

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

DRAFT

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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 the scientific, technical, and innovation communities to submit innovative science and technology (S&T) proposals in support of Canada's defence, security, and public safety. The CFP identifies S&T Challenges for which solutions are sought that address scientific and technological needs and gaps ("Challenges") within the research and development (R&D) context.

More specifically, this CFP identifies S&T Challenges (see Annex B) that relate to the following DRDC programs:

- All-Domain Situational Awareness (ADSA) Program - a five-year initiative to conduct research and analysis to support the development of options for enhanced domain awareness of air, surface and sub-surface approaches to Canada, and in particular those in the Arctic. The ADSA Program focuses on the following areas:
 - Strategic surveillance of airborne traffic and aerospace warning;
 - Awareness of maritime traffic in Canadian approaches and Arctic littoral regions;
 - Awareness of sub-surface activity approaching or in Canada's North; and
 - Analysis of sensor mixes and information integration and sharing for all domain awareness to enable detection of modern threats beyond the threshold of the current systems.

- Canadian Safety and Security Program (CSSP) - a whole-of-government initiative that enhances Canada's security and public safety through S&T investments. The CSSP 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. More information about the CSSP is available at www.science.gc.ca/cssp.

1.2 Call for Proposals Procurement Approach

This Call for Proposals (CFP) process involves a two-stage procurement process:

Stage 1: Proposal Submission and Evaluation

Stage 2: Contracting

The information provided in Stage 1 will be used to establish a pool of pre-qualified proposals. Pre-qualified proposals selected for funding will be subject to the contracting phase (Stage 2) that is led by the Contracting Authority.

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

1.3 Trade Agreements

The Agreement on Internal Trade (AIT) applies to this procurement. The CFP process is organized in a manner consistent with the principles of the *Agreement on Internal Trade* (AIT) in terms of equal access, fairness, and transparency and is open to all Bidders and Government Departments who are Canadian practitioners of S&T (public and private sectors).

The requirement is excluded from the North American Free Trade Agreement (NAFTA) as per Annex 1001.1b-2 Research and Development, all classes, and excluded from the application of the World Trade Organization – Agreement on Government Procurement (WTO-AGP) under Appendix 1, Annex 4.

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 Public Works and Government Services Canada (<http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>) website

1.5 Canadian Content

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

1.6 Controlled Goods Program

Any resulting contract may be 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

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 proposal solicitation related to the production or exploitation of any concept or prototype developed or delivered.

1.9 Comprehensive Land Claim Agreements (CLCA)

Depending on the proposals 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, that procurement will be subject to the applicable Comprehensive Land Claims Agreement(s).

2.0 Terminology

In this document, the following terms in have the meaning below applied to them.

Term	Interpretation (as found in Standard Instructions 2003)
Call for Proposals (CFP)	solicitation
Proposal	bid

PART 2 - BIDDERS INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

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

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

The 2003 (2016-04-04) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the proposal solicitation.

Section 4, Definition of a Bidder, of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

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

Subsection 5.2 d of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

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

Delete the following sections in their entirety:

- Section 08 Transmission by Facsimile
- Section 09 Customs Clearance

Section 05, Submission of Proposals, subsection 4:

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.

At Section 14, Price Justification:

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 Submission of Proposals

2.2.1 Unclassified Proposals

All unclassified proposals must be completed and submitted using the online tool – which is accessible from the following website: TBD.

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 closing date and time specified on the Buy and Sell website. Proposals received after the specified period will not be evaluated.

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

2.2.2 Classified Proposals

Bidders submitting a classified proposal must use and fully populate the Classified Submission Form and must adhere to the word limits imposed by section (as applicable). Bidders submitting a classified proposal must contact the Contracting Authority to obtain the Classified Submission Form and to arrange delivery of the proposal using procedures designed to protect the sensitivity of the content.

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

Due to the nature of the proposal solicitation, proposals transmitted by facsimile to PWGSC will not be accepted.

2.3 Enquiries - Proposal Solicitation

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

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

2.4 Contracting Authority

The Contracting Authority for this bid solicitation is:

Heather Palmer

Public Works and Government Services Canada

Acquisitions Branch

Defence Sciences Division

Telephone: 873-469-4812

E-mail address: heather.palmer@tpsgc-pwgsc.gc.ca

2.5 Applicable Laws

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

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

2.6 Communications Notification

As a courtesy and in order to coordinate any public announcements pertaining to any resulting contract, the Government of Canada requests that successful Bidders notify the Contracting Authority 5 business days in advance of their intention to make public an announcement related to the recommendation of a contract award, or any information related to the contract. The Government of Canada retains the right to make primary contract announcements.

2.7 Maximum Funding

For this CFP, approximately \$97 million has been allocated; \$82 million for Air, Surface, and Subsurface Stream S&T Challenges 1-7 and \$15 million for Public Safety and Security Stream challenges 8-22. All proposals must be costed in Canadian dollars.

PART 3 - Proposal PREPARATION INSTRUCTIONS

3.1 Electronic Proposal Submission Form

3.1.1 Bidders are requested to submit their proposal using the electronic Proposal Submission Form at the website specified at paragraph 2.2.1. In order to complete and submit a proposal, Bidders must first register and obtain a username and password.

3.1.2 Should there be technical difficulties accessing or using the web-based system, Bidders must use the contact information located on the website. Technical Assistance support is restricted to issues associated with mechanics of the online system. Technical Assistance Support personnel are not associated with the bid solicitation and are not in a position to comment on or provide interpretation on the bid solicitation. All non-technical assistance for proposal submission is to be directed to the Contracting Authority.

3.2 Classified Proposals

3.2.1 Bidders submitting a classified proposal must contact the Contracting Authority to arrange delivery of the proposal using procedures designed to protect the sensitivity of the content.

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 copies)

Section IV: Additional Information (4 hard copies)

3.3 Technical Proposal

3.3.1 The Bidder's responses to the criteria presented in the electronic Proposal Submission Form 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.

3.3.2 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 must explicitly demonstrate, in sufficient detail, how all criteria are met.

3.4 Financial Proposal

3.4.1 Bidders must complete the Financial Proposal Cost Breakdown set out in the electronic proposal submission form. Responses provided in the electronic Proposal Submission form will form the Bidder's financial proposal.

3.4.2 The Bidder's financial proposal must not exceed the amounts identified in Annex A. Any dollar value exceeding the maximum funding amounts will be the Bidder's commitment of co-investment funding to a resulting contract. All financial proposals must be in Canadian Dollars.

3.4.3 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. More information can be found at: <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/1031-2/6>

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

3.4.5 Eligible Costs

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

3.4.6 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.

3.4.7 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) can be included in the proposal as an in-kind contribution.

Also, 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 evaluation of the proposal, are the sole responsibility of the Bidder.

3.5 Certifications

Certifications required with the Bidder's proposal are identified in Part 5-Certifications and Additional Information.

Certifications and additional information that may be required precedent to contract award 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 the bid solicitation 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 Subject Matter Experts 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.

4.2 Evaluation Criteria

4.2.1 Mandatory Evaluation Criteria

Proposals must meet all mandatory evaluation requirements identified in Annex C.1 to be in compliance with the CFP. Proposals that fail to meet all mandatory evaluation criteria will be declared non-responsive.

4.2.2 Supporting Information

In the event that the Bidder fails to submit any supporting information pursuant to the technical mandatory criterion 1, 2 and 4, the Contracting Authority may 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 two (2) business days of the written request or within such period as specified or agreed to by the Contracting Authority in the written notice to the Bidder

4.2.3 Point-Rated Evaluation Criteria

Each proposal that meets all of the mandatory evaluation criteria will be evaluated and scored in accordance with the point-rated evaluation criteria identified in Annex C.2. Proposals must obtain a minimum overall pass mark of To be Determined (TBD) points out of TBD points. Proposals not meeting the minimum overall pass mark will be deemed non-responsive.

4.2.4 Evaluation of Price

The price of the proposal will be evaluated in Canadian Dollars; including, if applicable, 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 minimum point-rated evaluation score overall and in each criterion (where applicable), and meet all other requirements of the bid solicitation will be considered responsive 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

The Air, Surface, and Subsurface Stream and the Public Safety and Security Stream will each go through their own proposal selection process. Each process will follow the same order.

All responsive proposals will be considered for funding in accordance with the selection process summarized as follows:

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 PWGSC 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 investments 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.
- 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 recommended to receive funding, and those not recommended, the list is then sent for endorsement by the Steering Committee.

Steering Committee (SC) - The SC is chaired by the Department of National Defence Assistant Deputy Minister (S&T) (DND ADM(S&T)) and is composed of representatives from DRDC, and as needed, other government department SMEs. The PWGSC Contracting Authority will also participate in the PSC in an observational capacity.. The SC will review and endorse the prioritized pool of pre-qualified proposals recommended for funding, and those not recommended, by the PSC. The SC will consider the same factors as the PSC. The output is a final pool of pre-qualified proposals for approval by DND ADM(S&T).

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-compliant and given no further consideration.

4.6.2 Contract Negotiations

Upon completion of the statement of work, 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 4 months from the date of notification of acceptance into the pool of pre-qualified proposals, Canada reserves the right to stop negotiations with the Bidder and fund another proposal from the pool.

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. For studies and concepts, 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/3/2040/16>

Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts, found at:

<http://www.ic.gc.ca/eic/site/068.nsf/eng/00005.html>

Implementation Guide: Policy for Title to Intellectual Property Arising under Crown Procurement Contracts, found at: http://www.ic.gc.ca/eic/site/068.nsf/eng/h_00001.html

4.8 Human and Animal Ethics

A project involving human subjects, human tissues, laboratory animals, or animal tissues, must not proceed without prior approval of the Bidder's Human Subjects Research Ethics Committee or the Partners' 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 required certifications and additional information to be awarded a contract.

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

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the 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 *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidders must provide with their proposals the required documentation, as applicable, 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

Canadian Content Certification – Conditionally Limited

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

Subject to the evaluation procedures contained in the bid solicitation, 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, and as amended herein, 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.

5.1.2.2 SACC Manual clause A3050T (2014-11-27), Canadian Content Definition, as amended:

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 [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

Integrity Provisions - Declaration of Convicted Offences

In accordance with the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide with its bid 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](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969#afed) website (http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_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 projects 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 of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

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

5.2.2 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 the website:

http://www.labour.gc.ca/eng/standards_equality/eq/emp/fcp/index.shtml.

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 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).

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 Program.

OR

- A5.2. The Bidder certifies having submitted the **Agreement to Implement Employment Equity (LAB1168)** to ESDC- Labour Program. 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 [FCP for Employment Equity - Certification](#). (Refer to the Joint Venture section of the Standard Instructions)

5.2.3 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.

5.2.4 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](#).

5.2.5 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.

5.2.6 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>.

5.2.7 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.

5.2.8 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 InfoLine at 1-800-811-1148 to obtain the telephone number of the nearest Supplier Registration Agent.

PBN: _____

5.2.9 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.

5.2.10 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.

5.2.11 Certification Acknowledgment

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

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

By signing below the signatory authorizes 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

Resulting 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 the Bidder 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>) issued by Public Works and Government Services Canada.

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:

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 requirement (SRCL and related clauses) applies and form part of the Contract.

TBD

4. Term of Contract

The Work is to be performed during the period of To be Determined (TBD) to TBD .

5. Comprehensive Land Claim Agreements (CLCAs)

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

6. Authorities

6.1 Contracting Authority

The Contracting Authority for the Contract is:

TBD at 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 at 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 at 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 at 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 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 for default.

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 solidarily liable for the performance of the entire Contract.
- e) The Contractor acknowledges that any change in the membership of the joint venture (i.e., a change in the number of members or the substitution of another legal entity for an existing member) constitutes an assignment and is subject to the assignment provisions of the General Conditions.
- f) The Contractor acknowledges that all security and controlled goods requirements in the Contract, if any, apply to each member of the joint venture Contractor.

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

Annex A - 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 security 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 analyse key issues with rigour but the scope of the analysis is managed so as to be 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.

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.

Project Parameters

The table below identifies maximum project parameters. The funding range per project will be identified for each S&T Challenge (refer to Annex B).

Project Types	Studies	Concepts	Research & Development	Technology Demonstration	Technology Pilot
Project Duration from Initiation to Close-Out	≤ 12 months	≤ 24 months	≤ 36 months	≤ 36 months	≤ 36 months
Funding Range per air, surface, and sub-surface surveillance streams	≤ \$250K	≤ \$750K	≤ \$3.0M	≤ \$6.0M	≤ \$9.0M
Funding Range per Public Safety and Security Streams	≤ \$125K	≤ \$250K	≤ \$1.0M	≤ \$1.5M	≤ \$2.0M
TRL Range	not applicable	TRL 1-3	TRL 3-4	TRL 5-7	TRL 7-9

Sequential Projects

This CFP allows for sequential projects that address a single S&T Challenge. As a result, multiple proposals can be submitted that span more than one project type and demonstrate progression of technological maturity (i.e. TRL). For sequential projects, Bidders must identify each proposal as part of a sequential project, the total number of proposals for the sequential project, and one separate proposal must be submitted for each project type. Each project type under a sequential project will be evaluated separately.

The maximum funding for any sequential project cannot exceed the sum of all amounts listed in the project parameters, Applicable Taxes included, and the duration of sequential projects cannot exceed 36 months.

Where a sequential proposal is submitted by a Bidder, Canada may award one or more or no contracts for each and/or all of the project types.

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.

Example:

Bidder ABC submits a sequential project that comprises two proposals consisting of the following:

Proposal One

Project Type: Concepts

DRDC Funding: \$500K

Duration: 12 months

Proposal Two

Project Type: Research and Development

DRDC Funding: \$3M

Duration: 24 months

Total DRDC Funding: \$3.5M

Total Duration: 36 months

Annex B - Challenges

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

- A. Stream A: Air, Surface, and Sub-Surface Surveillance S&T Challenges
- B. Stream B: Public Safety and Security S&T Challenges

For Stream A Challenges identified below, the following are excluded from the scope of the Challenges:

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

Stream A

Air Surveillance

- 1) Identify, conceptualize and assess solutions and technologies for detection, identification, tracking and classification of airborne objects of interest including:
 - a. Evaluation of radar technologies for long-range detection, tracking and cueing of air targets (with emphasis on the North)
 - b. Identification and assessment of other future sensing technologies (e.g. combinations thereof surface radar, space-based electro-optical/infrared (EO/IR), over the horizon radar (OTHR), aerostat, forward deployed, reflective high power optics, passive radio frequency (RF), etc.) for detection, tracking and cueing of air targets
 - c. Pattern of life monitoring of foreign infrastructure
 - d. Missile launch detection
- 2) Understand and mitigate environmental effects on surveillance system performance including:
 - a. Characterization and mitigation (e.g. RF clutter, cloud, aerosols, ionospheric effects, etc.) for improved sensor performance of existing and future sensing technologies
- 3) Assess and mitigate surveillance system vulnerabilities (e.g. energy/power requirement, jamming, cyber-attack, deception, capture, etc.).

Surface Surveillance

- 4) Identify, conceptualize and assess solutions and technologies for detection, discrimination, localization, classification and tracking of maritime surface objects of interest including:
 - a. Detection and improved discrimination of surface threats from background sea ice, debris, clutter
 - b. Improved timely delivery of space-based maritime surface surveillance product
 - c. Integrated surface and subsurface systems for maritime surface surveillance

- 5) Understand and mitigate environmental effects on surveillance concepts performance including:
 - a. Evaluation of methods for environmental data (hydrographic, bathymetric, etc.) collection and assimilation (e.g. autonomous survey)
- 6) Assess and mitigate surveillance concept vulnerabilities (e.g. energy/power requirement, jamming, cyber attack, deception, capture, etc.)

Sub-Surface Surveillance

- 7) Identify, conceptualize and assess the performance and the viability of existing and future surveillance solutions, technologies and methodologies for detection, localization, classification and tracking of underwater objects of interest in order to provide improved underwater warning and surveillance capability in both blue water and littoral environments (including chokepoints) including:
 - a. Long range deployable autonomous underwater/under-ice surveillance capabilities. Design concept and technologies that would allow increasing the endurance (months) and range (beyond 1000 km) of such capabilities.
 - b. Surface and under-water/under-ice multi-functional service nodes. Design concepts, technologies and feasibility studies for nodes that could include sensor arrays, power (charging stations for deployable autonomous underwater/under-ice surveillance capabilities), communications relay, data processing, and interoperability between sensor systems.

Stream B

Public Safety and Security

- 8) S&T projects that improve understanding of critical infrastructure (CI) vulnerabilities and their relative importance by better understanding and quantifying:
 - a. the risks associated with insider threats and mechanisms to mitigate this risk; or
 - b. the global impact and risk of counterfeit, fraudulent, suspect items (CFSI) to CI, including both hardware and software. Examples include nuclear power plants, aviation, transportation, medical equipment; or
 - c. the CI vulnerabilities associated with global navigation satellite system (GNSS) failures and how to mitigate those vulnerabilities; or
 - d. the risks and vulnerabilities with cyber-attacks related to connected vehicles, and how the cybersecurity posture of connected vehicles can be improved.
- 9) S&T projects that enable pre-event anticipation, prevention, detection, intelligence, and/or defeat of threats to CI by better understanding:
 - a. how to enhance intelligence and operations that strengthen Canada's ability to anticipate, prevent, and prepare for acts of cybercrime, terrorism and espionage by developing, testing, and validating new surveillance and interdiction technologies or analytical tools or systems that would assist national security, law enforcement and intelligence agencies and regulatory bodies in identifying criminals and criminal organizations terrorists, terrorist organizations, and individuals with malicious intent, their capabilities and the nature of their plans, and their supporters and counter the threat of proliferation of subject matter expertise; or
 - b. how the psycho-social aspects of risk perception among CI owners and operators (inclusive of cyber systems) can be improved to enhance CI resilience, for example through the implementation of specific risk mitigation measures.

- 10) S&T projects that enhance domain awareness in the air, land and maritime environments in border regions by better understanding innovative public safety and security solutions to the surveillance of remote areas, including Arctic regions.
- 11) S&T projects that enhance the secure and efficient flow of goods and people at ports of entry by better understanding:
 - a. how to exploit data analytics techniques for automated targeting of cargo and travellers at the border; or
 - b. how to develop or evaluate screening technologies to detect weapons, explosives, contraband, currency or human trafficking; or
 - c. how to enhance the cyber security of international supply chains or traveller authentication systems; or
 - d. how to enhance the automation of traveller authentication and processing systems and cargo screening systems to reduce bottlenecks; or
 - e. how to strengthen border security to prevent radiological-nuclear material smuggling and in particular enhance special nuclear material (SNM) detection.
- 12) S&T projects that investigate remaining gaps associated with locating, characterizing, and securing Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) materials that are out of regulatory control.
- 13) S&T projects that generate field-deployable technologies to enhance non-intrusive stand-off detection and identification of non-traditional agents including toxic industrial chemicals (TICs) /toxic industrial materials (TIMs), homemade explosives and natural, synthetic or semi-synthetic opioids.
- 14) S&T projects that propose systems to provide protection against inadvertent or malicious threats from small unmanned vehicles against personnel, facilities, or critical infrastructure. The proposed systems must provide integrated detection, identification, and/or mitigation of the threat using any electronic or other means of detection, and using mitigation method(s) that pose no danger to bystanders. Preference will be given to proposals offering end-to-end integration of the complete chain of detection, identification, and mitigation; however, proposals for individual elements will be considered.
- 15) S&T projects that examine technology solutions to reduce the accidental risks to first responders from being struck by vehicles while operating on roadways and in all-weather situations. The projects could examine existing roadway safety operations, associated technologies, responder protective clothing, emergency warning systems, vehicle conspicuity technology, vehicle detection technology, and responder deployment tracking.
- 16) S&T projects that result in novel solutions that:
 - a. apply wearable technologies to connect first responders and allow them to send and receive real-time actionable data during operations to identify and monitor threats, hazards and environmental conditions in which first responders operate; or
 - b. protect non-specialist responders from hazardous or infectious substances with technologies that are built into their daily wear uniforms. The proposed technology could both alert first responders to contaminant danger as well as provide a minimum level of protection from the danger during the course of normal operations.

- 17) S&T projects that improve communications interoperability between first receivers (hospital emergency department personnel) and first responders during the triage of mass casualties, including the design of mobile applications that can be utilized to transfer critical information during an event.
- 18) S&T projects that deliver research to better understand and support whole-of-society resilience to all-hazard risks through the development of specific methodologies and tools for community, regional, and national-level assessment and treatment of risk and resilience by:
 - a. developing or enhancing risk-related datasets (for example exposure, vulnerability, disaster loss), models, and scenarios, as well as disaster resilience metrics on the local to the national scale; or
 - b. developing risk assessments and geospatial systems that use datasets, models, or scenarios to represent or aggregate risks, are aligned with international best practice methodologies and standards (for example the United Nations Office for Disaster Risk Reduction (UNISDR) guidelines, databases and statistics), and enhance consistency across jurisdictions; or
 - c. using participatory action research methods to engage under-represented stakeholders such as youth, women, first nations, and persons with disabilities, in order to leverage their strengths and to capture their special requirements in the development and evaluation of strategies for increased inter-disciplinary resilience that are scalable at the community, regional, and national level.
- 19) S&T projects to support better understanding and communication related to the mitigation of disaster risks specifically from extreme weather events and climate change by:
 - a. exploiting advanced techniques for collecting risk and resilience data, such as crowd-sourcing and community engagement, to investigate specific local factors (for example economic, social, environmental and cultural), patterns, causes, and effects; or
 - b. strengthening the evidence base in support of disaster risk reduction (DRR) and assisting to establish a Canadian value on the return on investment (ROI) of DRR activities; or
 - c. support regions and municipalities to develop their own capacities, frameworks, and platforms for DRR and climate change adaptation, including tools to inform decision making related to DRR.
- 20) S&T projects that enhance the data collection and analytics as well as research that informs the prevention and mitigation of post-traumatic stress injuries (PTSI) in the first responder community.
- 21) S&T projects that target innovation for improving preparedness against disaster risks derived from extreme weather events and climate change, such as hazard monitoring and forecasting capabilities as well as early warning systems and emergency communication systems, including those engaging community-level stakeholders.
- 22) S&T projects that strengthen communities' resistance to extremist influences, and methodologies and to support effective evidence-based interventions and countermeasures to fight violent extremism and terrorism by:
 - a. investigating factors/dynamics related to families, peer networks, gender, trauma, and mental health where the investigation encompasses how they manifest both in terms of vulnerability/risk *and* mitigating/protective effects. The projects need to develop screening/assessments to inform programs to prevent, intervene or disengage and re-integrate those vulnerable to extremist rhetoric or with previous engagement in extremist activities; or
 - b. exploring how broad social, economic, political, and demographic trends manifest at local levels and affect communities, either negatively through increased threat of radicalization to violence or other types of serious crime, or positively through 'resilient' forms of reaction, such as community

based efforts towards integration, support to vulnerable community members, reconciliation, and peace-building; or

- c. leveraging lessons learned from public health research and practice about the effectiveness of interventions to influence behaviour at the population, community and individual level (interventions that range, for example, from broad public awareness campaigns to best practices for managing cases involving mental health and addictions), in order to support efforts in countering radicalization to violence and preventing involvement in other forms of serious and organized crime (such as human trafficking).

Annex C - Evaluation Criteria

C.1 Mandatory Technical Criteria

- 1) Identification of the one primary S&T Challenge listed in Annex B that your proposal is responding to.
- 2) The following information is to be submitted with the proposal.
 - a. **List of Financial Support Solicited from Any Federal Program(s):** If additional financial support for the project is being solicited and/or has been received through programs offered by any federal government departments/agencies, such solicitations must be disclosed as identified in Annex E.

3) Alignment

The Bidder must demonstrate how each project deliverable addresses, and aligns with, the selected S&T Challenge (500 words maximum) – which includes:

- a. identification of each deliverable;
- b. identification of how each deliverable addresses all elements of, and aligns with, the selected S&T Challenge.

The proposal does not clearly identify how each deliverable will address the selected S&T Challenge. The proposal is assessed as incomplete and/or without relevance to the S&T Challenge.	Fail
The proposal clearly articulates how each deliverable is aligned with the selected S&T Challenge. As assessed, relevant alignment with the selected S&T Challenge has been clearly addressed.	Pass

- 4) For proposals responding to Public Safety and Security S&T Challenges (numbers eight through twenty two only – mandatory requirements are:
 - a) Identification of a partnership that includes:
 - i. a Canadian Government Department*; and
 - ii. a different public organization from 4.a.i, or any other partner.
 - b) Submission of a completed Partner Signature Form as set out in Annex H. Signatures must, at minimum, be at:
 - i. Director General level for the federal government; and
 - ii. A level acceptable for provincial/territorial/municipal level of government 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 the Auditor General.

C.2 Point-Rated Evaluation Criteria

Proposals that satisfy the mandatory criteria will be evaluated on the following point-rated criteria. No partial points will be awarded. The audience for the responses is evaluators who are subject matter experts (SMEs). The evaluators are, therefore, skilled in the relevant challenge area and this affords an informed and objective lens for the evaluation process.

2. Scientific and/or Technical Merit, including the Scope, Approach, Merit, Originality, Innovative benefit and the impact- Maximum of 90 points and mandatory minimum score of 63.

a) **Scope and Approach.**

The Bidder should identify the project’s scope and approach to address the selected S&T Challenge – which includes, in a maximum of 750 words:

- i. Clear description of the scope of the project;
- ii. Adequately developed, well-reasoned, and appropriate approach for the proposal;
- iii. Proposed deliverables clearly define a final product that meets the S&T challenge.

Evaluation Schema	Points
The scope and approach provides no evidence to any of the three elements detailed above.	0 points
The scope and approach demonstrates one or two elements above. Although the Bidder presents some of the information required, the proposal lacks the depth to permit any concrete analysis.	8 points
The Bidder has clearly articulated the scope and approach of at least 2 of the 3 elements above. There is adequate information to see a description of the scope of the project, the technical concept is developed, and deliverables define a final product.	14 points
The Bidder has clearly articulated the scope and approach of all 3 elements above. There is a clear description of the scope of the project, the technical concept is developed, well-reasoned and appropriate, deliverables clearly define a final product that meets the proposed S&T Challenge.	20 points

b) **Scientific and/or Technical Value.**

The Bidder must demonstrate the scientific or technical merit, as detailed in the three elements below, of the approach, in a maximum of 1000 words:

- i. the scientific and/or technical elements are completed in a logical sequence;
- ii. State of the art thinking and practice in the relevant methodological area, analytical approach, and relationships being tested or explored and;
- iii. Proposed plans for inclusion of Gender Based Analysis+ (GBA+) as defined at the following website: <http://www.swc-cfc.gc.ca/gba-acis/index-en.html>.

In addition, for GBA analysis, include responses to the following questions:

- a. Does your application consider GBA+?
- b. If yes, describe your analysis and findings.
- c. If not, explain why you did not consider GBA+.

Evaluation Schema	Points
The scientific or technical merit provides no evidence to any of the three elements detailed above.	0 points
Although the Bidder presents some of the information requested, the proposal lacks the depth to permit any concrete analysis.	12 points
The Bidder has clearly articulated the scientific or technical merit of at least 2 of the 3 elements above. The deliverables are clear, the methodology is up to date, the technical elements are logical.	21 points
The Bidder has clearly articulated the scientific or technical merit of all 3 elements above. The deliverables are clear, the methodology and approach is up to date, the technical concept is sound and achievable, the technical elements are logical.	30 points

c) Original and Innovative

The Bidder should demonstrate how the proposal is original and innovative over existing solutions (for example, how is this project a game changer?) and should include, in a maximum of 1000 words:

- i. identification of how new knowledge, science and/or technology improvements (including novel** concepts, approaches or methodologies, tools, or technologies) are integrated;
- ii. examples of enhanced capabilities and/or improved efficiencies over the current state of the art;
- iii. The proposed work has innovation* potential to lead to creating new knowledge and/or technology enhancement over existing solutions.

Evaluation Schema	Points
The proposal has not addressed the evaluation elements above. Furthermore, completing this work would not lead to creating new knowledge or technology enhancements over current existing solutions.	0 points
Although the Bidder presents some of the information required, the proposal lacks the depth to permit any knowledge of how the proposal is original and innovative.	8 points
The Bidder has shown innovation and originality by addressing at least 2 of the 3 elements above. The work has the potential to be innovative over existing solutions.	14 points
The Bidder has clearly shown the innovative and original nature of the proposal by addressing all elements above. The proposal is clear, the work is innovative, novel and the concepts are well integrated.	20 points

*** Innovation:**

- An invention, new technology or new process that is not currently available in the marketplace.
- 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 (generally patentable) improvement in functionality, cost or performance of goods and services that are considered state-of-the-art or the current industry best practice.

****Novel:**

- Is not commonly known or not an obvious derivative of an existing way of doing things.

d) Impact

The Bidder should demonstrate how its solution will have an impact in the selected S&T challenge. The information should include the following, in a maximum of 1000 words:

- i. Identification and explanation of the gap or critical barrier in the S&T Challenge that the solution is addressing.
- ii. If the aims of the project are achieved, how will scientific knowledge and/or, technical capability be improved?
- iii. How will successful completion of the aims change the concepts, methods or technologies that drive this field?
- iv. Does the proposed project have commercial potential to lead to a marketable product, process or service?

The Bidder may provide support letters from stakeholders, who are not named project partners, indicating their interest in the work. Support letters from named project partners will not be considered.

Evaluation Schema	Points
The proposal has not addressed the elements listed above; and/or completing this work would not lead to an impact in the selected S&T challenge.	0 points
Although the Bidder presents some of the information required by addressing 2 of the 4 elements above, the proposal lacks the depth to permit any knowledge of how the solution will have an impact in the selected S&T Challenge.	8 points
The Bidder has shown some impact in the selected S&T Challenge by addressing at least 3 of the 4 elements above. The work has the potential to have an impact in the selected challenge.	14 points
The Bidder has clearly shown that the solution will have impact by addressing all elements above. The proposal is clear, the critical gaps are addressed. Completion of the project will have an impact in the selected S&T Challenge.	20 points

2.0 Work Plan - Maximum of 45 points

The assessment of the Bidder’s proposed Work Plan is based on the evaluation elements and schema summarized below.

The Bidder should provide:

- a) a Work Plan with adequate detail to identify milestones and deliverables with adequate detail to measure progress, in the format provided in Annex D.

The work plan should include:

- i. Task No.: Enter the number of each task (e.g. 1,2,3)
- ii. Task Description: Describe the work to be done, including the technical methodology.
- iii. Deliverable: Describe the output of the task.
- iv. Lead: Identify who is responsible for task delivery/performance.
- v. Special Procurement requirements: Identify special procurement considerations (e.g. controlled goods and security issues, restricted materials, IP licenses) that may impact the project.
- vi. Physical Resource needs: Identify physical resources needs (e.g. facilities and equipment) and adequate detail provided as to their accessibility.
- vii. Go/No-Go Decisions: Identify decision-points in the schedule or deliverable to be achieved that allows for the project to proceed to the next step, be terminated, or redirected.

Evaluation Schema	Points
The proposal has not addressed any of the elements listed above, the work plan is incomplete.	0 points
The proposal has addressed less than 3 of the elements listed above in detail, the deliverables are not clear, the technical risks and challenges are not well defined, the work plan does not contain enough information to demonstration completion of the project.	10 points
The proposal has addressed all of the elements although only at a limited level. The work plan, while complete, lacks detail and may not have considered all the necessary elements to complete the project.	15 points
The proposal has addressed all of the elements although and while it is more than a limited level, there is some detail lacking. The work plan is complete and provides a clear overview of the proposed project but did not consider all the necessary elements to complete the project.	20 points
The proposal has clearly addressed all the elements in great detail. The work plan is complete and demonstrates that full consideration has been given to all elements of the proposed project and has considered all the necessary elements to complete the project.	25 points

- b) a cost estimate that is commensurate with the level of effort and deliverables for the proposal, in the format provided in Annex E and in the Work Plan in Annex D. Detail should include:
- i. Explanation of any significant costs.
 - ii. That the proposed costs are realistic for the technical approach offered;
 - iii. Substantiation of the proposed costs with the type and number of labour hours proposed per task as well as the types and kinds of materials, equipment and other associated costs proposed.

Evaluation Schema	Points
The costs are unrealistic, do not provide a practical understanding of the effort, and are undefined with regards to labour hours.	0 points
The proposal only addresses 1 of the elements presented above in any detail. The costs are unrealistic, and do not provide a practical understanding of the effort. The costs are undefined with regards to labour hours.	4 points
The proposal addresses 2 of the elements presented above in good detail. The costs are realistic, and provide a practical understanding of the effort and labour hours required. More detail is required for a full response.	7 points
The proposal addresses all 3 elements with in-depth detail. All significant costs are explained, the costs are realistic for the approach, and all costs are substantiated.	10 points

- c) a risk mitigation strategy as provided in the Work Plan, Annex D.
- i. The plan identifies any potential risks associated with specific tasks as well as risk mitigation plans;
 - Risks: Identify the risk(s) associated with the task, as well as if it is a High, Medium or Low Risk and if the impact will be High, Medium or Low. Examples of `Risk Type` include: financial, schedule, scope, technical, IP issues. If no risk is anticipated enter N/A.
 - Mitigation: Identify the steps required to lessen the impact of the risk. If no risk is identified enter N/A.
 - Go/No Go points and off ramps: A proposal should demonstrate what considerations are in place for a project to end or adjust its path throughout its lifecycle. Key milestones and deliverables should be identified and linked to decision points on whether to proceed or end a project.

Evaluation Schema	Points
The technical risks and mitigation strategies are not defined. Go/No Go points are not identified.	0 points
The technical risks and mitigation strategies are identified, but the detail is lacking, or they are not well thought out. The risk plan may not have considered all the necessary elements to complete the project. Go/No Go points are not clearly identified.	4 points
The technical risks and mitigation strategies are well defined. The risk plan is complete and provides a clear overview of the proposed risks and Go/No Go points.	7 points
The technical risks and mitigation strategies are clear and very well defined. The risk plan is complete and demonstrates that full consideration has been given to all elements of the proposed project, including Go/No Go points.	10 points

3. Project Manager and Key Personnel - Maximum of 25 points

The assessment of the Bidder's proposed project management plan (e.g. identification of Project Manager and Key Personnel) is based on the evaluation elements and schema below.

- a) The Bidder should demonstrate:
 - i. that the identified Project Manager (or Principal Investigator for Studies and Concepts) has experience managing projects that are commensurate with both the complexity and funding amount being requested by the proposal, in the format provided in Annex F. Minimum of three examples required and examples should include enough detail to ascertain commensurability. The Bidder may describe how the Project Manager will coordinate with a team to deliver the project management capability (e.g. a Project Manager in one partner and a Deputy Project Manager in another partner).

Evaluation Schema	Points
The project manager has some qualifications in managerial expertise for the delivery of the project. These qualifications are described in a general way, and do not provide meaningful detail.	0 points
The project manager has demonstrated qualifications in managerial expertise for the delivery of the project. These qualifications are described in some meaningful detail.	4 points
The project manager has significant qualifications in managerial expertise for the delivery of the project. These qualifications are well described to ascertain commensurability.	7 points
The project manager has extensive experience and very significant qualifications in managerial expertise for complete delivery of the proposal. These qualifications are fully described to ascertain commensurability.	10 points

- c) key members of the proposed project team, including sub-contractors, possess relevant experience and qualifications to undertake the scientific or technical elements required by the proposal, in the format provided in Annex G.

Evaluation Schema	Points
The key personnel have some qualifications in technical expertise for the work proposed. These qualifications are described in a general way. The team proposed is not likely to meet requirements	0 points
The key personnel have demonstrated qualifications in technical expertise for the work proposed. These qualifications are described in some detail. There is not enough detail to assess if the team proposed will meet the requirements.	6 points
The key personnel have significant qualifications and technical and expertise for the delivery of the work proposed. These qualifications are well described. The team covers all components and will likely meet requirements.	10 points
The key personnel have extensive experience and very significant qualifications for the delivery of the work proposed. These qualifications are fully described. The team is exceptional and could be expected to meet the requirement	15 points

4. Transition Plan - Maximum of 20 points

The assessment of how the knowledge, science, or technology developed through the Bidder’s proposal will be transitioned and/or exploited is based on the evaluation elements and schema summarized below.

The transition plan should:

- a) Provide additional steps that are beyond the scope of the proposal (such as user validation trials, regulatory approvals, ongoing maintenance and licensing renewal). Technology demonstrations and pilot projects must describe the knowledge, technology and/or product dissemination plan. And,
- b) Include an overview of how additional research, technology exploitation and/or commercialization are to be financed. This may include the intent to form strategic partnerships or alliances with other stakeholders; The Bidder may provide support letters from stakeholders, who are not named project partners, indicating their interest in the work. Support letters from named project partners will not be considered. And,
- c) Describe the product, technology, device, method, process, systems, etc., that are expected to ultimately result from this project.

(1000 words maximum)

Evaluation Schema	Points
The transition plan does not demonstrate and/or provides significantly limited demonstration of consideration being given to research and/or technology exploitation. There is no information on how future work on the technology will be funded or exploited.	0 points
The transition plan provides limited demonstration of consideration has been given to exploiting the resulting research and/or technology. The plan is unclear on how additional research, technology will be funded	8 points
The transition plan demonstrates that some consideration has been given to exploiting the resulting research and/or technology. A plan appears to be in place for future financing to continue to develop and/or exploit the technology. Some details may be missing, but overall, the plan is clear and complete.	14 points
The transition plan demonstrates that a clear and complete approach to fully exploiting the resulting research and/or technology has been considered. A plan for future financing to further develop the research and/or technology is clear and complete.	20 points

Annex D - Work Plan

Task No.	Task Description	Start Date (MO/YR)	End Date (MO/YR)	Deliverable	Lead	Risks	Probability (H/M/L)	Impact (H/M/L)	Mitigation

*Add rows as needed

Work Plan- continued.

Task No.	Special Procurement Requirements	Physical Resource Needs	Sub-Contracting Needs	Go/No-Go Decisions	Direct Cost Canada's Contribution	Direct cost Co-investment Contribution	In-Direct cost Canada's 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. If the proposal is not for a three (3) year project, the column(s) corresponding to the additional year(s) should be left blank. Additional columns (eg Year 4) cannot be added).

Program Funding Requested					
Partner	Item	Year 1	Year 2	Year 3	TOTAL
Bidder	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Partner 1 OR Lead Government Department (if Lead Federal Department is not the Bidder)	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Partner 2	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Partner 3	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -

	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Partner 4	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
All other partners (List in space below)	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Total Program Funding Requested:		\$ -	\$ -	\$ -	\$ -
Co-Investment Contribution (In-kind and Cash)					
Partner	Budget Element	Year 1	Year 2	Year 3	TOTAL
<i>Bidder</i>	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
<i>Partner 1 OR Lead Government Department (if Lead Federal Department is not the Bidder)</i>	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -

Partner 2	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Partner 3	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Partner 4	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
All other partners (List in space below)	Labour				\$ -
	Equipment				\$ -
	Material & Supplies				\$ -
	Indirect Costs				\$ -
	Travel				\$ -
	Sub- Contracts				\$ -
	Other (specify)				\$ -
	TOTAL:	\$ -	\$ -	\$ -	\$ -
Total Co-Investment Contribution:		\$ -	\$ -	\$ -	\$ -
Estimated Total Costs for Proposal					
Total Program Funding Requested		\$ -	\$ -	\$ -	\$ -
Total In-Kind Contribution		\$ -	\$ -	\$ -	\$ -
Total Cash Contribution		\$ -	\$ -	\$ -	\$ -
Total Funding from Other Federal Programs		\$ -	\$ -	\$ -	\$ -
Total Proposal Value		\$ -	\$ -	\$ -	\$ -

Annex F - Project Manager Experience

Project Manager, identify three projects that show that the Project Manager or project management team has experience managing projects that are 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	Roles

Project Two:

Project Title:				
Description	Start Date	End Date	Cost	Roles

Project Three:

Project Title:				
Description	Start Date	End Date	Cost	Roles

Other Comments: (200 words maximum)

Annex G- Key Project Team Members Experience

For each Key Project Team Member identified, identify 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	Past Experience	Start Date	End Date	Deliverables

And/or

Qualifications

Required scientific or technical element	Qualification	Year

Other Comments: (200 words maximum)

Annex H – Partnership Signature Form

This template for the Partnership Signature form is to be filled out for the Public Safety and Security S&T Challenges only (challenges 8-22). Refer to Annex C for instructions on the level of signatures.

A signature on this form constitutes a confirmation to the effect that:

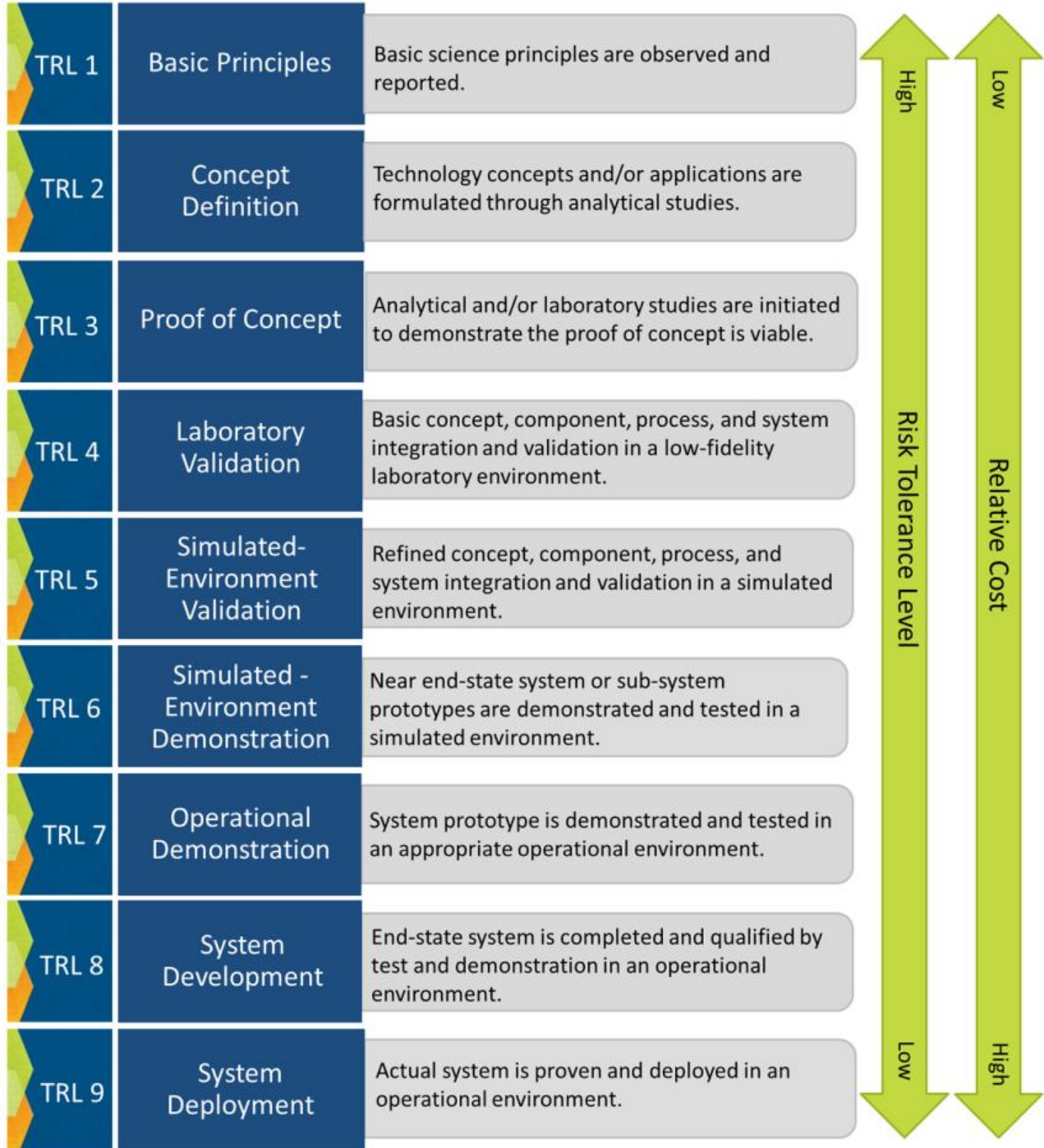
“I have read this CFP and proposal in full and agree to the collaboration of myself and my organization as described in the project description and budget information.”

Partnership Signature Form				
DRDC Reference ID:				
Proposal Title:				
Bidder Name:				
Partner	Signatory			
Organization Name and Sector (print)	Name (Last, First) (print)	Position Title (print)	Date (YYYY/MM/DD) (print)	Signature
Full Name: Sector:				
Full Name: Sector:				

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

Annex I – Technology Readiness Levels (TRLs)

The technology readiness levels (TRLs) are indicated below:



Annex J – 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 J-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
Travel	-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	-Space for stakeholder activities outside the scope of the specific proposal

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Buyer ID - Id de l'acheteur

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CCC No./N° CCC - FMS No./N° VME

	<p>stakeholder premises or on field work</p> <ul style="list-style-type: none"> -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 	<p>-Equivalent commercial rates</p>
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