as a release by all the members.
- c) All the members agree that Canada may terminate the Contract in its discretion if there is a dispute among the members that, in Canada's opinion, affects the performance of the Work in any way.
- d) All the members are jointly and severally or solitarily liable for the performance of the entire Contract.
- e) The Contractor acknowledges that any change in the membership of the joint venture (i.e., a change in the number of members or the substitution of another legal entity for an existing member) constitutes an assignment and is subject to the assignment provisions of the General Conditions.
- f) The Contractor acknowledges that all security and controlled goods requirements in the Contract, if any, apply to each member of the joint venture Contractor.

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

Annex A - Project Types and Parameters

Project Types:

The types of projects that will be considered for this CFP are:

- Studies;
- Concepts;
- Research and Development ;
- Technology Demonstrations; and
- Technology Pilots.

Each project type, except studies, covers a technology readiness level (TRL) range. A TRL is a measure that evaluates the maturity of evolving technology – which include, for example, devices, materials and software (refer to Annex I).

Studies

Studies are evidence-based examinations or analyses that address known defence, security, or safety issues, define problems or propose options that require investigation. Studies can provide operational research tools and methods, including risk, capability and foresight analyses, or road-mapping to define operational needs and/or aid in prioritizing investment decisions. Studies can vary considerably in scale and complexity. Studies analyze key issues with rigour but the scope of the analysis is managed so as to be both feasible and attainable with limited time-frames and resources (including funding). Examples include conducting scoping studies or developing emergency response scenarios that help define needs.

Concepts

Concepts provide a more in-depth analysis of the issues and solution options than studies. Typically, these include an analysis of problems as well as potential solutions taking into account technological, operational, environmental, policy, governance, and regulatory aspects where applicable. Concepts usually include a comprehensive environmental scan that covers the scientific, technological and operational landscapes to ensure the analysis is up-to-date. Often there is broad consultation with a variety of Subject Matter Experts (SMEs).

Research and Development (R&D)

R&D projects involve applied research in scientific or technological fields that may generate new knowledge or awareness while addressing user-defined capability gaps in critical areas. R&D projects include analytical research, laboratory studies and experiments that mature earlier findings. R&D projects can also validate analytical predictions of existing S&T or enable 'proof-of-concept' validation.

Solicitation No. - N° de l'invitation
W7714-17DRDC/B
Client Ref. No. - N° de réf. du client
W7714-17DRDC

Amd. No. - N° de la modif.
File No. - N° du dossier
062sv.W7714-17DRDC

Buyer ID - Id de l'acheteur
062sv
CCC No./N° CCC - FMS No./N° VME

Technology Demonstrations

Technology demonstrations are projects that advance the maturity of a technology, application or capability by embedding S&T in an operational context. These projects foster collaboration between operational and S&T communities. They integrate basic technological elements that can be tested in a “simulated” or realistic environment. Technology demonstrations test the applicability of a TRL solution to address a capability gap. This project type usually does not transition directly into implementation or operationalization as additional development may still be required.

Technology Pilots

Technology pilots, which are sometimes referred to as feasibility studies or experimental trials, are projects that involve the implementation of a known solution on a small-scale to evaluate its full impact, strengths and weaknesses prior to full implementation. This project type allows for the collection of information to adequately learn how the solution might work in practice.

Staged Projects:

This CFP allows for Staged Projects. Such projects include two distinct proposals and must demonstrate progression of technological maturity (i.e. TRL) from one project type (Stage 1) to the subsequent project type (Stage 2). The Bidder must identify the Go/No-Go considerations to transition from one Stage to the second Stage of the Staged Project. Go/No-Go clauses will be included in any resulting contract that spans project types, and it will be Canada's decision whether to proceed to the next project.

When submitting a Staged Project, each proposal must be distinctive. Proposals should be treated as separate work packages and each will be evaluated on its own merits. An evaluator must be able to discern the work described in one proposal from beginning to end, without relying on information from a second proposal submitted as part of the Staged Project.

The financial proposal for a Staged Project should not exceed the sum of amounts listed in the project parameters for the selected project types, including Applicable Taxes. The combined duration of projects cannot exceed 36 months, regardless of the project parameters identified in Table A.

Canada may award one or more or no contracts for each and/or all of the Stages.

Example:

Bidder ABC submits a proposal and identifies it as a Staged Project consisting of the following:

Stage I:

Project Type: Concept

DRDC Funding (maximum): \$250K

Duration (maximum 24 months): X months (to be determined by the Bidder)

Submits separate responses to the point rated criteria.

Stage II :

Project Type: R&D

DRDC Funding(maximum): \$1M

Duration (maximum 36 months): X months (to be determined by the Bidder)

Submits separate responses to the point rated criteria.

Total DRDC funding that can be requested: \$1.25M

Total duration not to exceed: 36 months

Project Parameters

The table below identifies project parameters for each project type. Proposals should not exceed the parameters identified for funding, and must not exceed the parameters identified for project duration, including for Staged Projects.

Table A: Project Parameters

Project Type	TRL Range	Project Duration (from initiation to close-out)	Funding Range
Studies	Not applicable	≤ 12 months	≤ \$125K
Concepts	1-3	≤ 24 months	≤ \$250K
R&D	3-4	≤ 36 months	≤ \$1.0M
Technology Demonstrations	5-7	≤ 36 months	≤ \$1.5M
Technology Pilots	7-9	≤ 36 months	≤ \$2.0M

Annex B – S&T Challenges

For this CFP, the following S&T Challenges have been identified:

- a) Stream A: Public Safety and Security : Smart Communities and Systems
- b) Stream B: Support to Canada's Defence Policy "Strong, Secure, Engaged"

Stream A – Public Safety and Security

Smart Communities and Systems

The introduction of smart technologies (artificial intelligence, Internet of Things (IoT), automated learning systems, robotics, data analytics, broadband communications, and connected /driverless vehicles) into public safety and security systems and into urban, rural, or remote/isolated communities is complex, occurring fast, and not happening in a particularly systematic way. The convergence of these technologies coupled with multiple dynamic factors introduced by an ever changing threat, hazard and risk landscape presents significant challenges for public safety and security. Keeping pace with these changes is necessary for society to exploit the benefits of the new technologies while countering the vulnerabilities these same technologies are introducing or exacerbating. The core challenge is to optimize the utility of these inexorable technology advancements in a manner that is coherent, safe, secure, and preserves the privacy of individuals in deployed safety/security systems.

For this CFP, in Stream A, DRDC is looking for novel ideas and innovative solutions to S&T Challenges under the theme of smart communities and systems within the following five broad categories: Border, Law Enforcement and Intelligence; Privacy and Security; Emergency and Crisis Management; Enabling Resilient Communities and Emerging Threats and Hazards.

1. **Problem:** Law enforcement, national security and intelligence agencies need the tools to exploit the increasing amount of information from social media, the IoT and other internet or surveillance sources, while at the same time denying criminal use of data and understanding and navigating the balance between security and privacy and other societal expectations.

S&T Challenge: Develop analytical tools that use artificial intelligence, machine learning or advanced/predictive data analytics that exploit social media, the IoT or other internet or surveillance sources such as cybercrime or crime data as the basis for surveillance and/or interdiction technologies, real-time surveillance of critical infrastructure or advanced warning of threats and hazards (e.g. chemical, biological, radiological nuclear, and explosives (CBRNE), natural hazards). All proposals must address privacy concerns (e.g. privacy-preserving technologies or discussions of societal expectations) and the avoidance of algorithmic bias.

2. **Problem:** The generation of intelligence is fueled by the exchange of large quantities of data. This inherently increases the risk of infringing on the privacy rights of individuals. While data privacy and anonymization are not new concepts, the disparate nature of current research, especially within the Canadian context, is insufficient to establish useful frameworks that satisfy privacy concerns against the essential value derived from data analytics.

S&T Challenge: Survey and/or advance research in anonymization techniques and theory to identify guidelines and added safeguards allowing entities, like defence and security agencies, to support ongoing data sharing while addressing requirements from privacy experts and improving public understanding and perception of data analytics.
3. **Problem:** As modern information systems are integrated with or replace older operational systems, critical infrastructure is vulnerable to cyber-attacks through new attack surfaces.

S&T Challenge: Develop and demonstrate prototype systems that enhance early detection and prevention of cyber-attacks (such as ransomware), resilience to cyber-attacks, privacy or information protection in the telecommunications, transportation, and/or health sectors.
4. **Problem:** The physical security of critical infrastructure, government facilities, systems and other controlled sites, demands enhanced capacity to prevent, detect and reduce risks posed by individuals with malicious intent, or explosives as a vector of choice for threat actors.

S&T Challenge: Strengthen access control systems for managing/controlling access, including that of individuals, while addressing privacy concerns, to:

 - a. Chemical, biological, radiological and nuclear, and explosives precursor material; or
 - b. government facilities or systems and/or other controlled sites.
5. **Problem:** As borne out in world events, explosives continue to be a vector of choice for threat actors and a challenge to operators. Traditional and non-traditional CB agents are emerging enablers for threat actors.

S&T Challenge:

 - a) Examine the viability of new and emerging agents in mixed biological explosives events; or
 - b) Examine the toxicity of new and emerging agents in mixed chemical explosives events.
6. **Problem:** New genetic engineering technologies are generating unknown threats and vulnerabilities that need to be assessed and countered.

S&T Challenge: Develop capabilities to counter emerging infectious disease risk, with an emphasis on the use of synthetic biology to target microorganisms modified using synthetic biology.

7. **Problem:** There is an increasing number of people and volume of goods crossing or in transit at border ports of entry coupled with expectations of reduced processing time and cost without compromising Canadian border integrity.

S&T Challenge: Enhance the secure and efficient flow of people and/or goods at border ports of entry or in transit to the border (i.e., transportation pathways), with an emphasis on:

- a. the utilization of artificial intelligence and/or automated systems to assist in the processing (i.e., identification, detection, tracking, etc.) of people and/or goods; or
- b. enhancing the detection and interception of shielded Special Nuclear Material and RN materials, narcotics, or other toxic substances; *or*
- c. the harmonization of Canada-United States approaches to screening inbound cargos for chemical, biological, radiological and nuclear, and explosive threats.

8. **Problem:** The capacity to perform surveillance and interdiction of border regions between ports of entry must adapt to a changing security landscape. Examples of factors challenging the border security system include the recent increase in asylum claimants at the land border, ongoing concerns over returning foreign fighters, perennial exploitation by organized crime, and increasing traffic in Arctic/northern waters.

S&T Challenge: Improve surveillance, detection and interception capabilities for:

- a. individuals crossing the Canada / United States land border between official ports of entry; *or*
- b. unidentified/unknown surface targets in Canadian maritime border regions, including the North/Arctic.

9. **Problem:** New extremely toxic substances including opioids, infectious agents, and blood borne pathogens, and bioterrorism agents pose serious risks to the health of first responders and border agents. To mitigate this risk, they must be able to rapidly identify the presence of the substances and apply suitable protection strategies to ensure service delivery effectiveness.

S&T Challenge: Define and develop models, devices, applications and technology solutions to prepare and protect operators responding to emergency situations in which the subject may be using or have possession of toxic substances.

10. **Problem:** Recent incidents internationally have demonstrated the vulnerability of public events that bring together large crowds (indoor and outdoor) or important delegates to physically bounded spaces. Though this is a long-standing operational issue, there is a need to bring innovation from new technologies and analytics to the physical security of secure spaces and controlled venues.

S&T Challenge: Develop new sensors and analytical tools that exploit the full range of available information to secure perimeters and sites. Examples include video processing for behaviour or biometric detection, artificial intelligence (AI) -based techniques that exploit information sources such as social media, and the Internet-of-Things (or other Smart City sources) as well as local surveillance information.

11. **Problem:** When operators respond to a call, they currently lack adequate means to leverage all available information on the people involved, the location, other responders or resources available, etc. which may limit their ability to gain full situational awareness and make optimal decisions on, for example, routing to the call, patient treatment strategies, or other required response actions. Enhanced capability to sift through and process large amounts of data in order to extract relevant information could improve the speed and effectiveness of their response.

S&T Challenge: Data science solutions for the definition and development of on-site/en-route decision aides, leveraging real-time Internet of Things (IoT), artificial intelligence, and machine learning, to detect, characterize, interpret and fuse information from multiple sensors, sources and data sets, and provide appropriate decision support, to improve operator decision-making and effectiveness.

12. **Problem:** There is currently no coordinated resource allocation tools available between operator agencies, both for personnel and equipment. Such coordination, supported by technology and automated to the extent possible, would allow efficient allocation of sufficient resources to a large-scale event, particularly over an extended time-frame.

S&T Challenge: Define and develop models, devices, applications, and technology, or evidence that supports the development of standards to better position responders (e.g. police, fire and paramedic) and other community resources to plan for, deploy, and sustain the effective utilization of scarce resources from multiple agencies during resource critical events.

13. **Problem:** The paramedic profession lacks the ability to define the Canadian paramedic experience in terms of descriptive statistics and performance measures around paramedic incidents, paramedic patients, paramedic services, paramedic capabilities and communities that paramedics serve, making it difficult to ensure paramedics are adequately supported to accomplish their role.

S&T Challenge: Develop frameworks, common taxonomy and designs, or evidence that supports the development of standards for a national level Canadian Paramedic Information System for data and information related to paramedic incidents, patients, services, capabilities and communities. These frameworks, standards, taxonomy and designs must be of a non-propriety and/or open source nature.

14. **Problem:** Emergency response and recovery planning often relies on a static view of information and requirements derived from dated top-down emergency management principles, which often fail to properly account for evolving local conditions and are ill-equipped to accommodate dynamic changes in the needs on the ground.

S&T Challenge: Explore applications of big data (from real-time Internet of Things, social media content before, during, and after crises, etc.) and advanced analytics (data mining, machine learning, artificial intelligence, etc.) to reveal the correlations between crisis outcomes and community characteristics which will help anticipate future requirements and optimize resource allocation and coordination during emergency response and recovery.

15. **Problem:** Insufficient multi-agency capability to access, process, and share information as well as assessment methods and tools to identify specific gender, age, special needs, health, cultural, social and economic related vulnerabilities and/or strengths in order to develop multi-agency strategies for prevention, intervention, rehabilitation, emergency assistance, and/or recovery.

S&T Challenge: Conduct case study research and/or community pilots that integrate technological solutions (that enable remote presence, for example) with social science/participatory research (i.e., to identify factors/dynamics related to families, peer networks, gender, trauma, and mental health) in order to support the development of multi-agency approaches to reach at-risk population segments (youth, indigenous, etc.) through programs for prevention, intervention, rehabilitation, emergency assistance, or recovery.

16. **Problem:** Insufficient Return on Investment (RoI) evidence to support economic justification and political and public buy-in for investments in disaster risk reduction measures such mitigation, climate adaptation, resilience building and smart recovery.

S&T Challenge: Develop forensic (i.e. investigating past disasters) and scalable all-hazards risk modelling approaches to calculating the economic, cultural and social losses from disasters, in order to validate the cost-effectiveness of disaster mitigation, resilience building, climate adaptation, and smart recovery/building-back-better for Canadian communities and regions, in alignment with the Sendai Framework for Disaster Risk Reduction (DRR).

Stream B: Support to Canada's Defence Policy "Strong, Secured, Engaged"
S&T Challenges

Support to CANSOFCOM

17. S&T projects that investigate and generate novel solutions providing the ability to protect deployed soldiers against hostile use of mini or small Unmanned Aerial Vehicles (UAV) (also known as Remotely Piloted Aircrafts (RPA)). Potential hostile use of UAVs includes, but is not limited to, providing observation and reconnaissance capability, directing fire, dropping ordnance, releasing chemical agents, or delivering Improvised Explosive Devices.

Current counter-UAV systems based on a detect-recognise-identify-neutralise sequence tend to be large, expensive and operator intensive. This Challenge seeks innovative solutions that must include a mechanism to deny access by a drone to a 1000 metre bubble and should include consideration of the following desirable factors:

- a) Is easily transportable from site to site;
- b) Requires minimal operator intervention or even participation;
- c) Has negligible (or at least minimal) electro-magnetic collateral effect on friendly systems;
- d) Is able to be powered from 120/240 volts, 60/50Hertz generator power, or from 12/24 volts vehicle power; and/or
- e) Is designed to evolve with the threat.

Furthermore, for this S&T challenge, recovery of the drone itself is not a desirable effect, and no restrictions are imposed on the nature of the system's effector.

18. S&T projects that investigate and generate novel solutions for remote sensing based on soldier-portable Unmanned Aerial Vehicles (UAV) (also known as Remotely Piloted Aircrafts (RPA)) to provide:
- a) The ability to detect, classify and identify chemical agents of concern; and/or
 - b) The ability to detect, classify and identify radiological and nuclear agents of concern.

This includes, but is not limited to, consideration of:

- a) Sensor performance not negatively impacted by the operation of the UAV platform; and/or
- b) Near real-time data transfer from the sensors to the field operators.
- c) Combined sensors and UAV platform weight not exceeding a 600 grams payload constraint.

For this Challenge, no restrictions are imposed on the families of chemical agents or radiological and nuclear agents to be included. Furthermore, no restrictions are imposed on the types of sensor to be considered.

19. S&T projects that investigate and generate novel solutions providing the capability to stop a large vessel of interest (i.e. vessels too large to be stopped by currently available ship-stopping technologies such as barriers or entanglement devices) underway at sea with minimal (or no) collateral damage.
20. S&T projects based on image intensification tube technology that improve the current capabilities of soldier-portable night vision goggle systems to extend the operator situational awareness beyond the existing 40x40 degree range. This includes, but is not limited to, consideration of:
 - a) Increased situational awareness through display of mission critical data;
 - b) ITAR free systems;
 - c) Compatibility with current 18X 30 millimeter inverting tubes;
 - d) Exploration of advances in optical designs including F number<1.2; and/or
 - e) Reduced mass/volume compared to contemporary systems, without compromising the performance currently available.

Support to the ADSA S&T Program

21. S&T projects, analyses, methodologies or tools that investigate sensor mixes concepts involving the complementarities and interactions between disparate sensors within each, and across, the three physical domains identified by ADSA: air, maritime surface and maritime sub-surface approaches to Canada, including Canada's Arctic region. This includes, but is not limited to, consideration of:
 - a) Identification, optimization and selection standard of sensor mixes and their placements on space, air, land, surface and sub-surface platforms across all of the identified domains (air, maritime surface and maritime sub-surface);
 - b) Concepts of employment for layered surveillance systems and future joint strategic surveillance architectures; and/or
 - c) Threat scenario-based assessments of sensor complementarities and surveillance systems resilience to determine the appropriate sensor mixes that deliver effective, responsive, resilient and affordable surveillance for future acquisitions.

Note: the following are excluded from the scope of the S&T challenge above (#21):

- Data fusion, integration and higher level manipulation including displays and Command and Control; and
- Consideration of land, space and cyber threats.

Solicitation No. - N° de l'invitation
W7714-17DRDC/B
Client Ref. No. - N° de réf. du client
W7714-17DRDC

Amd. No. - N° de la modif.
File No. - N° du dossier
062sv.W7714-17DRDC

Buyer ID - Id de l'acheteur
062sv
CCC No./N° CCC - FMS No./N° VME

Support to ADM (IE):

22. S&T projects that identify and assess innovative solutions and technologies for energy efficiencies including, but not limited to, future concepts around non-conventional energy, and sources, low-carbon and green buildings.

Annex C – Evaluation Criteria

#	Applicable Stream	Evaluation Criteria & Demonstration of Criteria (Bidder to provide)		Evaluation Grid
		Evaluation Criteria	Supporting Information	Assessment
		Mandatory Criteria (MC)	Unless otherwise stated below, the following information must be provided as a minimum to demonstrate the criteria and enable Canada's assessment of the criteria.	Schema (Pass or Fail)
MC-1	A, B	One S&T Challenge of Annex B	Supporting Information	
		The proposal must identify one primary S&T Challenge listed in Annex B that the proposal is addressing. If the proposed project aims to / or incidentally addresses more than one S&T Challenge of Annex B, the "secondary S&T Challenges can be addressed in other sections, including in MC-4, at the Bidder's discretion.	Identify the Primary S&T Challenge in the online tool (via radio button).	Proposal identifies one primary S&T Challenge that is listed Annex B.
MC-2	A, B	Project Type Duration	Supporting Information	
		The proposal must not exceed a project duration period of 36 months. If two project types are submitted as a Staged Project, the maximum collective duration period is 36 months.	Show the duration in the work plan.	The proposal meets the criteria.
MC-3	A, B	Financial Support Disclosure	Supporting Information	
		The proposal must disclose all financial support received (if any) and to be received (if any) from all Canadian federal government organizations	List all financial support, and indicate the following information for each:	The proposal provides all required information.

		<p>and programs (including DRDC) for the proposed project.</p> <p>Bidders are advised that this criterion (this support) is separate from the Program funds requested from DRDC for this CFP.</p>	<ul style="list-style-type: none"> Name of Canadian federal government organization and program; Amount; The Fiscal Year of receipt of the funding received or to be received. <p>If financial support is not applicable, indicate "nil".</p>	
MC-4	A, B	Alignment with Primary S&T Challenge	Supporting Information	
		Each proposed project output must address, and align with, the primary S&T Challenge.	<p>In a maximum of 750 words, provide the following information:</p> <ol style="list-style-type: none"> Scope and objectives of the proposal. Identification of the project output in relation to the primary S&T Challenge. 	The proposal clearly articulates how the project output addresses and aligns with the primary S&T Challenge.
MC-5	A	Partnerships – for *Stream A only*	Supporting Information	
		<ol style="list-style-type: none"> Each proposal must have two or more project partners, including the Bidder. The partners must meet the requirements as set out in Part 3.1 Who May Apply. <p>Additional Canadian or international partners in the public or private sector are permitted as long as the requirements of Part 3.1 are satisfied.</p>	<p>Submit a complete Partnership Signature Form as set out in Annex G. The Bidders as well as all entities/organizations identified as partners in the proposal must provide:</p> <ul style="list-style-type: none"> Signature of the bidder and each partner; <p>Submission of a complete Partnership Signature Form as set out in Annex G. The Bidders as well as all entities/organizations identified as partners in a proposal must provide a signature, and at a minimum, be at a level:</p> <ul style="list-style-type: none"> of Director General or higher for the federal government; and 	Proposal meets the criterion and contains the Partnership Signature Form completed as required under "Supporting Information".

			<ul style="list-style-type: none"> acceptable for a provincial, territorial, municipal government, academic institution, or a private industry to authorize the financial and operational commitment of its organization for the proposal. 	
--	--	--	---	--

		Evaluation Criteria & Demonstration of Criteria (Bidder to provide)	Evaluation Grid	
		Evaluation Criteria	Supporting Information	Assessment & Proposal Rating
		Point-Rated Criteria (PR)	The information below should or must be provided, as stated below, to demonstrate the criteria and enable Canada's assessment of the criteria.	Evaluation Schema & Possible Points
		Stream A and B		
PR-1		Scientific and/or Technical Merit of the proposal including: the Feasibility and Approach, Scientific and/or Technical Merit, Novelty and Innovation, and Impact		Maximum 90 points possible. Minimum 55 points required.
PR-1 A	Feasibility and Approach	In a maximum of 1000 words, the proposal should demonstrate all sub-criteria of Feasibility and Approach with a degree of information sufficient to enable Canada's assessment of the proposal against the criterion and the Evaluation Schema.	<ol style="list-style-type: none"> i. The proposal provides little or no evidence of any of the three elements of the sub-criteria. 0 points ii. The proposal presents some of the information required, but lacks the clarity to permit any concrete analysis and/or no more than one element is clearly articulated. 8 points iii. The proposal clearly articulates the feasibility and approach for two of three elements and the information permits concrete analysis. 14 points. iv. The proposal clearly articulates and demonstrates the feasibility and approach of all three sub-criteria. 20 points 	
	<ol style="list-style-type: none"> 1. The approach is feasible 2. The technical solution or the method is feasible 3. The proposed solution is applicable in Canada 			

PR-1 B	Scientific and/or Technical Merit of the Proposal	Supporting Information	
	<p>1. The proposed project is supported by sound and logical scientific and/or technical evidence.</p> <p>2. The scientific and/or technical concepts are based on state-of-the art thinking and practice in the relevant methodological area.</p>	<p>In a maximum of 1000 words, the proposal should demonstrate all sub-criteria with a degree of information sufficient to enable Canada's assessment of the proposal against the sub-criteria criterion and the Evaluation Schema.</p>	<p>i. The proposal provides little or no evidence of any of the three sub-criteria. 0 points</p> <p>ii. The proposal presents some of the information addressing the sub-criteria, but lacks the clarity to permit any concrete analysis. Two or less sub-criteria are clearly articulated. 12 points.</p> <p>iii. The proposal clearly articulates the scientific and/or technical merit for two out of the three sub-criteria. The information provided is clear and permits concrete analysis. 21 points.</p>
	<p>3. The proposal constitutes one of the following scenarios:</p> <p>a. One or more factors of GBA+ are relevant to the project, and at least one factor is considered in the proposal.</p> <p>b. GBA+ is considered, however, there are no relevant factors</p> <p>c. There are one or more GBA+ factors relevant to the project, however they are not considered in the proposal</p>	<p>The proposal should:</p> <p>a. identify the applicable scenario, <i>and</i></p> <p>b1. for scenario a, identify all relevant factors for this project and explain how at least one factor is considered in the proposal*</p> <p>b2. For scenario b, explain the basis for there being no relevant factors</p> <p>b3. For scenario c, identify all relevant factors for this project explain why GBA+ was not considered.</p> <p>*Examples of responses;</p> <p>a) The impact of the GBA+ variables on the result of the project.</p> <p>b) The Explanation on how the GBA+ factors are incorporated in a project.</p>	<p>iv. The proposal clearly articulates the scientific and/or technical merit of all three sub-criteria. The information is clear; and permits concrete analysis. 30 points</p>

	<p>*GBA+ as defined by the Treasury Board Secretariat of Canada: https://www.tbs-sct.gc.ca/hgw-cgf/oversight-surveillance/tbs-pct/gba-oacs-eng.asp. It is encouraged to also refer to the Status of Women Canada website: http://www.swc-cfc.gc.ca/gba-acs/index-en.html.</p>		
--	--	--	--

PR-1 C	Novel and Innovative	Supporting Information	
	<p>The proposal is novel* and innovative** over existing solutions.</p> <ol style="list-style-type: none"> 1. There will be new knowledge, science, and/or technology integrated into the work. These include novel concepts, approaches or methodologies, tools, or technologies. 2. The proposed work can lead to creating new knowledge and/or technology enhancement over the current state-of-the-art and existing solutions (“game changer”). 	<p>In a maximum of 1000 words, the proposal should demonstrate all sub-criteria for “novel and innovative” with a degree of information sufficient to enable Canada’s assessment of the proposal against the criterion and the Evaluation Schema.</p>	<ol style="list-style-type: none"> i. The proposal provides little or no evidence of any of the two sub-criteria. 0 points ii. The proposal presents some of the information addressing the sub-criteria, but lacks the clarity to permit any concrete analysis. 10 points. iii. The proposal is novel and innovative. There is sufficient information that is clear and permits concrete analysis of all elements. 20 points

	<p>*Novel:</p> <ul style="list-style-type: none"> • An original idea. <p>**Innovative:</p> <ul style="list-style-type: none"> • A new technology or new process that is not currently available in the marketplace. • New knowledge advancing knowledge in social science. • Significant modifications to the application of existing technologies/process that are applied in a setting or condition for which current applications are not possible or feasible. • An improvement to an existing technology/process that represents a significant improvement in functionality, cost or performance of goods and services that are considered state-of-the-art or the current industry best practice. 		
PR-1 D	Impact	Supporting Information	
	<p>The proposed solution should impact the field of the Primary S&T Challenge through the following sub-criteria:</p> <ol style="list-style-type: none"> 1) The proposed solution describes a positive change or result for the end user by addressing a gap or critical barrier in the S&T Challenge. 2) The proposed solution describes the positive change to the concepts, methods or technologies that drive the field of the S&T Challenge. 	<p>In a maximum of 1000 words, the proposal should demonstrate all sub-criteria with a degree of information sufficient to enable Canada's assessment of the proposal against the criterion and the Evaluation Schema.</p>	<ol style="list-style-type: none"> i. The proposal provides little or no evidence of any of the sub-criteria. 0 points ii. The proposal presents some of the information required, but lacks the clarity to permit a full analysis. 10 points iii. The proposal clearly articulates all sub-criteria. There is a clear explanation of the positive Impact to the S&T Challenge. 20 points.

PR-2	Work Plan Work Plan, Cost, Risk and Mitigation Strategy	The information below should or must be provided, as stated below, to demonstrate the criteria and enable Canada's assessment of the criteria.	Maximum 50 points possible.
	The fields listed below, as set out in Annex D, are completed, the deliverables and milestones show measurable progress, and the work plan demonstrates completion of the project.		i. The proposal minimally addresses less than three of the Fields. 0 points ii. The proposal addresses in detail less than three Fields. The task deliverables are not clear; the work plan does not contain enough information to assess the criteria. 10 points iii. The proposal addresses several Fields, either fully or at a limited level and lacks detail to demonstrate the criteria. 15 points iv. The proposal addresses all Fields. The work plan provides a clear overview of the proposed project but does not show the inter-relationship between all Fields to confirm the criteria. 20 points v. The proposal clearly addresses and fully addresses all Fields. The work plan provides a clear overview of the proposed project and shows the inter-
A	Fields:		
	<ul style="list-style-type: none"> Task description 	Describe the work to be done	
	<ul style="list-style-type: none"> Task dates: <ul style="list-style-type: none"> start end 	Show month and year (MM/YY)	
	<ul style="list-style-type: none"> Task deliverable and/or output 	Describe each task deliverable and/or output	
	<ul style="list-style-type: none"> Lead for task delivery and/or performance 	Identify who (entity or person or both) is responsible for each task	
	<ul style="list-style-type: none"> Special procurement needs that may impact the project. Examples include controlled goods and security issues, restricted materials, IP licences. 	Identify each need/consideration and explain the potential impact of each one on the project.	
	<ul style="list-style-type: none"> Physical resource needs for the project, and, the accessibility. Examples include facilities and equipment. 	Identify physical resource needs for the project, and, the accessibility.	
	<ul style="list-style-type: none"> Sub-contracting needs to support the project. 	Identify sub-contracting needs, if any, to support the project.	

	<ul style="list-style-type: none"> Go/No Go decision points. 	<p>For decision points relative to the schedule, indicate the time(s) and/or event(s) in the schedule each point will occur.</p> <p>For decision points relative to the work progress, indicate the considerations in place for the project to end or to be adjusted throughout its lifecycle, including progress/milestone(s) completed or to be completed in order to proceed to the end of the project.</p>	relationship between all Fields to confirm the criteria. 25 points
PR-2 B	Work Plan - Cost Estimate	Supporting Information	
B-A	The cost estimate should be completed to contain the fields at B1 and B2 below.		<p>i. Minimal information provided and does not enable a basic assessment of the criteria. 0 points</p>
B-B	<p>The cost estimate is commensurate with the work, and specifically:</p> <p>a) is realistic for the technical approach offered;</p> <p>b) aligns with, and is reasonably relative to,</p> <ul style="list-style-type: none"> each labour category proposed per task; the number of labour hours proposed per task; the types and kinds of materials, equipment, costs and other associated items. <p>c) For each task for which travel and living is proposed, the travel and living costs are explained and reasonable.</p>	<p>The proposal should demonstrate all sub-criteria with a degree of information sufficient to enable Canada's assessment of the proposal against the criterion (B-A, B-B and B-1 and B-2) and the Evaluation Schema, and in addition explain all significant costs (i.e. over 30 percent of the project cost) (including in-kind values, if any).</p>	<p>ii. The proposal addresses some sub-criteria (which?) but lacks detail and does not enable assessment of the sub-criteria. 5 points</p> <p>iii. The proposal addresses most sub-criteria B with sufficient detail and enables assessment of the criteria. 10 points</p> <p>iv. The proposal addresses all sub-criteria B with in-depth detail and confirms the cost estimate is commensurate to the work. 15 points</p>

B1	Work Plan	Supporting Information	
	<ul style="list-style-type: none"> • Total (project) amount of direct costs for each of: <ul style="list-style-type: none"> ○ Canada's contribution; and ○ Co-investment's contribution • Total (project) amount of Indirect costs for each of: <ul style="list-style-type: none"> ○ Canada's contribution; and • Co-investment contribution Amount of all significant costs (i.e. over 30 percent of the project costs) • Total estimated budget/cost for the project 	Information for B1 should form part of the Submission Form at Annex D "Work Plan".	
B2	Detailed Budget Table	Supporting Information	
	The proposal includes a detailed budget table.	Information for B2 should form part of the Submission Form at Annex E "Detailed Budget Table".	
PR-2 C	Work Plan – Risks, and Mitigation	The information below should or must be provided, as stated below, to demonstrate the criteria and enable Canada's assessment of the criteria.	
	The proposal includes a risk mitigation strategy that identifies: <ul style="list-style-type: none"> • anticipated risks*, if any, for each task; 	Risks: <ul style="list-style-type: none"> • Explain the anticipated risks, if any, for each task. 	i. The risks and mitigation strategy are minimally defined and does not enable a basic assessment of the criterion. 0 points

	<ul style="list-style-type: none"> a sound risk mitigation plan for each risk. <p>*Examples of risk types include financial, schedule, scope, technical, IP issues, etc.</p>	<ul style="list-style-type: none"> For each risk identified, show <ul style="list-style-type: none"> the probability as high, medium or low; and, the impact as high, medium or low <p>If no risks identified, enter “n/a” in Annex D of the Submission Form.</p> <p>Mitigation:</p> <ul style="list-style-type: none"> For each risk identified, show the steps to be taken to lessen the impact of the risk. If no risks were identified, enter “n/a” in Annex D of the Submission Form. 	<ul style="list-style-type: none"> ii. The proposal identifies some of the risks and/or mitigation plan but may not consider sufficient risks/ and/or mitigation to complete the project. 4 points iii. The proposal identifies the risks and the mitigation plan is well defined. 7 points iv. The proposal is clear and demonstrates full consideration of anticipated risks and details a sound mitigation plan to complete the proposed project. 10 points
PR-3	Project Management Plan Project Team		Maximum 20 points possible
	<p>The combined experience and qualifications of the proposed project team* is</p> <ul style="list-style-type: none"> commensurate with both the complexity of the proposed project and the funding amount requested to manage the project; and sufficient to undertake the scientific and/or technical elements required by the proposed project 	<p>The Bidder must complete the information required in Annex F – “Project Manager and Key Project Team Members Experience” of the submission form.</p> <p>Provide sufficient detail to demonstrate the Project Team members meet the criteria and in particular to ascertain commensurability to enable Canada’s assessment of the proposal against the criterion and the Evaluation Schema.</p>	<ul style="list-style-type: none"> i. The proposed Project Team does not meet the criteria, or, there is insufficient detail to enable practical assessment against the criteria. 0 points ii. One or more members of the project team have demonstrated the criterion however, in aggregate, the project team does not meet the criterion or there is insufficient detail of each member to enable practical assessment against the criterion. 8 points

	*Project manager (or Principal Investigator for Studies and Concepts) and all key project team members		<p>iii. All members sufficiently meet the criteria. 14 points</p> <p>iv. The project manager significantly meets the criteria, and in aggregate, the team has extensive experience and highly relevant qualifications all relative to the criterion. 20 points</p>
PR-4	Transition/Exploitation Plan	Supporting Information	Maximum 20 points possible.
	The proposal includes a plan to transition and/or exploit the knowledge, science or technology that is developed through the proposed project. The transition plan should include, as a minimum, sub-criteria A, B, C and D below.	In a maximum of 1000 words, the proposal should demonstrate all sub-criteria with a degree of information sufficient to enable Canada's assessment of the proposal against the criterion and the Evaluation Schema.	<p>i. The transition plan does not demonstrate and/or provides significantly limited demonstration of consideration to additional research and/or technology exploitation. There is no information on how future work will be funded or exploited. 0 points</p>
	A) Steps that are beyond the scope of the proposal (the transition, exploitation and/or dissemination plan; for example, user validation trials, regulatory approvals, ongoing maintenance and licensing renewal, additional research, technology exploitation and/or commercialization).	The proposal should provide an overview explaining the criterion.	<p>ii. The transition plan provides limited demonstration of consideration being given to continuing and/or exploiting the resulting research and/or technology. There is insufficient information regarding intellectual property management. The plan is unclear on how additional research and/or technology will be funded or exploited. 8 points</p>
	B) Financing the next steps including how additional research, technology exploitation and/or commercialization are to be financed. This may include the	<p>The proposal should provide an overview explaining the criterion.</p> <p>In addition, the Bidder may provide support letters from stakeholders, who</p>	<p>iii. The transition plan demonstrates some consideration is given to continuing and/or exploiting the resulting research and/or technology. A plan appears to be in place for future financing to continue</p>

Solicitation No. - N° de l'invitation
W7714-17DRDC/B
 Client Ref. No. - N° de réf. du client
W7714-17DRDC

Amd. No. - N° de la modif.
 File No. - N° du dossier
062sv.W7714-17DRDC

Buyer ID - Id de l'acheteur
062sv
 CCC No./N° CCC - FMS No./N° VME

	intent to form strategic partnerships or alliances with other stakeholders.	are not named project partners, indicating their interest in the work. Support letters from named project partners will not be considered.	to develop and/or exploit the technology. Information is present regarding the intellectual property's dependencies and management. Some details are missing but overall the plan is clear and complete. 14 points
	C) Ultimate project result (desired final output), including the product (or knowledge), technology, device, method, process, systems, etc., that are expected to ultimately result from this project	The proposal should provide an overview explaining the criterion.	iv. The transition plan demonstrates that a clear and complete approach to continuing and/or exploiting the resulting research and/or technology. A plan for future financing to further develop and/or exploit the resulting research and/or technology is clear and complete. The information regarding intellectual property's dependencies and management is sufficiently detailed. 20 points
	D) Provide information on the intellectual property dependencies, as well as the disposition and management on foreground intellectual property.		

Annex D - Work Plan

Below is a template for the Work Plan, please fill in all columns except for the "Start Date" which is to be assumed as June 2018.

Task	Task Description	Start Date (MO/YR)	End Date (MO/YR)	Deliverable	Go/No-Go	Lead	Risks	Probability (H/M/L)*	Impact (H/M/L)	Mitigation
1		June 2018								
2										
3										
4										

***H/M/L: High/ Medium/ Low**

Solicitation No. - N° de l'invitation
W7714-17DRDC/B
Client Ref. No. - N° de réf. du client
W7714-17DRDC

Amd. No. - N° de la modif.
File No. - N° du dossier
062sv.W7714-17DRDC

Buyer ID - Id de l'acheteur
062sv
CCC No./N° CCC - FMS No./N° VME

Work Plan- continued.

Special Procurement Requirements	Physical Resource Needs	Sub-Contracting Needs	Direct cost Canada's Contribution	In-Direct cost Canada's Contribution	Direct cost Co-investment Contribution	In-Direct cost Co-investment Contribution	Explanation of significant costs	Total Estimated Budget/Cost

Annex E – Detailed Budget Table

Below is a template for the Detailed Budget Table by fiscal year. Proposals submissions for projects longer than 36 months will not be considered. If the proposed project has a duration of less than three (3) years, the column(s) corresponding to the additional year(s) should be left blank. Additional columns (e.g. Year 4) cannot be added.

Note: The Federal Government fiscal year is April 1st to March 31st. It is estimated that contracts will be awarded starting June 2018; however, Canada may require that some contracts be awarded earlier. For planning purposes, it is suggested that the detailed budget start no earlier than June 2018.

Program Funding Requested					
Partner	Item	Fiscal Year 2018-2019	Fiscal Year 2019-2020	Fiscal Year 2020-2021	TOTAL
Bidder	Labour				\$ -
	Equipment Rentals				\$ -
	Material &Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Partner 1 or For Stream A Lead Government Department (if Lead Department is not the Bidder)	Labour				\$ -
	Equipment Rentals				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -

All other partners (List in space below)	Labour				\$ -
	Equipment Rentals				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Total Program Funding Requested:		\$ -	\$ -	\$ -	\$ -
Co-Investment Contribution (In-kind and Cash)					
Partner	Budget Element	Fiscal Year 2018-2019	Fiscal Year 2019-2020	Fiscal Year 2020-2021	TOTAL
Bidder	Labour				\$ -
	Equipment Rentals				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Partner 1 OR For Stream A Lead Government Department (if Lead Federal Department is not the Bidder)	Labour				\$ -
	Equipment Rentals				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
All other partners (List in space below)	Labour				\$ -
	Equipment Rentals				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Total Co-Investment Contribution:		\$ -	\$ -	\$ -	\$ -

Solicitation No. - N° de l'invitation
W7714-17DRDC/B
Client Ref. No. - N° de réf. du client
W7714-17DRDC

Amd. No. - N° de la modif.
File No. - N° du dossier
062sv.W7714-17DRDC

Buyer ID - Id de l'acheteur
062sv
CCC No./N° CCC - FMS No./N° VME

Estimated Total Costs for Proposal				
Total Program Funding Requested	\$ -	\$ -	\$ -	\$ -
Total In-Kind Contribution	\$ -	\$ -	\$ -	\$ -
Total Cash Contribution	\$ -	\$ -	\$ -	\$ -
Total Proposal Value	\$ -	\$ -	\$ -	\$ -
Total Approved Funding from Other Federal Programs (including DRDC)	\$ -	\$ -	\$ -	\$ -

Annex F - Project Manager and Key Project Team Members' Experience

For the Project Manager identified, list three projects that show that the Project Manager or project management team has project management expertise that is commensurate with both the complexity and funding amount being requested by the proposal.

Project Manager Name(s):

Project One:

Project Title:				
Description	Start Date	End Date	Cost	Responsibilities

Project Two:

Project Title:				
Description	Start Date	End Date	Cost	Responsibilities

Project Three:

Project Title:				
Description	Start Date	End Date	Cost	Responsibilities

Other Comments: (200 words maximum)

For each Key Project Team Member identified, list the relevant experience and/or qualifications to undertake the scientific or technical elements required by the proposal.

Key Project Team Member's Name:

Experience:

Required scientific or technical element (related to task number in work plan)	Past Experience	Start Date	End Date	Achievements

And/or

Qualifications

Required scientific or technical element (related to task number in work plan)	Qualification	Year

Other Comments: (200 words maximum)

Annex G – Partnership Signature Form

This template for the Partnership Signature Form is to be filled out for the Stream A- Public Safety and Security. Signatures must include the Bidder’s signature, as well as all partners involved in a proposal, and, at a minimum, be at a level:

- a) of Director General level for the federal government; and
- b) acceptable for a provincial/territorial/municipal government, academic institution, or a private industry to authorize the financial and operational commitment of its organization for the proposal, as set out in Part 3.1 Who May Apply

Partnership Signature Form						
DRDC Reference ID:						
Proposal Title:						
Signatory Section						
Organization Name (print)	Organization Type (select one)	Full Name (First, Last) (print)	Position Title (print)	Signature	Date (YYYY/MM/DD) (print)	Certification Statement (check box)
	Academia Federal Provincial/Territorial Municipal Private	Bidder Name		 _____ Bidder Name		<input type="checkbox"/> “I have read this Call for Proposals in full and agree to the collaboration of myself and my organization as described in the project description and budget information.”
	Federal Provincial/Territorial Municipal	Lead Government Organization		 _____ Lead Government Organization		<input type="checkbox"/> “I have read this Call for Proposals in full and agree to the collaboration of myself, and as the Lead Government Department, I am prepared to be the project champion and, at a minimum, commit resources to initiate the requisition for contract, receive invoices/deliverables, verify milestone payments, and facilitate project reporting requirements to DRDC”

	Academia Federal Provincial/Territorial Municipal Private	Partner 2		 <hr/> Partner 2		<input type="checkbox"/> "I have read this Call for Proposals in full and agree to the collaboration of myself and my organization as described in the project description and budget information."
	Academia Federal Provincial/Territorial Municipal Private	Partner 3		 <hr/> Partner 3		<input type="checkbox"/> "I have read this Call for Proposals in full and agree to the collaboration of myself and my organization as described in the project description and budget information."

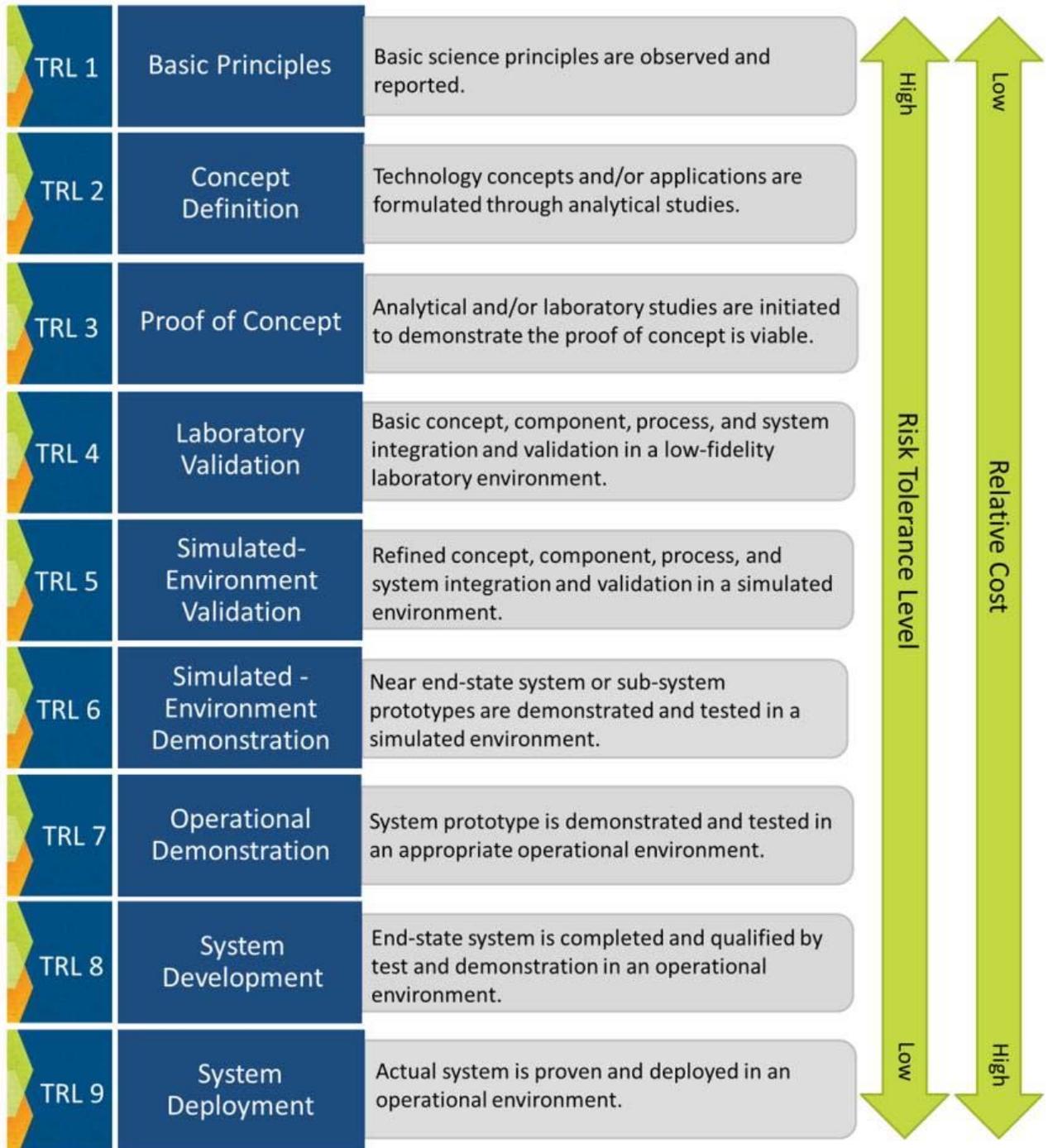
Bidder to add rows for additional partners, as needed.

A signature on this form constitutes the certifications set out above. The signature of a partner in an acting capacity should be specified.

The sector classification (public, industry, academia, etc.) of an organization is to be identified. Public organizations are to identify which level of government they represent - federal, provincial, territorial or municipal. Other than the signature, all entries should be printed.

Annex H – Technology Readiness Levels (TRLs)

The TRLs are indicated below:



Annex I – Co-Investment Information

There are two types of co-investment contributions, as detailed below.

- 1) **Cash Contributions:** Partners are strongly encouraged to demonstrate their direct support for the project (defined in the proposal) with cash contributions. Cash contributions are project expenses paid for directly by a partner organization for goods or services acquired solely for activities related to the project. Two examples include:
 - a) partner organization funds that will be used to purchase new equipment or software that no partner had at the time of project initiation; and
 - b) services of a resource that/who will work on the project that/who was not engaged by a partner prior to the initiation of the project.

- 2) **In-kind Contributions:** In-kind contributions are direct costs to the project that are considered essential to project execution. They are most often in the form of cash equivalent goods or services that are pre-existing within a partner's inventory at the initiation of the project. For example, the salary of a full time employee, use of equipment, licences and/or laboratory space all qualify as in-kind contributions to the project. Contributions will only be taken into consideration if they are from participating partners.

Partners may solicit financial support from other federal programs as a contribution to the project. Such contributions must respect the limitations imposed – if any - by the partner organizations (for example, stacking provisions associated with some federal programs) and must be clearly articulated in the proposal.

If a proposal is selected, co-investment contribution information must be supported by detailed calculations, explaining all proposed inputs and valuations in the project implementation phase.

Table I-1: In-kind Contributions

In-Kind Category	Acceptable	Non Acceptable
Access to Databases	- Incremental costs of access	- Cost of developing a database and collecting data
Analytical and Other Services	- Internal rates or incremental cost of providing service	- Commercial rates
Equipment	- Donated (used) - fair-market value - company book value - price for internal transfers - Donated (new) - selling price to most favoured customer (if stock item) - cost of manufacture (if one of a kind) - Loaned - rental equivalent based on depreciation - rental equivalent to highest-volume rate	-List price or discounted list price - Rentals exceeding the acceptable values had the rental equipment been donated or sold - Development costs
Faculty Remuneration	- Payment to the university/college for release time from teaching duties	- Payments as consulting fees or honoraria (additional to normal salary)
Materials	- Unit cost of production for commercial products - Selling price to most favoured customer - Price for internal transfers - Cost of production of prototypes and samples	- Development costs
Patents and Licences	- Licences acquired from third parties for use by the project	- Fees related to applying for and maintaining patents - Licensing fees
Salaries	- Actual salary cost (including benefits)	- External charge-out or consultant rates - Salary and costs of administrative support staff - Salary and costs of management activities not directly related to scientific and technical contributions to the project
Software	- Cost of training and support for software required - Most-favoured-customer cost for one licence per software package - Cost of equivalent commercial product (where donated software is not commercially available)	- Development costs

Solicitation No. - N° de l'invitation
XXXXX-XXXXXX/X
Client Ref. No. - N° de réf. du client
XXXXX-XXXXXX

Amd. No. - N° de la modif.
File No. - N° du dossier
xxxxx.XXXXX-XXXXXX

Buyer ID - Id de l'acheteur
XXXXX
CCC No./N° CCC - FMS No./N° VME

Travel	Justified in Work Plan and compliant with the National Joint Council's Travel Directive - Travel costs to meet with project stakeholders	- Conference travel
Use of Facilities	- Internal rates for logistical support, food, and lodging for project personnel working on stakeholder premises or on field work - Internal rates for use of specialized equipment by project personnel or use of process or production lines - Internal rates for value of lost production resulting from downtime	- Space for stakeholder activities outside the scope of the specific proposal - Equivalent commercial rates