



Government of Canada / Gouvernement du Canada

PSTP - Call for Proposals Bidder Guidebook for Call 3

DRDC Centre for Security Science

PSTP Call 3 opens 14 December 2010 and closes 25 January 2011 1600 EST

DRDC CSS M 2010-001

A Partnership Led by Defence R&D Canada – Centre for Security Science



Agriculture and Agri-Foods Canada • Atomic Energy of Canada Limited • Canada Border Security Agency • Canadian Food Inspection Agency • Canadian Nuclear Safety Commission • Canadian Security Intelligence Service • Communications Security Establishment • Defence Research and Development Canada • Environment Canada • Fisheries and Oceans Canada • Health Canada • Industry Canada • National Research Council • Natural Resources Canada • Privy Council Office • Public Health Agency of Canada • Public Safety Canada • Public Works and Government Services Canada • Royal Canadian Mounted Police • Transport Canada • Treasury Board Secretariat



Abstract

The *Public Security Technical Program Call for Proposals Bidder Guidebook Call 3* is for potential Bidders who wish to submit proposals in response to the Public Security Technical Program (PSTP). Resulting contract(s) and associated funding will be used to enhance the program and to enable, through a lead investment, in science and technology (S&T) services and support to address national public safety and security objectives. It provides information on the process by which proposals are prepared, evaluated, selected and recommended for contract award. This *Call for Proposals Guidebook* has been updated to reflect the evolution in PSTP Investment Priorities.

The procurement process consists of two stages. Bidders are invited to submit a solution to address the defined PSTP Statements of Work (SOWs) identified herein. This procurement process does not constitute a guarantee on the part of Canada that a contract will be awarded. The information provided in Stage One is used to establish a list of pre-qualified Bidders, and Stage Two focuses on the contracting process.

No payment will be made for costs incurred in the preparation and submission of a bid in response to the Call under the request for proposal process. Costs associated with preparing and submitting a bid, as well as any costs incurred by the Bidder associated with the evaluation of the bid, are the sole responsibility of the Bidder.

Bidders must use only the current guidebook when preparing their submission.

Résumé

Le présent guide donne aux éventuels soumissionnaires en réponse du Programme technique de sécurité publique (PTSP). Le placement associé et de contrat(s) subséquent seront employés pour augmenter le programme et pour le permettre, par un investissement majeur en science et en technologie (S et T) services et support pour adresser des objectifs publics nationaux de protection et sécurité. Il fournit des informations sur le procédé à suivre pour préparer, évaluer, sélectionner et recommandées pour attribution d'un contrat. Le présent guide d'appel de propositions a fait l'objet d'une mise à jour pour refléter l'évolution des priorités en matière de financement du PTSP.

Le processus d'appel de propositions comporte deux étapes. Les soumissionnaires sont invités à soumettre un énoncé des travaux (EDT) pour adresser des priorités définies ci-dessus en matière de financement du PTSP. Ce processus de proposition ne constitue pas une garantie de la part du Canada qu'un contrat sera attribué. Les renseignements donnés au cours de l'étape Une est employée pour établir une liste de candidats pré qualifiés et l'étape Deux est centrée sur le processus de passation des marchés.

Aucun paiement ne sera versé pour des coûts encourus pour la préparation et la présentation d'une soumission en réponse au processus de l'appel demande de propositions. Le soumissionnaire sera seul responsable des frais engagés dans la préparation et la présentation d'une soumission, ainsi que des frais engagés par lui pour l'évaluation de sa soumission.

Pour la préparation de propositions, les candidats doivent utiliser seulement le guide actuel.

Table of Contents

ABSTRACT	2
RÉSUMÉ	3
1 INTRODUCTION	6
1.1 CONTEXT AND PURPOSE OF GUIDEBOOK	6
1.2 PSTP MANDATE	8
1.3 PROCUREMENT APPROACH	9
1.4 OVERVIEW OF THE MANAGEMENT OF THE PSTP PROGRAM AND PSTP STUDIES.....	11
2 PSTP INVESTMENT PRIORITY SETTING FOR CALL 3.....	12
2.1 INVESTMENT PRIORITY SETTING PROCESS	12
2.2 OVERVIEW OF CAPABILITY GAP INVESTMENT PRIORITIES.....	12
3 PROPOSAL SUBMISSION AND EVALUATION.....	13
3.1 GENERAL INFORMATION	13
3.2 PROPOSAL TECHNICAL EVALUATION CRITERIA.....	16
3.3 PROPOSAL REVIEW, RANKING, AND SELECTION	18
3.4 DEBRIEF FROM PROPOSAL SELECTION PROCESS	19
3.5 SENSITIVE OR PROPRIETARY INFORMATION.....	20
3.6 CANADIAN CONTENT	20
3.7 INTELLECTUAL PROPERTY	20
3.8 SECURITY CONSIDERATIONS.....	22
3.9 DISCLOSURE AND USE OF INFORMATION	22
3.10 HUMAN AND ANIMAL ETHICS	22
3.11 PROPOSAL PARTNERSHIPS.....	22
4 FINANCIAL CONSIDERATIONS	23
4.1 FUNDING	23
4.2 IN-KIND CONTRIBUTIONS	23
4.3 ELIGIBLE COSTS.....	23
4.4 PROGRAM FINANCIAL FRAMEWORK	24
5 POST-STUDY APPROVAL/STUDY IMPLEMENTATION	26
5.1 MEMORANDUM OF UNDERSTANDING.....	26
5.2 STUDY INITIATION AND MANAGEMENT	26
5.3 PERFORMANCE EVALUATION/AUDIT REQUIREMENTS	27
5.4 DISPUTE RESOLUTION.....	27
6 STUDY AND CONTRACT TERMINATION.....	28
6.1 STUDY TERMINATION	28
6.2 CONTRACT TERMINATION.....	28
7 STUDY DELIVERABLES	29
7.1 CHARTER	29
7.2 SUPPORTING DOCUMENTATION	29
7.3 PROGRESS REPORTS	29
7.4 FINAL REPORT	30
ANNEX A PSTP CALL 3 INVESTMENT PRIORITIES	32
A.1 OVERVIEW	32
ANNEX B ORGANIZATIONAL CHART FOR PROGRAM MANAGEMENT	34
ANNEX C PROGRAM FINANCIAL FRAMEWORK	35
ANNEX D IN-KIND CONTRIBUTIONS	36



ANNEX E LEAD FEDERAL DEPARTMENTS..... 39
ANNEX F TECHNICAL EVALUATION CRITERIA - LANGUAGE LADDERS 40
ANNEX G PROPOSAL CONTRACTING DOCUMENTS..... 44
ANNEX H ACRONYM..... 45



1 Introduction

1.1 Context and Purpose of Guidebook

Over the last several years, as part of the government's commitment to innovation, the federal S&T community has been developing new approaches to enable the effective delivery and management of government science. Through federally led networks, these approaches are designed to integrate federal, other levels of government, public, non-profit, academic, and private sector science to produce solutions for emerging issues and to deliver innovative products and services.

Canada's Public Security Science and Technology (S&T) Program is an essential aspect of the federal government's public safety and security agenda, which endeavors to position S&T as a strategic lead investment through efforts to collaboratively deliver S&T solutions that advance Canada's national capabilities to prepare for, prevent, respond to, and recover from high-consequence public safety and security events.

The Centre for Security Science (CSS) coordinates public security investments in S&T on behalf of Public Safety Canada, the Department of National Defence (DND), and the more than 20 other federal government departments that are party to the Public Security Technical Program (PSTP) Memorandum of Understanding (MOU).¹ These investments encompass a broad range of subject matter and are currently organized into four domains: Defeat Chemical, Biological, Radiological/Nuclear and Explosives (CBRNE) Threats; Critical Infrastructure Protection (CIP); Surveillance, Intelligence and Interdiction (SII); and Emergency Management Systems and Interoperability (EMSI).

Inside each of the three domains for which the PSTP has direct responsibility, the following distinct Communities of Practice (CoPs) have been formed:

- a. Critical Infrastructure Protection (for CIP)
- b. e-Security (for CIP)
- c. Border and Transportation Security (for SII)
- d. Biometrics for National Security (for SII)
- e. Emergency Management Systems and Interoperability (for EMSI)

The purpose of this Call for *Proposals Bidder's Guidebook* is to provide information on PSTP's third Call for Proposals (Call 3), which has been designed to strengthen public security investments across these five CoPs. The PSTP will seek a balance of investment across these five CoPs and will provide funding, of up to \$200,000 per study. Typically, there will be approximately two to four studies awarded per CoP.

This guidebook provides information for potential Bidders in PSTP studies on the process by which proposals for PSTP funds are prepared, evaluated, selected and funded. This current Call for Proposals Guidebook refers to the proposal cycle for studies to be conducted during the fiscal year 2011-2012, which

¹ MOU between DND and 22 Federal Department/Agency Partners on the CSS and PSTP, (signed July–Sept 2008); DND MOU Identification Number: 2008040021.

opens in December 2010. Additional information is available on the [PSTP Call for Proposals](http://www.css.drdc-rddc.gc.ca/pstp/proj-prop/index-eng.asp) page of the CSS website at <www.css.drdc-rddc.gc.ca/pstp/proj-prop/index-eng.asp>.

1.2 PSTP Mandate

PSTP’s mission is “to strengthen Canada’s ability to prepare for, prevent, respond to, and recover from high-consequence public safety and security events by employing S&T as a strategic enabler and lead investment for the federal government’s public safety and security agenda.”

1.2.1 PSTP Scope

In support of the PSTP mission, PSTP is seeking proposals for studies in the CIP, SII, and EMSI domains that will start to address key capability gap investment priorities in each of their associated CoP through the defined Statements of Work (SoWs) for this Call for Proposals. An overview of the scope of each of the three domains follows in the subsections below. Further information about the individual CoPs and the PSTP Call for Proposals Call 3 related SoWs can be found on the PSTP Call for Proposals page of the CSS website at www.css.drdc-rddc.gc.ca/pstp/proj-prop/index-eng.asp.

1.2.1.1 Critical Infrastructure Protection

The objective of the CIP domain is to improve the resilience of Canada’s critical infrastructure to physical and cyber attack by engaging all four communities implicated in Critical Infrastructure (policy; operations; security & intelligence; and science and technology). As a key enabler, S&T will strengthen the robustness, reliability, resilience, and protection of facilities (including cyber facilities), networks, services and assets. Any of which, if disrupted or destroyed, would have a serious impact on health, safety, security, economic well-being, or effective functioning of Canada and Canadians.

The challenges of protecting Canadians from the consequences of failures of critical infrastructure (e.g., communications and information technology, food, health, finance, manufacturing, transportation, water, and energy and utilities) are significant, and may fall under the responsibility of the federal, provincial, territorial, or municipal governments or the private sector. S&T support is therefore essential for the assessment of critical vulnerabilities and the development of capabilities to reduce those vulnerabilities. PSTP has established and is currently supporting two CoPs within this domain:

- 1) CIP, which includes aspects associated with protecting the physical critical infrastructure; and
- 2) eSecurity (Cyber).

Through initial interdepartmental e-security (cyber) working groups and PSTP “seed funding,” a PSTP e-Security (Cyber) CoP has been established to gain an initial understanding of the various mandates relating to e-security (cyber), assess the required capabilities, identify gaps that need strengthening; and identify the S&T areas that will address such gaps. These areas are proposed as the initial pillars, or work breakdown structure, for e-security (cyber) S&T. They include secure network architecture and management; psychosocial and cultural aspects of e-security (cyber); e-security (cyber) event management; and network analysis and modelling.

The CIP CoP has been established to share a broad understanding of the vulnerabilities of Canada’s 10 CI sectors (and specific sub-sectors) and their dependencies and interdependencies, and to identify opportunities for S&T to enhance resilience.



1.2.1.2 Surveillance, Intelligence, and Interdiction

The objective of the SII domain is to engage S&T players from multiple sectors to advance and integrate Canada's surveillance, intelligence, and interdiction public security capabilities.

Today's challenges of protecting and enforcing borders; protecting and enforcing security in the North; and protecting marine security, aviation security, and other modes of transportation security represent a series of immensely significant and visible challenges. Lead S&T investment and support is urgently required to develop capabilities needed to identify and stop terrorists/criminals and their activities. These capabilities include surveillance, monitoring, disruption, and interdiction. At present, PSTP has established and is supporting two CoPs within this domain:

- 1) Border and Transportation Security; and
- 2) Biometrics for National Security

1.2.1.3 Emergency Management Systems and Interoperability

The objective of EMSI is to engage S&T players from multiple sectors to advance and integrate Canada's emergency management (EM) public security capabilities.

The challenges of protecting Canadians from the consequences of increasingly complex emergencies continue to grow. EMSI focuses on the performance, integration, and interoperability of national and international EM capabilities and supporting systems. Effective EM requires seamless interactions with various CoPs whose capabilities extend across multiple jurisdictions, as well as industry and academia.

S&T activities can provide support to the development of standards, vision architectures for interoperable EM capabilities, and the assessment of EM systems' vulnerabilities. S&T experts can help decision makers in articulating strategic direction by providing advice on policy interpretation and priorities to address national EM capability gaps.

Interoperable EM systems enhance national EM capabilities related to saving lives, preserving the environment, and protecting property and the economy. Activities include building operational capacity and seamlessness across the national system, including strengthening surge capabilities; developing a comprehensive process that includes the private sector and regional response communities; supporting regular national and international exercises involving civilian and military resources to assess the adequacy of the national system against various emergency scenarios; and working closely with allies to continuously improve capacity and coherence in continent-wide EM.

1.3 Procurement Approach

The PSTP Call for Proposals process involves two-stage procurement process 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 national S&T performers – public, private, and academic. Research and Development (R&D) services are excluded under the North American Free Trade Agreement (NAFTA) and World Trade Organizations Agreement on Government Procurement (WTO-AGP).

Stage One: Proposal Process

The RFP Letter and resultant contract clauses template are shown under [Annex G, Proposals Contracting Documents](#).

1.4 Overview of the Management of the PSTP Program and PSTP Studies

The PSTP Program is governed by the Public Security S&T Steering Committee (SC), co-chaired by DRDC's Assistant Deputy Minister (ADM) (S&T), and PS Canada's ADM Emergency Management and National Security with membership from participating federal departments and agencies at the ADM level. The SC is responsible for endorsement of investment priorities, development of strategic policy, and oversight of financial activities. The Public Security S&T Program Management Board (PMB) provides operational oversight and is co-chaired by the Director General, CSS and the Director General, Emergency Management Policy, PS Canada. Members include the director generals of participating federal departments.

The CSS Secretariat develops, recommends, and manages PSTP administrative and program policies and procedures, coordinates the proposal selection process, manages program funding and proposal funding recommendations, and coordinates communications and events.

The Proposal Selection Committee (PSC) supports the CSS Secretariat in the screening, review, and evaluation of proposal submissions. As previously mentioned, the PSC is chaired by the Director, S&T Public Security (DSTPS), and includes experts from the federal science and operational communities, industry, academia, and Public Works and Government Services Canada (PWGSC). Due diligence is applied to the study review and selection process to ensure that conflict of interest situations are avoided. The PSC recommends proposals to the PMB for approval.

A Lead Federal Department or agency must lead each PSTP study ([See Annex E "Lead Federal Departments" for the list of possible Lead Federal departments](#)). The Lead Federal Department appoints a study Project Champion (PC) and Project Manager (PM). The PM is accountable to the PC and is responsible for study execution according to agreed objectives, schedules, and resource commitments articulated in a study charter. Partners involved in delivering the study form a study team, and support the PM in study execution.

A Study Review Committee (SRC), chaired by the lead department's PC, provides oversight of the study, including approval of changes to the schedule and cash profile, recommends changes in the study's profile to PMB for approval, and addresses other exceptional circumstances that cannot be resolved by the study team. A study organizational chart depicting the management structure for CSS funded studies is presented in [Annex B "Organizational Chart for Program Management"](#).

Public Works and Government Services Canada (PWGSC) is the authority responsible for the integrity of the procurement process under the Call for Proposal method of supply.

2 PSTP Investment Priority Setting for Call 3

2.1 Investment Priority Setting Process

The CSS develops a set of Investment Priorities based on identified requirements and gap analyses. These are informed by a consultation process involving federal policy, science, operational, and intelligence communities, along with representatives of the provincial and municipal first responders and international communities. In each Call for Proposals, a number of Investment Priorities are targeted. As the PSTP continues to strive for a balanced study portfolio, it has selected the top Investment Priorities detailed in Annex A, [“PSTP Call 3 Investment Priorities.”](#)

2.2 Overview of Capability Gap Investment Priorities

For the PSTP Call for Proposals, Investment Priorities for each CoP are articulated through a detailed SOW. [Annex A “PSTP Call 3 Investment Priorities”](#) lists the current PSTP capability gap investment priority areas.

3 Proposal Submission and Evaluation

PSTP employs a competitive proposal selection process that examines each proposal's quality and relevance, as established by the selection criteria outlined in this *PSTP Call for Proposals Bidder Guidebook for Call 3*.

Submission is accomplished through a password-protected, web-based system through which Bidders register and complete the online Proposal Submission Form. This process is described further in [Section 3.1.2](#), "Proposal Submission Process."

This procurement process does not constitute a guarantee on the part of Canada that a contract will be awarded. The information provided in Stage One is used to establish a list of pre-qualified Bidders.

3.1 General Information

3.1.1 Who May Submit a Proposal

A proposal may be submitted by an individual as the Lead Bidder from a Canadian private, academic or public sector organisation. Canadian Bidder(s) may partner with International organisations from the aforementioned Canadian sectors. PSTP requires wide collaborations to result from its studies, in particular, collaborations that will endure beyond the duration of the study. These new linkages are expected to connect industry, academia, government, and, ultimately, end-user participants, both within Canada and internationally.

Limit on Bidders: Submissions from any one Lead Bidder are strictly restricted to two (2) submissions. This is intended to encourage collaborations between partners and respect the limits of resources and time within the individual research facilities and within the CSS secretariat. The Lead Bidder must be an authorized signing officer of the Bidder Organization and have authority to submit the proposal on behalf of the Bidder Organization and to act as the lead contact for purposes of the submission.

Federal Departments that submit proposals as a "*Bidder*", where there would be intent to contract with a Supplier using the Call for Proposals method of supply, must name the Supplier in their proposal submission and the applicable budget. Contracting with Suppliers not clearly identified by the Federal Department within the proposal submission will be subject to Treasury Board Secretariat under the Government Contracting Regulations and the Departments mandate, delegated approval and Contracting Policies and Procedures.

3.1.2 Proposal Submission Process

CSS has contracted with ProGrid Ventures Inc. to use its Benchmark Action decision-support technology to structure the submission, review, evaluation, and selection process with the use of an on-line application utility.

Submission of an unclassified proposal is done through a password-protected, web-based Submission system through which the Bidder registers and completes an online Submission Form accessible at https://secure.benchmarkaction.com/Docs/PSTP/proposal_instructions_en.html. This online system permits content to be copied and pasted into fields. The submission does not have to be completed in a single log-in session; incomplete entries are automatically saved by the system so that

Bidders can return and edit a still unfinished Submission Form. However, once the Bidder selects the final “Submit” option, the Submission Form is considered complete and a confirmatory e-mail message will be sent to the Bidder.

PSTP studies typically involve a team with multiple partners. The study team should choose a Proposal Lead Bidder to register the proposal in the web-based submission system. The proposal Lead Bidder may be the Principle Investigator, Project Leader or Coordinator, and so on. All subsequent communications concerning the proposal submission will be only with the Proposal Lead Bidder.

Bidders submitting a classified proposal must contact the CSS Secretariat through the PWGSC [Contracting Authority](#) (see section 3.1.4 Communications – Call for Proposals Period) to obtain the proper Classified Submission Form and to arrange delivery of the proposal using procedures designed to protect the confidentiality of the content.

All Submissions must be received through the web-based system or, if it is a classified submission, by the CSS Secretariat, no later than 18 January 2011, 16:00 Eastern Standard Time (EST).. Bidders using the web-based system will receive confirmation of receipt through the online system. Bidders of classified submissions will receive confirmation of receipt from the CSS Secretariat.

Bidders who encounter difficulty using the web-based system should contact the systems administrator at support@benchmarkaction.com.

Note: If a large number of Bidders access the system at the same time, electronic submission of proposals at or near the deadline may be delayed. Bidders are solely responsible for ensuring their proposal is **received** on time; late submissions will not be accepted. A date stamp indicating the time of the transmission is also not acceptable.

3.1.3 Schedule for PSTP Call 3

TABLE 2: PROPOSAL SCHEDULE FOR PSTP CALL 3

Call for Proposals Announcement	14 December 2010
Closing Date for Proposal Submission	25 January 2011
Study Award Announcement	April 2011
Study Implementation Workshops	April 2011
Bid Validity End Date	25 January 2013
Follow-up Debrief to Potential Studies	As required April 2011 to January 2013
Follow-up Study Implementation Workshop for Potential Studies now Approved	As required April 2011 to January 2013

3.1.4 Communications – Call for Proposals Period

To ensure the integrity of the competitive bid process, all enquiries and other communications regarding the Call for Proposal must be directed to the Contracting Authority identified below. Failure to comply with this requirement may result in the proposal being declared non-responsive.

PWGSC Contracting Authority

Name: Brooke Taylor

Supply Team Leader

Public Works and Government Services Canada

Telephone: 819-956-1674

Facsimile: 819-997-2229

Email: brooke.taylor@tpsgc-pwgsc.gc.ca

Communications must be made no later than ten (10) calendar days prior to bid closing. Enquiries received after that time may not be answered.

To ensure consistency and quality of information provided to Bidders, significant enquiries received and the replies to such enquiries will be provided simultaneously to Bidders, without revealing the sources of the enquiries.

Bidders should reference as accurately as possible the numbered item of the *Call for Proposals Bidder Guidebook* to which the enquiry relates. Care should be taken by the 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 questions or may request that the Bidders do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

Responses to enquiries may have significant implications for the bid solicitation. An extension to the bid closing date will be considered every time a response is provided to an enquiry.

3.1.5 Modification and Withdrawal of a Proposal Submission

A Proposal may normally be modified, withdrawn or resubmitted before the Call for Proposal closing date provided that it is done using the Online Submission process described in Section 3.1.2.

When using the Online Application system, Submissions are final. **No** updates or changes can be processed after selecting the “Submit” button on the “Review and Submit” page.

Bidders must contact the [Contracting Authority](#) (see section 3.1.4 Communications – Call for Proposals Period) to advise of a modification and/or withdrawal of a completed submission before the closing date and identify the proposal to be modified/withdrawn by the submission number and title. Note that no requests for modification will be accepted within 24 hours of the Call for Proposal closing time.

M4. Compliance with the PSTP Financial Framework:

- PSTP will fund a maximum amount of \$200,000 for any one study (exclusive of GST/HST). In-kind contributions must be provided by the study partners, including federal departments. The in-kind contribution must be a minimum of 10% of PSTP funds. For example, a minimum of \$20,000 must be provided as in-kind contributions by the partners, including federal departments if a Bidder requests the default \$200,000 of PSTP funding. All study proposal applications must be completed in Canadian currency.

Unless otherwise specified, the default amount of funding to be provided by PSTP will be CAD\$200,000.

Note: Since funding from PSTP is capped at \$200K, proposals will not be evaluated for cost, however in-kind resources will be considered when assessing the team engagement component of the proposal ([see Annex F Technical Evaluation Criteria – Language Ladder, LL4. Team Capability and Engagement](#)).

M5. Certification:

In submitting a proposal submission, the Lead Bidder must certify to the following terms:

- That he or she has read, understood and agreed to the contents, terms, and conditions contained in this Call for Proposals Bidder Guidebook. (see also [Annex G Proposal Contracting Documents](#), RFP Letter and Resulting Contracting Clauses).
- That he or she is an authorizing signing officer of the Bidder and has authority to submit this proposal on behalf of the Bidder and to act as the lead contact for purposes of this Submission.
- That all the information he or she has provided in this Submission is true and complete.
- That all partners listed in the proposal have agreed with their roles and resource implications.
- That he or she understands that a signature may be requested later during the Stage Two, PWGSC Contracting Process.

M6. Proposal Duration:

- All studies must not exceed 9 months duration from date of contract issue.

3.2.2 Technical Evaluation Criteria and Ratings

PSTP will use the following assessment criteria for technical evaluation (See [Annex F “Technical Evaluation Criteria – Language Ladders”](#) for the comprehensive set of performance statements).

- Relevance
- Impact on CoP
- Study work plan
- Team capability and engagement
- Feasibility and likelihood of success

Language Ladders are used in rating each criterion and are provided during the online submission process. Reviewers are asked to rate criteria against performance statements termed “Language Ladders” (LLs) (see [Annex F “Technical Evaluation Criteria – Language Ladders”](#)). The language ladder tool is an assessment scheme through which each proposal will be assessed using specific criteria.

Note: that in this system, A is ranked as low and D as high, as outlined in the following ratings:

- A = Major deficiencies that impact viability of proposal
- B = Minor deficiencies that should be addressed if project is approved
- C = Fully satisfactory with no deficiencies to address; project can proceed as proposed
- D = Excellent in all aspects with the ability to exceed objectives

3.3 Proposal Review, Ranking, and Selection

PSTP is running a Call for Proposals for five CoPs. PSTP will seek to balance the total \$2 million investment across these five CoPs by funding approximately two studies per CoP. CSS reserves the right to make the final decision on balance of investment decisions so as to maximize the benefit of the program and minimize any chances of duplicating or over-emphasizing work in a particular area.

Each of the five CoPs has two to four “study topics” for which proposals will be accepted. The study topics also form the basis of the SoWs, which are available on the [PSTP Call for Proposals](#) page of the CSS website at <www.css.drdc-rddc.gc.ca/pstp/proj-prop/index-eng.asp>. Selection will be based on the overall funding allocation and the highest scored proposals received for each CoP.

Note: It is preferable that a maximum of one proposal per study topic be funded in order to avoid duplication of effort and to balance investment. Should the highest ranked proposals received for one CoP address the same study topic, only the highest ranked will be selected, followed by the next highest rated proposal of sufficient quality from one of the other study topics in that same CoP.

Review

Independent expert reviewers complete the technical evaluations while the online assessment tool determines the final average score and ranking, from highest to lowest technical score. Independent reviewers are selected based on their knowledge and experience in CIP, SII and EMSI S&T and knowledge of S&T end-user operational requirements.

The Proposal Selection Committee is comprised of Canadian and international subject matter experts from government, industry and academia. PSC members review proposal submissions and ensure that the content of the submissions is consistent with the PSTP Investment Priorities described in [Annex A “PSTP Call 3 Investment Priorities”](#) of this guidebook.

Ranking

The final proposal selection decisions for PSTP funding support will be based upon the following factors:

- The relative average technical scores (ranked highest to lowest) for the proposals, based on the independent expert reviewers' assessments using the technical evaluation criteria, as provided by ProGrid to the PSC.
- A review of proposal rankings from highest to lowest technical score and a rationalization against investment priorities completed by the PSC to balance investments across the Investment Priorities (see [Annex A "PSTP Call 3 Investment Priorities"](#)).
- The PSC generation and provision of the Final Recommended Studies List, including Potential Studies, to the Program Management Board (PMB) for approval of the rankings and selections.

Selection

Final determination for funding approval of full or partially approved studies is made by the DSTPS based on the recommendations of the PMB and available funding.

PSTP Call 3 will allocate up to approximately CAD \$2 million to new projects aligned with investment priorities identified in this guidebook.

Additional Potential Funding Opportunities

- i. Should an estimated additional funding become available following initial study selection, the potential proposed studies will be selected to ensure a balanced investment across the PSTP program. These potential studies will be deemed approved by the PMB and DSTPS should the following conditions be met: (1) the proposed study submission is still valid as per the Bid Validity Period; (2) that the Investment Priorities and descriptions provided in the PSTP Call for Proposals Call 3 guidebook are reflective of PSTP current business requirements; and (3) PSTP Call for Proposals Call 4 has not been issued. Should a proposed potential study address an Investment Priority provided in [Annex A PSTP Call 3 Investment Priorities](#) that is no longer relevant to the business needs of the PSTP Program, then the proposed potential study will be skipped and selection of the next highest ranked potential study will be made.
- ii. The Crown reserves the right to exercise an option to fund optional follow-on activities where an additional value between CAD \$5,000 and \$50,000 may be made available for the purpose of test and evaluation support to any of the approved studies.

3.4 Debrief from Proposal Selection Process

The PMB approves the selected proposals based on the recommendation of the PSC. Once the announcement is made public by CSS, all Bidders will be advised of the status of their proposal submission. Bidders will receive one of the following debrief messages:

1. The proposal submission did not meet the mandatory criteria or was outside the PSTP scope and mandate.
2. The proposal submission did not rank high enough to be considered for funding.
3. The proposal submission has been accepted, partially conditional on refinements and/or further clarification made to the work plan, scope, or budget as identified during the selection process.
4. The proposal submission has been accepted in full.
5. The proposal submission has been approved as a potential study pending additional funding in 2011/2012 and the relevance of the study to investment priorities at the time of funding, the Bid Validity Period, and the status of the PSTP Call for Proposals Call 4

Due to the large volume of Proposal Submissions to PSTP, further feedback will not be possible at this time. Bidders will be provided with the full review results for their proposal within 30 days of the PSC's decision. PSTP cannot provide information on the results of a proposal's review to anyone other than the Lead Bidder. The CSS Secretariat will only correspond and provide feedback to the Lead Bidder identified on the proposal. Bidders must quote their PSTP proposal number in all correspondence.

Bidders of approved potential studies will be advised should their study status change from Potential Study to Approved Study by the end of the Bid Validity Period. One of the debrief messages detailed above will be provided.

3.5 Sensitive or Proprietary Information

The contents of all submissions will be considered sensitive and will be maintained in confidence by the CSS Secretariat, PSC members, PMB members and expert reviewers throughout the evaluation and selection process. Any release of this information outside the selection process requires the expressed agreement of the Bidder(s).

3.6 Canadian Content

The "Canadian Content Policy" in the PWGSC's *Supply Manual* applies to competitive procurements that are publicly advertised and have an estimated value of \$25,000 or more. Any contracts for goods or services or both initiated by the Lead Federal Department that will use funding received from PSTP will be assessed by PWGSC for Canadian content. The aim is to achieve a minimum of 80 percent Canadian content. As a result, successful Bidders may be requested to provide additional information on Canadian content during Stage Two, PWGSC contracting process. Additional information on Canadian content is available in Annex 3.6 of the PWGSC *Supply Manual* at <www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre03-chapter03-eng.html#sa3-6>. The Supply Manual demonstrates how Canadian content is determined for a mix of goods, a mix of services or a mix of goods and services.

3.7 Intellectual Property

The importance of Intellectual Property (IP) and the complexities surrounding it demand that active IP management take place. IP represents a valuable asset arising from a project. Public servants may create it "internally" (i.e., strictly), or contractors or a combination of both may create it. It is imperative to identify all background IP (BIP)² at the earliest possible moment, preferably in the study proposal submission and during the development of the Study Charter before contract negotiations take place.

² Implementation Guide for the Policy: Title to Intellectual Property Arising Under Crown Procurement Contracts, section 4, Definitions - http://www.tbs-sct.gc.ca/pubs_pol/dcgpubs/Contracting/tipaucpc_ig1-eng.asp Background IP - Background consists of all Intellectual Property developed outside the scope of the Crown Procurement Contract. Background may be controlled or owned by either party to the particular Crown Procurement Contract or by third parties. Foreground IP - all Intellectual Property first conceived, developed, produced or reduced to practice as part of the work under a Crown Procurement Contract.

PWGSC's General Conditions [2040—Research and Development](#)³, includes provisions respecting IP. If required, additional special provisions may be drafted regarding BIP for inclusion in the contract. The disposition and status of foreground intellectual property (FIP) must be planned for prior to study implementation, and prior to the execution of any contracts. The following questions will be helpful in managing IP:

- What will be the Crown's need to access Contractor-owned BIP⁴, so that the Crown will, if necessary, be able to use the FIP?
- What will be the Crown's licensing requirements for future improvements to the IP?
- What are the Crown's present and future needs? What is the government-wide purpose of this IP, rather than the specific needs of any one department?
- Who will own the FIP? According to the Implementation Guide on the Treasury Board *Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts*⁵, ownership is typically vested in the Contractor. This is a decision of the Lead Federal Department with input from PWGSC.

IP must be addressed in all contracts. There are two options: either the Crown will own the FIP, or the Contractor will own the FIP. There will be no shared ownership. Any contract that involves the collection, generation, or use of "personal" data will be subject to more intensive IP scrutiny and data protection.

Each study will manage IP according to the following principles:

- Identification and "right to use" of BIP will be made before project initiation. Study participants will normally make their background IP available to the extent appropriate for the successful execution of the study.
- Study participants will respect the interests of collaborators regarding the divulgence or use of third-party information, or any previous commitments/licensing of BIP. Non-disclosure agreements will be employed when requested by study participants.
- Parameters for the ownership, management, administration, and exploitation of FIP (i.e., IP generated in the course of the study) must be completed before project initiation. These parameters will favour the transfer and commercialization of IP so as to maximize its access by first responders and operational communities.
- Every reasonable effort will be made to support private sector participants in the commercialization of FIP generated in the course of the study. This will typically result in either the granting of licences or the assignment of ownership. The selected approach will be negotiated before the start of the study to best support the interests of all parties.

³ PWGSC – [Standard Acquisition Clauses and Conditions, General Conditions – Research & Development](#)

⁴ Implementation Guide for the Policy: Title to Intellectual Property Arising Under Crown Procurement Contracts, section 4, Definitions <www.tbs-sct.gc.ca/pubs_pol/dcgpubs/Contracting/tipaucpc_ig1-eng.asp>

⁵ [Implementation Guide for the Policy: Title to Intellectual Property Arising Under Crown Procurement Contracts](http://www.tbs-sct.gc.ca/pubs_pol/dcgpubs/contracting/tipaucpc_ig-eng.asp) <www.tbs-sct.gc.ca/pubs_pol/dcgpubs/contracting/tipaucpc_ig-eng.asp>.

- Where contracts have been issued, the Treasury Board *Policy on Title to Intellectual Property Arising under Crown Procurement Contracts* will be applied except where exemptions have been made.

3.8 Security Considerations

Participants in PSTP studies may be required to possess valid security clearances, depending on the nature of the study, in order to have access to information necessary for its execution. The Lead Federal Department and the project team will determine the level of security required for the study and will be responsible for managing the acquisition of any necessary security clearance. Security clearances can be provided by the Canadian Industrial Security Directorate (CISD) PWGSC. For further information, refer to The CISD website <[Canadian Industrial Security Directorate \(CISD\) - ISS](http://ssi-iss.tpsgc-pwgsc.gc.ca/apropos-about/org/dsic-cisd-eng.html)> available at <http://ssi-iss.tpsgc-pwgsc.gc.ca/apropos-about/org/dsic-cisd-eng.html>.

3.9 Disclosure and Use of Information

At the onset of the study, study partners must clearly identify all issues related to security and disclosure of information. Special or specific information requirements should be identified in this section.

CSS reserves the right to disclose and/or use information for studies for which it provides funding when requested by the appropriate authorities. Additionally, the use and publication of information related to a study will require review and acknowledgement by the Project Manager, Lead Federal Department, and CSS. To achieve this, study members will provide copies of any reports, articles or publications to CSS for review 30 days prior to any release, distribution, or planned publication.

3.10 Human and Animal Ethics

A proposed study involving human subjects, human tissues, laboratory animals, or animal tissues, must not proceed without prior approval of DRDC's Human Subjects Research Ethics Committee or the partner's institutional Animal Care Committee and must not be conducted in contravention of the respective Committee's conditions of approval.

Additional terms and conditions may be applicable to any resultant contract involving the care and use of experimental animals in the performance of the Work.

3.11 Proposal Partnerships

Where two or more proposals are similar in scope and purpose, PSTP may ask the study teams to combine their resources to conduct a study.

4 Financial Considerations

Participation by the private sector or academia in PSTP studies will occur through contracts. The competitive selection process for PSTP studies, in compliance with Treasury Board Secretariat (TBS) policies,⁶ is designed to give national S&T performers in the Canadian public, private, and academic sectors equal opportunity to seek funding from the initiative.

4.1 Funding

All study proposal applications must be completed in Canadian currency.

PSTP will fund a maximum amount of \$200,000 for any one study (exclusive of GST/HST). In-kind contributions must be provided by the study partners, including federal departments. The in-kind contribution must be a minimum of 10% of PSTP funds.

Unless otherwise specified, the default amount of funding to be provided by PSTP will be CAD\$200,000.

4.2 In-Kind Contributions

In-Kind contributions from participants, including federal departments, are required for the implementation of PSTP studies. Participants in a PSTP study must provide in-kind contributions to the study at a minimum of 10% of the PSTP funds. For example, a minimum of \$20,000 must be provided as in-kind contributions by the partners, including federal departments if a Bidder requests the default \$200,000 of PSTP funding.

Participants' In-Kind contributions may include non-cash and cash (matching funds) contributions. Non-cash contributions will generally comprise salaries (e.g., for the PM role), related overheads, and operating costs for major facilities. The nature of eligible non-cash contributions is described further in [Annex D "In-Kind Contributions."](#) Use the method described in [Annex D "In Kind Contributions"](#) or the existing formula of the Lead Federal Partner to calculate In-Kind contributions.

4.3 Eligible Costs

PSTP funds can be provided to studies for both the incremental costs of participating federal departments (see [Annex E "Lead Federal Departments"](#)), and for the costs of contracting with the private sector (where profits are an eligible expense), academia, other levels of government, and international participants, according to approved study work plans. The financial framework for PSTP is described further in [Annex C "Program Financial Framework"](#).

Due to costs incurred by the CSS when full or partial government salaries are covered by PSTP funding, any costs itemized in the study budget that are related to government salaries will be subjected to a 20% holdback. All budget figures for government salaries should take this into account. For example, if personnel costs are to be \$100,000 for a government organisation, a figure of \$120,000

⁶ PWGSC - [SACC - Standard Acquisitions Clauses and Conditions](http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/rqqr.do?date=current&id=2040&lang=eng) < <http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/rqqr.do?date=current&id=2040&lang=eng> >

should be indicated in the budget line in order to provide for the 20% holdback. This 20% is applicable to federal government salaries only.

4.4 Program Financial Framework

DND/Defence Research and Development Canada (DRDC) will advance funds to lead federal departments for PSTP studies, as determined by the Director of CSS's DSTPS. Approved study funds will be transferred in accordance with respective work plans, and in consultation with lead department Project Managers.

Appropriate funding mechanisms will be used to transfer PSTP funds to the Lead Federal Department of a PSTP study.

Participating departments will assume responsibility for received funds in accordance with approved study work plans and will follow their departmental expenditure authority. Departments are accountable for expenditure management of received funds within the current fiscal year according to the agreed upon study objectives, schedule, and cash profile. Departments will keep an accounting record of each study separately.

Note: Following submission of a signed study charter, the Lead Federal Department during StageTwo, PWGSC Contracting Process, will be responsible for submitting a contract requisition through the PWGSC office designated to support PSTP's Call for Proposals. It is important that the departmental contract-procurement staff processing this requisition are aware that the contract selection process has already been completed through PWGSC (see [Section 1.3, "Stage Two: PWGSC Contracting"](#)), and that funding for the contract is being provided externally through an interdepartmental transfer from PSTP to the Lead Federal Department (as already pre-approved by the Public Security Technical Program (PSTP) MOU for which the federal partner is a co-signer). The study charter is not a contract and a valid contract must be issued. Any resultant contract will take precedence over the charter.

All PSTP study contracting must be performed in a manner that enhances access, competition, and fairness and results in best value or, if appropriate, the optimal balance of overall benefits to the Crown. Contracting should be done in a manner that will stand the test of public scrutiny, ensure the pre-eminence of operational requirements, and be consistent with Canada's trade agreement obligations. R&D contracting is exempt from the World Trade Organization – Agreement on Government Procurement and the NAFTA, but is covered by the Agreement on Internal Trade (excluding contracts between government entities) and must respect the Treasury Board's Contracting Policy.⁷

Unexpended funds will be returned to DND/DRDC to apply against other PSTP studies. Where this transfer is not possible, PSTP funds will be managed within DND's cash management authorities.

The Director of DSPTS will oversee program finances. Departments will be accountable to the Director—via their respective departmental PMs—for provision of periodic expenditure and cash flow information, by study, as well as any slippage in a project that could lead to a carry-forward at the end

⁷ [Chapter 10 - Cost and Profit - Supply Manual - Acquisitions - PWGSC](http://www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre10-chapter10-eng.html) <www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre10-chapter10-eng.html>.

of September and February each year. The Lead Federal Department is responsible for identifying potential slippage of funds by no later than 1 December of the calendar year.

PSTP funds advanced to departments can be applied against departmental incremental costs in support of the study and/or used to contract with either or both the private or academic sectors, as established in the study plan.

Universities participating in PSTP studies will receive funds based on specific deliverables via the contracting process. Universities will be able to apply reductions in accepted overhead charges for work performed as matching funds toward a study.

5 Post-Study Approval/Study Implementation

5.1 Memorandum of Understanding

A Memorandum of Understanding (MOU) has been established between participating federal departments/agencies and the Department of National Defence (DND) to define the financial and project management responsibilities to be undertaken in the execution of PSTP studies.⁸

Proposals that have been accepted for funding will require a formal study charter that must be signed by all partners; this charter is then attached to the MOU of the Lead Federal Department. The Proposal Lead Bidder of a submission is responsible to ensure that all the partnerships, resources, and study information included in the charter are true and accurate.

5.2 Study Initiation and Management

Financial accountability will be in accordance with the *Financial Administration Act* as administered within each participating department.

Participating departments and agencies will assume responsibility for received funds in accordance with approved study work plans and will follow their departmental expenditure authority. A federal department or agency must lead each study. The Lead Federal Department appoints a PM, who is responsible for management of the study in compliance with the agreed-upon objectives, schedule, and budget.

Partners involved in delivering the study form a study team and support the PM in the study's execution. Typically, the Contractor team will supply a deputy PM who will support the majority of the time- and labor-intensive PM tasks. The PSTP Portfolio Manager will be the main contact between the PM and PSTP.

A Study Implementation Workshop planned and hosted by CSS will be held following the final study approvals. At the workshop, the PMs and team managers will receive guidance and further information in the development of the study plan, charter, reporting, financial, and accountability mechanisms.

It is important that the Lead Federal Department for a given study understands its roles and responsibilities for the duration of the study. These responsibilities include the following:

- Completion and sign-off of study charter;
- Management of the receipt of interdepartmental funding transfer from CSS through local financial authorities, which requires provision of Interdepartmental Settlement [IS] information (i.e., IS Organization and IS Reference) to the CSS Finance Manager;
- Submission of Contract Demand documentation through departmental material managers and a PWGSC Contracting Officer, including
 - Applicable SoW, as provided by the PSTP Call for Proposals Call 3,
 - Security Clearance Requirement Checklist, if applicable,
 - Employee–Employer Relationship Form,
 - Intellectual Property Declaration, and

⁸ MOU Between DND and 22 Federal Department/Agency Partners on the CSS and Public Security Science and Technology (signed July–Sept 2008); DND MOU Identification Number: 2008040021.

- Departmentally Approved Contract Requisition Form, PWGSC Requisition 9200;
- Management of the day-to-day operations of the study in compliance with the agreed-upon objectives, schedule, and budget (this task is often supported by contracted Deputy PM); and
- Delivery of the final report and other deliverables as per Section 7, “Study Deliverables.”

Within one month of proposal approval, the study Project Manager must develop a charter including a one-page extended abstract describing the goals and anticipated outcomes. Further guidance on this requirement will be provided to the selected Bidders at the Study Implementation Workshop.

Contracts will be issued by PWGSC based in accordance with the SoW and the Contractor’s technical bid with a designated federal department or agency participating in the study as the contract Technical Authority, as determined by the PM. PWGSC may update, as applicable, the standard terms and conditions of resultant contracts.

5.3 Performance Evaluation/Audit Requirements

Since PSTP studies are typically in the order of nine months in duration, the Study Review Committee (SRC) and study team will audit and evaluate the study as part of the interim review (mid-point of study) and again at study closure. Key aspects of the evaluation will include the following reviews:

1. Review of study performance against objectives and work plan; and
2. Review of study impact.

5.4 Dispute Resolution

The respective SRC will manage the resolution of any disputes. At the program level, the CSS Secretariat will manage the dispute resolution process; unresolved issues will be brought to the PMB.

6 Study and Contract Termination

6.1 Study Termination

The Director General, CSS, in consultation with the PC, will make recommendations to the PMB regarding the termination of a study. The PMB will make the final decision on the termination of a study. If one of the following conditions is present, the contract may be terminated:

- Deliverables and/or milestones not met;
- Forecasted inability to deliver (e.g., key personnel have left the department or project); or
- Failure of a contractor to meet contractual obligations or CSS MOU reporting requirements, or both.

Procedures for study termination will be included in the MOU or study charter.

6.2 Contract Termination

Upon consultation with the Technical Authority (who may also want to consult the PC and CSS PSTP Portfolio Manager), the PWGSC Contracting Authority ([see Section 3.1.4 Communications – Call for Proposals Period](#)) has the authority to terminate a contract under the following conditions:

- Termination for Default;
- Termination for Convenience;
- Termination by Mutual Consent; and
- Termination by Performance (completion).

7 Study Deliverables

Documents will be delivered in hard copies (2) and electronic format (MS Word). Presentations will be delivered in hard copies and in MS PowerPoint (ppt) format. The deliverables can be submitted in the official language of preference, except for the fact sheet, which must be in both official languages. Translation of the Fact Sheet must be included in the study's proposal cost .

7.1 Charter

Charter – Study work plan, milestones, financial planning, the responsibilities of the team members, and the charter must be signed by all partners and by the CSS DSTPS *before the funds can be transferred to the Lead Federal Department*. A template will be provided.

7.2 Supporting Documentation

Fact Sheet: A one-page fact sheet (in both official languages) on the study and its results must be submitted for the annual Public Security S&T Summer Symposium. Format templates will be provided at the Study Implementation Workshop. An updated version of the fact sheet is to be resubmitted with the final report.

Quad Chart: A one-slide quad chart summarizing the study objectives, team members, general approach, and expected outcomes must be provided and presented at the Study Implementation Workshop. An updated version of the fact sheet and quad chart is to be resubmitted with the final report. Format templates will be provided at the Study Implementation Workshop.

Symposium: The study team may be invited to present their findings upon completion of the study at the annual Public Security S&T Summer Symposium that is held each year in Canada during the month of June. Presentation at the annual Symposium is subject to receiving an invitation by the Symposium planning committee. Preparation of presentation materials (typically a 20-minute PowerPoint briefing) is part of the final report deliverables; however, funding for participation in the symposium, should it be required, will be covered through another contract mechanism and should be excluded from the study budget.

Publications – Publication of formal reports are managed by the CSS Document Review Panel. Copies of publications concerning a PSTP study must be sent to the appropriate Portfolio Manager for review prior to publication. Study publications along with formal reports, scientific literature, and close-out reports are retained in the CSS official records system.

7.3 Progress Reports

The following documents are required for accountability and progress reporting:

Quarterly financial reports and progress reports

All studies will provide at least one interim progress report in addition to the quarterly reports providing an overview of the study budget and progress based on the work plan (a template for quarterly reporting will be provided at the study implementation workshop). Typically four to six

months after the starting date of the study (or as otherwise scheduled by the approved study plan), the team will make a presentation to the CoP and the Study Review Committee (SRC), which is composed of the Portfolio Manager, the PM, and the Director of DSTPS. This presentation will cover the progress of the study and the draft road map. The PM will also present the strategic plan for the study (see Section 7.4, “Final Report”). This meeting will be held in Ottawa.⁹ This interim progress report presentation will replace the quarterly report that falls within the mid-point range of study execution as agreed by the Portfolio Manager

7.4 Final Report

The final report must document all information collected and created as required by the tasks assigned within the applicable SoW (which will take precedence over details specified here). The final report typically will include the following two components as part of the conclusions and recommendations section:

1. **Strategic Planning Advice:** This deliverable provides a concise strategic perspective on the study to clearly position its role in the overall PSTP program and proposes the strategy for maximizing its success by identifying any barriers or enablers and recommendations on measures to be taken to maximize benefits accordingly. The strategic planning advice can be provided in the form of a letter report (typically less than two pages) or a presentation to be provided at the interim progress review meeting (see Section 7.3). The presentation would typically be delivered as soon as possible after the study start date, and no later than at the first interim review meeting (to be scheduled for four to six months after the starting date).
2. **Capability Road Map:** This deliverable builds on the above advice and is provided upon completion of the Study. The Capability Roadmap is a concise document (typically less than two-three pages and containing a Gantt-chart like schedule of activity with accompanying text to explain the elements) that provides a time-sequenced and holistic view of the key “capability inputs or issues” that need to be addressed (and by when) in order to ensure the success of the Study. Capability Roadmaps intentionally include elements that are out-of-scope for the study. The Capability Roadmap must identify key activities (capability changes) that are required to adjust the current (as-is) capability with its’ associated people, processes and tools to cause it to change incrementally towards a new (to-be) enhanced capability in the future. A successful Capability Roadmap writing effort will engage subject matter experts from the technology being inserted and information from the various “lifecycle support” domains (acquisition, maintenance, HR, etc). The Capability Roadmap must also identify the current Technology Readiness Level (TRL) of the technology options being described and how the Technology Readiness Level is expected to evolve along the timescale of the proposed Capability Roadmap.

⁹ Travel expenses for this meeting are included in the budget for the study and should be planned at the onset.

This page intentionally left blank.

Annex A PSTP Call 3 Investment Priorities

A.1 Overview

The following PSTP Investment Priorities for Call 3 were identified through broad consultation with stakeholders throughout the year (i.e., Community of Practice [CoP] information sessions, workshops, and individual meetings with PSTP partners). This call for investment priorities culminated in an open session (open to all attendees through the annual CSS Symposium held in Ottawa each June) at which proposed topics identifying where PSTP investment would be needed to fill capability gaps. The topics were refined and a final list of Investment Priorities (shown below) was recommended to PMB and approved secretarially. These Investment Priorities form the basis from which the Statements of Work (SoW) were developed in consultation with CoP stakeholders. The capability improvements envisaged for PSTP Call 3 are organized into capability gap investment priority areas, outlined below by CoP (not in order of importance).

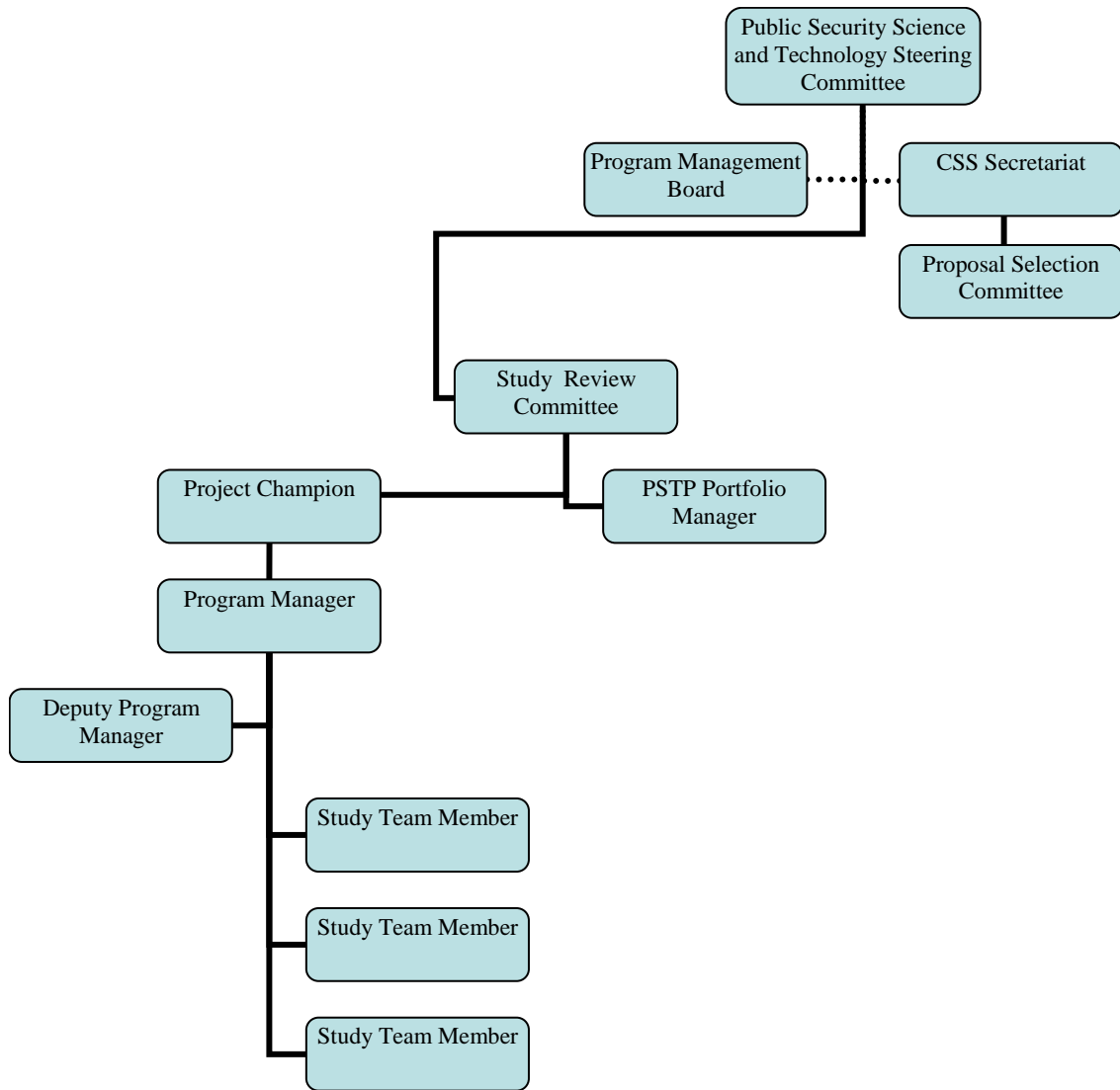
Community of Practice	PSTP Call 3 – S&T Capability Gap Investment Priorities
Emergency Management Systems and Interoperability (EMSI Domain)	<ol style="list-style-type: none"> 1. Integrating Damage and Loss Estimation Models into The Multi-Agency Situational Awareness System (MASAS) 2. Standard Operating Procedures for Emergency Operations Centers – Interoperability, FERP Alignment, and Training/Best Practices
Biometrics and Identity Management for National Security (SII Domain)	<ol style="list-style-type: none"> 1. Real-time Identification System using Mobile Hand-held Devices 2. Real-time Face Recognition Technologies for Video-surveillance Applications 3. Private Biometrics: Protecting Biometric Information from Theft and Misuse
Border and Transportation Security (SII Domain)	<ol style="list-style-type: none"> 1. Border Security Measures for Low-flying Aircraft 2. Video Analytics for Border and Transportation Security—Indoor and Outdoor Environments
Critical Infrastructure Protection—Physical (CIP Domain)	<ol style="list-style-type: none"> 1. Efficacy of Detecting Cosmic Ray Muons to Provide Early Solar Flare Warning for Protecting Energy Sector Critical Infrastructure 2. Architecture Based Analysis of Critical Infrastructure Interdependencies. 3. Improved Risk Management Practices – Protection of Government Buildings Against Blast

Community of Practice	PSTP Call 3 – S&T Capability Gap Investment Priorities
e-Security (Cyber) for CIP (CIP Domain)	<ol style="list-style-type: none"> 1. SCADA Network Security in A Test-bed Environment 2. Smart Grid Cyber Security

As in previous PSTP Calls, a number of factors may influence the articulated investment priorities. These factors may include, but are not limited to: emerging national security and safety strategies, policies and guidance; dynamic, global security and safety environment; international agreements and programs; whole-of-government S&T priorities; and operations (e.g., Afghanistan, 2010 Olympics).



Annex B Organizational Chart for Program Management



Annex C Program Financial Framework

DND/ADM (S&T) (Co-Chair of SC) is accountable to the Deputy Minister DND for the financial performance of the PSTP, consistent with Treasury Board guidance, budget allocation and the government's financial rules, regulations and procedures. ADM (S&T) has delegated authority for day-to-day oversight to Director General Centre for Security Science (DG CSS), in turn has delegated day-to-day management to the Director S&T Public Security (DSTPS)

DND/DRDC will advance funds to lead federal departments for PSTP studies, as determined by the DSTPS CSS, consistent with project cash phasing. A Memorandum of Understanding (MOU) and a Study Charter have been established between study partners and DND to define the financial and task responsibilities to be undertaken in the execution of PSTP studies. Approved study funds will be transferred in accordance with the respective study work plans, and in consultation with departmental PSTP Project Managers.

Appropriate funding mechanisms will be used to transfer PSTP funds to the lead federal department of a PSTP study. When the lead department is DND, transfers of funds are done via internal processes.

Participating lead federal departments will assume responsibility for received funds in accordance with approved work plans, and will follow their departmental expenditure authority. Departments are accountable for the expenditure management of received funds within the current fiscal year according to agreed study objectives, schedule and cash profile. Departments will keep an accounting record of each study separately.

Due to costs incurred by the CSS when full or partial government salaries are covered by PSTP funding, any costs itemized in the study budget that are related to government salaries will be subjected to a 20% holdback. All budget figures for government salaries should take this into account. For example, if personnel costs are to be \$100,000 for a government organisation, a figure of \$120,000 should be indicated in the budget line in order to provide for the 20% holdback. This 20% is applicable to federal government salaries only.

Departments will be responsible for procurement services and for cash managing in-year received funds. Unexpended funds will be returned to DND/DRDC to apply against other PSTP studies. Where this is not possible, PSTP funds will be managed within DND's cash management authorities.

The DSTPS will maintain oversight of program finances. Departments will be responsive to the Director, via the respective departmental Project Managers, for provision of periodic expenditure and cash flow information by study as well as any slippage that could lead to a financial carry forward at the end September, December and March each year.

PSTP funds advanced to departments can be applied against departmental incremental costs in support of the study, and/or used to contract with the private sector and/or academia, as established in the study plan.

Universities participating in PSTP studies will receive funds based on specific deliverables via the contracting process. Universities will be able to apply reductions in accepted overhead charges for work performed as matching funds toward a study.

Annex D In-Kind Contributions

In-kind contributions represent a small but significant portion of the costs of PSTP studies. Study project managers are responsible for ensuring that their proposed in-kind contributions will total at least 10% of the total PSTP funding value. When preparing their estimated in-kind contributions for the charter, they should show detailed calculations, explaining all proposed inputs and valuations. This could then be used as the basis for monitoring In-Kind Contributions as the study progresses. The Project Manager will determine the management of these funds within the study.

In-kind commitments will generally comprise salary costs of personnel working directly on the study, multiplied by an appropriate overhead factor, and/or the operating costs of major facilities being accessed by the study. Overhead factors will be determined in a manner consistent with PWGSC¹⁰ policy on overheads allowed in the government procurement of research services from the private sector. Overhead factors for university performers will be consistent with the current agreement with the Association of Universities and Colleges of Canada.¹¹

Where study partners provide direct financial support to a PSTP study, the management of such support within the study will be determined by the study Project Manager.

Leveraging international programs may be considered as in-kind contributions, provided this leverage is quantified in a formal Memorandum of Understanding (MOU) or Project Arrangement and applies to the specific time period of the study.

Participating members may solicit financial support from other federal programs as a contribution to the study. These contributions will respect any stacking provisions associated with these federal programs.

Reductions in overhead charges will be considered as in-kind contributions.

Reductions in profit (or foregone profits) by industry participants on research and development (R&D) contracts, not to exceed amounts as calculated through the PWGSC's policy on cost and profit (see Chapter 10, "Cost and Profit," in the PWGSC *Supply Manual*), will be considered as in-kind contributions.

Definition and Valuation of In-Kind Contributions

In-kind contributions include both cash (matching funds) and non-cash contributions.

Matching funds are direct cash contributions by study participants.

Non-cash contributions should be given a cash value. For the purpose of PSTP studies, this can include:

- Direct Labour (Employee time plus benefits) and Overhead Indirect Costs:
- Direct material and other direct costs; and/or
- Use of equipment/facilities.

Non-cash contributions can be given a value using the following methods:

1. Direct Labour (Employee Time plus Benefits) and Overhead Indirect Costs

¹⁰ [PWGSC - SACC - Item Detail](#)

¹¹ [Supply Manual - Chapter 10 - Cost and Profit - PWGSC/TPSGC](#)

If the federal government department has a policy covering the application of overhead, then this policy should be applied. If no departmental policy exists, the Defence R&D Canada "Cost Recovery and Charging Policy" may be applied. As demonstrated in the example below, this policy allows an overhead factor of 2.4 to be applied to the direct labour cost in order to value the employee time, benefits and overhead indirect costs.

Example:

Take the employee's annual salary and divide by the number of hours in the fiscal year. Multiply by a factor of 2.4 to include employee benefits and overhead indirect costs (i.e. study support costs (such as procurement services, intellectual property advice, human resources support, etc.) to arrive at an hourly salary figure. This then is the value of the in-kind contribution for each hour the employee devotes to a PSTP study as follows:

e.g., (37.5 hours per week) X (52 weeks) = 1950 hours

(Annual salary \$50,000 per year)/ (1950 hours) = \$25.64/hour (\$25.64/hour) X (2.4 factor) = \$61.54/hour

(100 hours devoted to PSTP study) X (\$61.54/hour) = \$6154 in-kind contribution

PSTP studies should refer to PWGSC guidelines with respect to allowable overheads for companies and universities.¹² Reductions in university overheads will be considered In-Kind or matching funds towards a PSTP study.

2. Direct Material and Other Direct Costs

Direct material costs and other direct costs (e.g. travel, subcontractors, etc.) may be included as in-kind contributions. The Project Manager will maintain an auditable record of all direct material being used in support of the PSTP study.

3. Equipment/Facilities

If departmental rates are available (e.g., from a costing unit within the department) they should be used.

If no departmental rates are available, then the market value of the use of the equipment (e.g., cost to rent) should be determined and used.

If unable to determine the market value, use the departmental depreciation expense as calculated for accrual accounting purposes.

Tracking of In-Kind Contributions

Project Managers ensure that all in-kind contributions are tracked. The in-kind contribution is a significant aspect of the PSTP program and adequate documentation must be maintained in order to measure the progress of the given study and the program as a whole.

Personnel time should be tracked by the hour devoted to the study. Please note that this is not an issue of accounting for the time of an individual, but rather the amount of time devoted. In the absence of a more sophisticated system for tracking time, a spreadsheet may be used, logging the name of the individual, the study, and the dates/times devoted. For confidentiality purposes, the salary valuation should be calculated separately.

¹² [Supply Manual - Chapter 10 - Cost and Profit - PWGSC/TPSGC](#)

Direct material and other direct costs should be tracked as incurred. Again, in the absence of a more sophisticated system, a spreadsheet may be used to keep a running list of direct costs incurred. The spreadsheet should include the nature of the cost, the study, and the value.

Overhead is generally applied as a factor of direct labour. Thus it is essential that the study Project Manager ensure that time spent working on the study is adequately captured.

Use of equipment/facilities should be tracked on an 'hours used' basis. This can be done on a spreadsheet. The value assigned to the equipment/facility will be based on Point 3 above relating to "In-Kind Contribution: Valuation".

Annex E Lead Federal Departments

- [Agriculture and Agri-Food Canada/Agriculture et Agroalimentaire Canada](#)
- [Atomic Energy Canada Limited/Energie atomique du Canada](#)
- [Canada Border Services Agency/Agence des services frontaliers du Canada](#)
- [Canadian Food Inspection Agency/Agence canadienne d'inspection des aliments](#)
- [Canadian Nuclear Safety Commission/Commission canadienne de sûreté nucléaire](#)
- [Canadian Security Intelligence Service/Service canadien du renseignement de sécurité](#)
- [Communications Security Establishment/Centre de la sécurité des télécommunications](#)
- [Defence Research and Development Canada /Recherche et développement pour la défense Canada](#)
- [Department of Fisheries and Oceans Canada/Pêches et océans Canada](#)
- [Environment Canada/Environnement Canada](#)
- [Health Canada/Santé Canada](#)
- [Industry Canada/Industrie Canada](#)
- [National Defence/Défense nationale](#)
- [National Research Council/Conseil national de recherches Canada](#)
- [Natural Resources Canada /Ressources naturelles Canada](#)
- [Privy Council Office/ Bureau du Conseil privé](#)
- [Public Health Agency of Canada \(PHAC\) / Agence de la santé public du Canada](#)
- [Public Safety Canada/Sécurité publique Canada](#)
- [Public Works and Government Services Canada/Travaux publics et services gouvernementaux Canada](#)
- [Royal Canadian Mounted Police/Gendarmerie royale du Canada](#)
- [Transport, Infrastructure, Communities Canada/Transports,Infrastructure, et Collectivités Canada](#)

Annex F Technical Evaluation Criteria - Language Ladders

PSTP will use the following five assessment criteria to evaluate the study proposals against Language Ladder (LL) performance statements:

1. Relevance
2. Impact on Communities of Practice (CoP)
3. Study work plan
4. Team capability and engagement
5. Feasibility and likelihood of success

Language Ladders are used in rating each criterion and are provided during the online submission process. Reviewers are asked to rate criteria against performance statements termed “Language Ladders” (LLs). The language ladder tool is an assessment scheme through which each proposal will be assessed using specific criteria.

Note: that in this system, A is ranked as low and D as high, as outlined in the following ratings:

A = Major deficiencies that impact viability of proposal

B = Minor deficiencies that should be addressed if study is approved

C = Fully satisfactory with no deficiencies to address; study can proceed as proposed

D = Excellent in all aspects with the ability to exceed objectives

Performance Statements

The independent expert reviewers will assess the proposal based using a comprehensive set of performance statements associated with relevance, impact on COP, study work plan, team capability and engagement, and feasibility and likelihood of success. Each statement will be scored on a scale of A (lowest) to D (highest), that will include:

Relevance:

LL.1. The proposed study demonstrates an understanding of the CoP, study area and critical gaps of the applicable SoW through:

- A. A poor assessment or analysis that indicates only limited understanding of the CoP and/or study area and/or critical gaps;
- B. A barely acceptable assessment or analysis that indicates a basic understanding of the CoP, study area and critical gaps;
- C. A good assessment or analysis that indicates a solid understanding of the CoP, study area and/or; or
- D. A very good assessment or analysis that indicates a comprehensive understanding of the CoP, study area and critical gaps.

LL.2 The Bidder shows an understanding of the linkage between S&T and operational exploitation through:

- A. a poor assessment or analysis that indicates only a limited understanding of the linkage between S&T and operational exploitation;

- B. a barely acceptable assessment or analysis that indicates a basic understanding of the linkage between S&T and operational exploitation;
- C. a good assessment or analysis that indicates a solid understanding of the linkage between S&T and operational exploitation; or
- D. a very good assessment or analysis that indicates a comprehensive understanding of the linkage between S&T and operational exploitation.

Impact on CoP

LL.3 In terms of its potential impact and contribution to public security capabilities, including reducing vulnerabilities and enhancing resiliency, the proposed study

- A. will probably not improve national public security capabilities and linkages between science and operational exploitation are not adequately explained;
- B. will probably improve national public security capabilities, but linkages between science and operational exploitation are not explained fully;
- C. will very probably improve national public security capabilities , and linkages between science and operational exploitation are explained well; or
- D. will definitely improve national public security capabilities, and linkages between science and operational exploitation appear to be fully understood

LL.4 In terms of its potential to enhance breadth and depth of collaboration and information sharing within the CoP, the proposed study:

- A. will probably not enhance breadth and depth of collaboration and information sharing within the CoP;
- B. may enhance breadth and depth of collaboration and information sharing within the CoP;
- C. will in all probability enhance breadth and depth of collaboration and information sharing within the CoP;?
- D. will definitely enhance breadth and depth of collaboration and information sharing within the CoP.

Study work plan:

LL.5 The submitted work plan

- A. is incomplete and the study’s logical process and method(s) for how the planned objectives and deliverables will be met is of poor quality;
- B. is largely complete but the study’s logical process and method(s) for how the planned objectives and deliverables will be met is of barely acceptable quality;
- C. is complete and the study’s logical process and method(s) for how the planned objectives and deliverables will be met is good; or
- D. is complete and comprehensive and the study’s logical process and method(s) for how the planned objectives and deliverables will be met is very good.

LL.6 The proposed study's degree of innovation as demonstrated through the deliverables of the work plan;

- A. is poor with significant weaknesses and/or inadequate description of deliverables;
- B. is barely acceptable with deliverables needing a higher degree of innovation;
- C. is good with proposed deliverables containing an acceptable degree of innovation; or
- D. is very good, and the degree of innovation of the proposed deliverables exceeds expectations.

Team capability and engagement:

LL.7 The assessment of the proposal is that the adequacy of expertise and resources (roles and responsibilities) of the team to successfully undertake and manage the study as demonstrated through the study team's past experience of delivering projects of similar application, scope, and complexity is:

- A. poor with resources relevant to only some or no aspects of the proposed work and with little or no past experience relevant to aspects of the proposed work;
- B. barely acceptable with resources possessing expertise relevant to most aspects, but not all, of the proposed work and with the team demonstrating past experience relevant to most aspects, but not all, of the proposed work;
- C. good with resources presented demonstrating competency in all elements of the expertise needed to carry out the proposed work and the majority of team members have experience on at least one project of similar scope and complexity, including the study Project Manager; or
- D. very good with excellent capability in all elements of the expertise needed to carry out the proposed work with demonstration of all team members having a track record of exceptional success on projects of directly comparable scope, complexity, and technology.

LL.8 Within the proposed study, the extent of engagement of team members in execution of the study (i.e. the extent to which the expertise is being used in both CSS funded and in-kind activities) is:

- A. demonstrated poorly with individual team member engagement not able to be assessed;
- B. barely acceptable with limited evidence of participation by key members in relevant study phases;
- C. good with active participation by key members throughout the most of the study phases; or
- D. very good with active participation by key members throughout all of the study phases.

LL.9 The probability of the proposed study partners to transition the study outputs for uptake is:

- A. poor with no indication of any team members possessing an ability to transition the study outputs for uptake assessed;
- B. barely acceptable with a low level of individual team member experience to draw upon to transition the study outputs for uptake;
- C. good with a demonstration of an ability of key members to facilitate transition of the study outputs for uptake; or
- D. very good with a majority of team members in a position to facilitate transition of the study outputs for uptake.

Feasibility and likelihood of success:

LL.10 Based on the consideration of the work plan, resources identified, team capabilities, expected deliverables, and study outcomes presented in the submitted proposal, the assessment finds that

- A. the proposed study will probably not meet PSTP expectations;
- B. the proposed study will probably meet most PSTP expectations;
- C. the proposed study will very probably meet PSTP expectations; or
- D. the proposed study will definitely meet and possibly exceed PSTP expectations.

Annex G Proposal Contracting Documents

1. RFP Letter and Resulting Contracting Clauses

<http://www.css.drdc-rddc.gc.ca/pstp/proj-prop/call-appel/contract-contrat-eng.pdf>

a) Standard Acquisitions Clauses and Conditions SACC General conditions Research and Development 2040

[SACC 2040](#)

<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/rqqr.do?lang=eng&id=2040&date=2010-08-16&eid=1>

b) Implementation Guide for the Policy: Title to Intellectual Property Arising Under Crown Procurement Contracts

[Implementation Guide for the Policy: Title to Intellectual Property Arising Under Crown Procurement Contracts](#)

http://www.tbs-sct.gc.ca/pubs_pol/dcgpubs/contracting/tipaucpc_ig-eng.asp

2. Security Requirements Check List

Fillable PDF Form

[Security Requirements Checklist \(SRCL\)](#)
[\(TBS/SCT 350-103\)](#) (319K)

(Fill-in by computer, print form, sign, submit by mail)

<http://www.tbs-sct.gc.ca/tbsf-fsct/350-103-eng.asp>

Non-Fillable PDF Form

[Security Requirements Checklist \(SRCL\)](#)
[\(TBS/SCT 350-103\)](#) (169K)

(Print form, fill-in by hand, sign, submit by mail)

3. Writing Better Proposals

[Writing Better Proposals – Buy and Sell](#)

<https://www.achatsetventes-buyandsell.gc.ca/eng/proposal>

Annex H Acronym

ADM	Assistant Deputy Minister
ADM (S&T)	Assistant Deputy Minister (Science and Technology)
AIT	Agreement on Internal Trade
BIP	Background Intellectual Property
CBRN	Chemical, Biological, Radiological-Nuclear
CBRNE	Chemical, Biological, Radiological-Nuclear, Explosives
CIP	Critical Infrastructure Protection
CoP	Community of Practice
CSS	Centre for Security Science
DG	Director General
DG CSS	Director General, Centre for Security Science
DND	Department of National Defence
DRDC	Defence Research and Development Canada
DSTPS	Directorate, S&T Public Security
EMSI	Emergency Management Systems and Interoperability
FIP	Foreground Intellectual Property
GETS	Government Electronic Tendering Service
IP	Intellectual Property
IS	Interdepartmental Settlement
LL	Language Ladder
MOU	Memorandum of Understanding
NAFTA	North American Free Trade Agreement
PC	Project Champion
PM	Project Manager
PMB	Program Management Board
PRC	Project Review Committee
PRICIE	Personnel, Research and Development and Operations Research; Infrastructure and Organization; Concept, Doctrine and Collective Training; Information Management; and Equipment, Supplies and Services
PSC	Proposal Selection Committee
PS	Public Safety Canada
PSTP	Public Security Technical Program
PWGSC	Public Works and Government Services Canada
R&D	Research and Development
RFP	Request for Proposal
SC	Steering Committee
S&T	Science and Technology
SII	Surveillance, Intelligence, and Interdiction
US	United States
WTO-AGP	World Trade Organizations Agreement on Government Procurement