RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Bid Receiving - PWGSC / Réception des soumissions - TPSGC
11 Laurier St. / 11, rue Laurier
Place du Portage , Phase III
Core 0A1 / Noyau 0A1
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
Science Procurement Directorate/Direction de l'acquisition de travaux scientifiques
11C1, Phase III
Place du Portage
11 Laurier St. / 11, rue Laurier
Gatineau, Québec K1A 0S5

Title - Sujet CSSP CFP - PCSS ADP	
Solicitation No. - N° de l'invitation W2207-12CSSP/A	**Amendment No. - N° modif.** 002
Client Reference No. - N° de référence du client W2207-12CSSP	**Date** 2012-09-07
GETS Reference No. - N° de référence de SEAG PW-$$SV-057-24880	
File No. - N° de dossier 057sv.W2207-12CSSP	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à** 02:00 PM **on - le** 2016-03-31	**Time Zone** **Fuseau horaire** Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☐ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: McRae, Scott	**Buyer Id - Id de l'acheteur** 057sv
Telephone No. - N° de téléphone (819) 956-1383 ( )	**FAX No. - N° de FAX** (819) 997-2229
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:**	

Instructions: See Herein

Instructions: Voir aux présentes

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

Canada

The Canadian Safety and Security Program (CSSP) Call for Proposals (CFP) Bidder Guidebook version 1.1 is an attachment.

Government of Canada | Gouvernement du Canada

DEFENCE R&D DÉFENSE

Canadian Safety and Security Program

Call for Proposals: Bidder Guidebook

Version: 1.1
Effective Date: September 2012

Defence R&D Canada – Centre for Security Science

Canada

This document is reviewed and, if required, updated annually.

Abstract

The Canadian Safety and Security Program (CSSP) — Call for Proposals Bidder Guidebook is written for potential Bidders who wish to submit project proposals for CSSP science and technology (S&T) investment funding. Resulting contracts and associated funding will be used to enhance the program and support national public safety and security objectives. The Guidebook outlines the process by which proposals are prepared, evaluated, selected and recommended for contract award. The procurement process consists of three stages: Synopsis, Full Proposal and Public Works and Government Services Canada (PWGSC) Contracting. The information provided via proposals in Stage 1 and Stage 2 is used to establish a pool of pre-qualified Bidders, while Stage Three 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 proposal submission.

Résumé

Le document intitulé Programme canadien de sûreté et de sécurité (PCSS) — Appel de propositions : guide à l'intention des soumissionnaires a été préparé à l'intention des soumissionnaires éventuels qui souhaitent proposer un projet en vue d'obtenir des fonds d'investissement en sciences et technologie (S et T) dans le cadre du PCSS. Les marchés qui seront conclus et les fonds qui y seront affectés serviront à améliorer le programme et à appuyer les objectifs nationaux en matière de sécurité publique. Le présent document donne des renseignements sur la préparation, l'évaluation et la sélection des propositions, ainsi que sur les recommandations liées à l'octroi d'un contrat. Le processus d'acquisition comporte trois étapes : synopsis, proposition complète et passation de marché de Travaux publics et Services gouvernementaux Canada (TPSGC). L'information fournie dans les propositions présentées à l'étape 1 et à l'étape 2 sert à établir un bassine liste de soumissionnaires présélectionnés. L'étape 3, quant à elle, traite principalement du processus de passation des marchés. Aucun paiement ne sera versé pour des coûts engagés pour la préparation et la présentation d'une proposition en réponse au processus d'appel de propositions. Le soumissionnaire sera seul responsable des frais associés à la préparation et à la présentation d'une proposition, ainsi que des frais engagés par le soumissionnaire pour l'évaluation de sa proposition. Les soumissionnaires doivent utiliser seulement le guide actuel pour préparer leur proposition

Record of Amendments

Version Number	Section(s) Amended	Amendment Date
1.1	2.5.1.3	6 September 2012

List of Acronyms and Abbreviations

ADM	Assistant Deputy Minister
ADM (S&T)	Assistant Deputy Minister (Science and Technology)
AIT	Agreement on Internal Trade
BIP	Background Intellectual Property
CBRNE	Chemical, Biological, Radiological-Nuclear, Explosives
CoP	Community of Practice
CSS	Centre for Security Science
CSSP	Canadian Safety and Security Program
DG	Director General
DND	Department of National Defence
DRDC	Defence Research and Development Canada
DSTPS	Directorate, S&T Public Security
EEZ	Exclusive Economic Zone
EMSI	Emergency Management Systems and Interoperability
FIP	Foreground Intellectual Property
GETS	Government Electronic Tendering Service
IP	Intellectual Property
IS	Interdepartmental Settlement
MOU	Memorandum of Understanding
NAFTA	North American Free Trade Agreement
PC	Project Champion
PM	Project Manager
PMB	Program Management Board
PRC	Project Review Committee
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
US	United States
WTO-AGP	World Trade Organizations Agreement on Government Procurement

Table of contents

1. Introduction

1.1 Scope

This document presents the instructions for the project selection, set up and execution for the Call for Proposals (CFP) investment instrument of Defence Research and Development Canada – Centre for Security Science (DRDC CSS) through the Canadian Safety and Security Program (CSSP). It is subject to annual review and where required, update.

1.2 Authority

The policies and procedures contained in this document are a subset to the Program Framework document that is published by DRDC CSS. These instructions are based on and in accordance with aspects and agreements identified in the approved Treasury Board Submission as well as with Public Works and Government Services Canada (PWGSC) requirements.

1.3 Background

1.3.1 Historical Information

Since 2006, DRDC CSS has been the focal point in coordinating a shared approach to the delivery of three public safety and security science and technology (S&T) programs: the Chemical, Biological, Radiological, Nuclear and Explosives Research and Technology Initiative (CRTI), the Public Security Technical Program (PSTP) and the Canadian Police Research Centre (CPRC) through partners at all levels of government, industry, and academia. The harmonization of these three programs provides the foundation of the CSSP.

1.3.2 Program Foundations

The vision for the CSSP as managed by DRDC CSS is:

> ***A safe and secure Canada through S&T leadership***

The mission of the program and the Centre is to:

> ***Strengthen Canada's ability to anticipate, prevent/mitigate, prepare for, respond to, and recover from acts of terrorism, crime, natural disasters, and serious accidents through the convergence of science and technology with policy, operations and intelligence.***

The program scope is to deliver S&T solutions, support and advice to respond to Canada's public safety and security imperatives. The program will address the following issues, amongst others:

- Horizontal co-ordination across government departments, agencies, and stakeholders, including federal, provincial and territorial partners;

- Prioritizing and matching S&T investment responses according to the assessment of public safety and security risks;
- Leveraging existing S&T capacity, programs and agreements in government, academia and industry to accomplish program outcomes;
- Engaging stakeholders and end-users in establishing expectations for program outcomes, and in exploiting these outcomes;
- Supporting existing and evolving emergency preparedness and response plans and agreements;
- Providing evidence-based analysis and advice to policy and decision makers; and
- Informing, through S&T, the development of regulations, standards and codes

1.3.3 Program Delivery

The primary delivery mechanism for the program is based on project type.

1.3.4 Program Priorities

Program priorities have been identified to guide CSSP investment decision making. These Investment Priorities emphasize capability areas, objectives and threats/hazards that are relevant to the CSSP.

The Investment Priorities are linked to CSSP outcomes. CSSP long term outcomes have been articulated to enable the development of greater resilience to global and domestic high-consequence public safety and security events. CSSP investments strive to increase the nation's economic vibrancy, sovereignty, multi-jurisdictional security/intelligence and national emergency management systems, and public confidence through the application of S&T. A detailed list of program outcomes is in Annex A, Program Outcomes; Annex B, Investment Priorities outlines the Investment Priorities relevant to the current bid submission period.

Six intermediate outcomes summarize the intent of the program, which is to:

1. Advise and render implementable safety and security policy and operations;
2. Enable, connect and protect safety and security practitioners;
3. Assist rapid technology assessment and insertion;
4. Lead to resilient infrastructure;
5. Posture borders and perimeter as secure but open; and
6. Develop alert and resilient communities.

2. Call For Proposals

2.1 Objective

The objective of this Call for Proposals (CFP) is to engage industry, academia and other levels of government in collaborative research projects with those government departments and agencies that have both the subject matter and project management expertise to contribute S&T solutions for Canadian public safety and security outcomes.

2.2 Project Types

Three types of projects will be funded through the CFP process: Studies, Research and Development, and Technology Demonstration.

Studies

Studies are evidence-based examinations or analyses that address known public safety and security issues, define problems and/or solutions or scope out future projects in areas identified by the Bidders and assessed against published CSSP priorities (see Annex B "Investment Priorities Framework"). They 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. Examples include conducting scoping studies, developing emergency response scenarios that help to define needs, or analyzing the risk of a particular output for a variety of operational approaches in a feasibility or cost-benefit analysis. Studies may be funded up to $500K and are undertaken within a two year period. Technology outputs must have maturity levels or Technology Readiness Levels (TRL) from 3-9. (see Annex C, "Technology Readiness Levels")

Research and Development

Research and Development (R&D) projects involve applied research that will generate new knowledge or awareness while addressing user-defined capability gaps in critical areas as identified by the Bidders and assessed against published CSSP priorities (see Annex B "Investment Priorities Framework").. Examples of R&D projects include analytical research and experiments that mature earlier findings or validate that the analytical predictions of existing S&T in a new context to constitute "proof-of-concept" validation. R&D projects may be funded up to $1,000K, are to be performed within a three year period and their technology outputs may have a maturity of at least TRL 3-4.

Technology Demonstration

Technology Demonstration (TD) projects advance the maturity of a technology, application or capability by embedding science or technology in an operational context to foster collaboration between the operational and S&T communities in areas as identified by the Bidders and assessed against published CSSP priorities (see Annex B "Investment Priorities Framework"). Examples of technology demonstration projects include integrating basic

technological elements with realistic supporting elements so that the total applications (component-level, sub-system level, or system-level) can be tested in a 'simulated' or realistic environment. TD projects may be funded up to $1,500K, are to be performed within a three year period and their technology outputs may have a maturity of at least TRL 5-6.

Table 1 depicts the funding parameters for each of the three project types that will be funded through the CFP investment instrument:

Investment Instrument	**Call for Proposals (CFP)**		
Project types	**Studies**	**Research & Development**	**Technology Demonstration**
TRL Range (at project close out)	3 to 9	3 to 4	5 to 6
Duration *from Project award*	Less than or equal to 2 years	Less than or equal to 3 years	Less than or equal to 3 years
Nominal Funding Range $K	<500K	<1,000K	<1,500K
Fund Type	Vote 1 and 5 (no grants and contributions)	Vote 1 and 5 (no grants and contributions)	Vote 1 and 5 (no grants and contributions)
Co-Investment	A co-investment contribution that indicates a commitment to the project that is commensurate with risk is required for all projects. The project team should demonstrate that the level of contribution is appropriate to the CSSP investment being requested based on the ability of the partners to commit resources and the level of risk of the proposed project. Participants' co-investment contributions may include cash and non-cash (in-kind) contributions.		
Proposal Submission	A proposal may be submitted by a Canadian private, academic or public sector organization. International participants must partner with Canadian Bidder(s) from the aforementioned Canadian sectors.		
Lead Bidder	The Lead Bidder is the proposal team member who submits the bid and acts as the point of contact for the duration of the CFP solicitation process. The Lead Bidder can be a representative of any of the Canadian partner organizations. The Lead Bidder must be a Canadian Bidder.		
Partnership Requirements	Horizontal partnership of government, industry and/or academia participants.		
	Mandatory requirement: All proposal submissions must have a minimum of two partner organizations, with one being a government (Federal/Provincial/Territorial/Municipal) organization who will assume the role as the Lead Government Department if the proposal is approved for funding. On behalf of DRDC CSS, the Lead Government Departments acts as the Project Champion and Project Manager and respectively provide oversight and manage the implementation (initiation, execution and close out) of CSSP funded projects. The other mandatory partner can be from government, academia or industry. The partners must be capable of authoritatively representing at least two of the following three areas associated with the capability area being addressed by the project: • Policy (regulatory/legislative); • Operations; and • S&T. Additional partners from Canadian and international government, industry and academia are permitted.		

Table 1: Summary of CFP Project Type Funding Parameters

2.3 Procurement Approach

PWGSC is the contracting authority responsible for the integrity of the procurement process under the CFP method of supply.

The CSSP CFP process involves a three-stage procurement process:

- Stage 1: Synopsis (see Section 2.5.2)
- Stage 2: Full Proposal (see Section 2.5.3)
- Stage 3: PWGSC Contracting (see Section 2.5.4)

This procurement process does not constitute a guarantee on the part of Canada that a contract will be awarded. The information provided in Stage and Stage 2 is used to establish a list of pre-qualified Bidders.

The 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 national S&T performers – public, private, and academic. R&D services are excluded under the *North American Free Trade Agreement* (NAFTA) and *World Trade Organization Agreement on Government Procurement* (WTO-AGP) trade agreements.

2.3.1 Communications

To ensure the integrity of the competitive bid process, all enquiries regarding the CFP solicitation and contracting process 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
Scott McRae
Supply Team Leader
Public Works and Government Services Canada
Telephone: 819-956-1383
Facsimile: 819-997-2229
Email: scott.mcrae@tpsgc-pwgsc.gc.ca

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

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

2.3.1.1 Extension Enquiries

It is not anticipated that extensions will be granted. Changes to CFP solicitation documents will be published as required.

2.3.1.2 Public Announcements

In order to coordinate any public announcements pertaining to this CFP and any resultant contracts, neither the Bidder nor any participating partners shall make any public announcements without prior approval of DRDC CSS and/or PWGSC.

2.4 Financial Considerations

Participation by industry or academia in CSSP projects will occur through contracts. The competitive selection process for CSSP projects, in compliance with Treasury Board Secretariat (TBS) policies,[1] is designed to give national S&T performers in the Canadian public, private, and academic sectors equal opportunity to seek funding from and contribute to the initiative.

2.4.1 CSSP Funding

The CSSP funding available to each project is defined according to project type. The funding awarded will not exceed the maximum funding defined in the project funding parameters (see section 2.2).

2.4.2 Co-investment Contribution

A co-investment contribution that indicates a commitment to the project that is commensurate with risk is required for all projects. The project team should demonstrate that the level of contribution is appropriate to the CSSP investment being requested based on the ability of the partners to commit resources and the level of risk of the proposed project.

Participants' co-investment contributions may include cash and non-cash (in-kind) contributions. The co-investment amount and type must be defined in the project proposal. The nature of eligible non-cash contributions is described in Annex D, Co-Investment Model.

2.4.3 Eligible Costs

CSSP funds can be provided to projects for both the costs of participating government departments, and for the costs of contracting with the private sector, academia, other levels

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

of government, and international participants, according to approved project plans. The financial framework for the program is described further in Section 2.4.4.

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

2.4.4 CFP Financial Framework

DRDC CSS will allocate funds for program investment as determined by the project type, vote type and procurement methodology consistent with the approved project cash phasing. Appropriate funding mechanisms will be used to transfer funds to the Lead Department of a program investment project.

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

The Director General, DRDC CSS will oversee program delivery. Lead Government Departments will be accountable to the Director General, via their respective departmental project managers, for provision of trimester expenditure and cash flow information by project. The Lead Department is responsible for identifying any potential slippage of funds in each trimester report through the provision of an updated project forecast.

Program funds advanced to government departments can be applied against departmental incremental costs in support of the project and/or used to contract with either or both the private and academic sectors, as established in the project plan. Unexpended funds will be returned to DRDC CSS.

2.5 CFP Process

PWGSC employs a competitive proposal selection process that examines each proposal's quality and relevance to program goals, as established by the evaluation criteria outlined in this CFP Bidder Guidebook.

This invitation to submit a bid for the CSSP CFP is in the form of a Notice of Proposed Procurement (NPP) prepared and posted by PWGSC on MERX™

A summary of the CFP process (encompassing submission, evaluation, selection, and contracting steps) is shown in Figure 1.

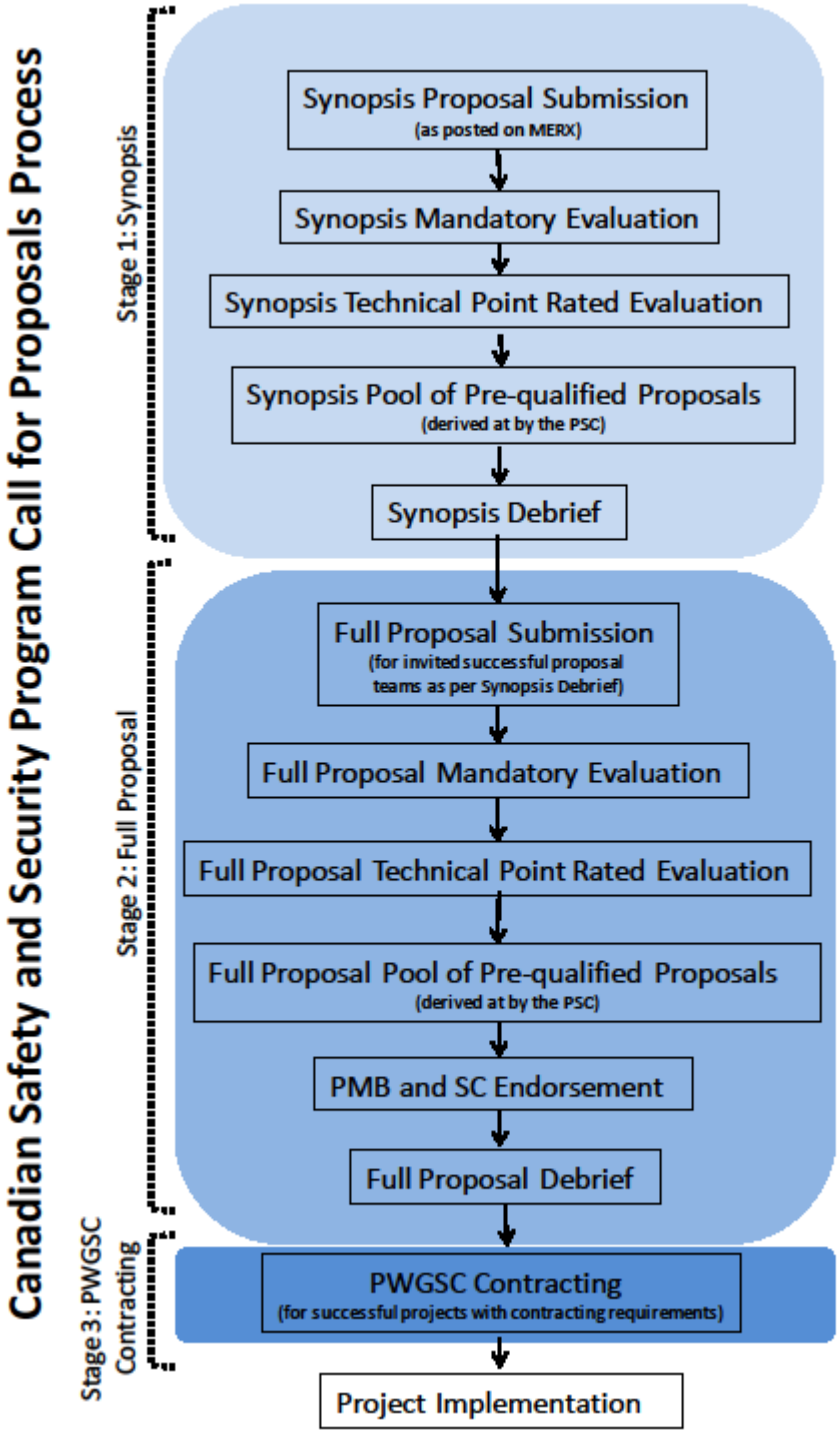


Figure 1: Summary of CSSP CFP Process

2.5.1 Bid Submission Terms of Reference

2.5.1.1 Standard Instruction, Clauses and Conditions

All instructions, clauses and conditions in the Call for Proposal Solicitation are identified by number, date and title as set out in the *Standard Acquisition Clauses and Conditions Manual* Standard Acquisition Clauses and Conditions (SACC) Manual - Procurement Information on Buyandsell.gc.ca (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual)

Bidders who submit a proposal agree that they have read, understand and acknowledge the instructions and clauses and conditions contained in all parts of the Call for Proposal Solicitation and draft resulting contract clauses and conditions.

The *2003 (2012-07-11) Standard Instructions - Goods or Services - Competitive Requirements*, are incorporated by reference into and form part of the Call for Proposal Solicitation. They are amended as follows:

At section 04 "Definition of Bidder"

Add: A Bid must be submitted by a Canadian Bidder, in submitting both a synopsis proposal and a full proposal.

At subsection 5.4

Delete: Bids will remain open for acceptance for a period of not less than sixty (60) days from the closing date of the bid solicitation, unless specified otherwise in the bid solicitation. Canada reserves the right to seek an extension of the bid validity period from all responsive bidders in writing, within a minimum of three (3) days before the end of the bid validity period. If the extension is accepted by all responsive bidders, Canada will continue with the evaluation of the bids. If the extension is not accepted by all responsive bidders, Canada will, at its sole discretion, either continue with the evaluation of the bids of those who have accepted the extension or cancel the solicitation.

Insert: Bids will remain open for acceptance for a period of not less than three hundred and sixty five (365) days from the closing date of the bid solicitation, unless specified otherwise in the bid solicitation. Canada reserves the right to seek an extension of the bid validity period from all responsive bidders in writing, within a minimum of three (3) days before the end of the bid validity period. If the extension is accepted by all responsive bidders, Canada will continue with the evaluation of the bids. If the extension is not accepted by all responsive bidders, Canada

will, at its sole discretion, either continue with the evaluation of the bids of those who have accepted the extension or cancel the solicitation.

Delete the following section in its entirety: Section 20 "Further Information".

Please note that in this document, the term “bid” conveys “proposal”.

2.5.1.2 Who May Submit a Proposal

A proposal may be submitted by a Canadian private, academic or public sector organization. International participants must partner with Canadian Bidder(s) from the aforementioned Canadian sectors.

Limits on Bidders: Proposals from any one person, individual laboratory, individual section, individual directorate or academic department, or private company (i.e. individual company business number) are strictly restricted to two (2) submissions per bid submission period.

Government Departments that submit proposals as a “*Bidder*”, where there would be intent to contract with a Supplier using the CFP method of supply, must name the Supplier in their proposal submission and the applicable budget. Suppliers not clearly identified within the proposal submission cannot be contracted through any resultant contracts initiated under the CFP method of supply.

2.5.1.3 Submission Tool

All unclassified submissions must be completed through the web-based submission system. Bidders are directed to <http://cssp-cfp2012.myreviewroom.com/> to initiate the submission process. Should there be difficulties accessing or using the submission site, contact support@myreviewroom.com.

- ∉ The web-based Submission system is only used for UNCLASSIFIED submissions. Bidders submitting a classified proposal must contact DRDC CSS through the PWGSC Contracting Authority (see section 2.3.1 Communications) to obtain the proper Classified Submission Form and to arrange delivery of the proposal using procedures designed to protect the sensitivity of the content.

All proposals must be received through the web-based system or, if it is a classified proposal, by PWGSC by the Synopsis and Full Proposal due date. Bidders using the web-based system will receive confirmation of receipt through the online system. Bidders of classified proposals will receive confirmation of receipt from PWGSC. Classified proposals received outside the bid submission periods will be returned to the bidder.

2.5.1.4 Bid Submission Periods

This CFP Solicitation will be posted on MERX™ for a period of four years and proposals will be accepted on an annual basis during the bid submission periods, listed below. There are four (4) bid submission periods for proposal submission as follows:

1. Bid Submission Period 2012 (CSSP 1):
    a. Synopsis Proposal Submission Period: September 5, 2012 to October 5, 2012 at 16:00 EDT
    b. Full Proposal Submission Period: November 5, 2012 to December 5, 2012 at 16:00 EST
2. Bid Submission Period 2013 (CSSP 2): TBD
3. Bid Submission Period 2014 (CSSP 3): TBD
4. Bid Submission Period 2015 (CSSP 4): TBD

Proposals for each period must be submitted as per the current version of the CSSP *CFP Bidders' Guidebook.*

2.5.1.5 Modification and Withdrawal of a CSSP Bid Submission

A Project Proposal may normally be modified, withdrawn or resubmitted before the bid submission period closing date provided that it is being submitted using the online submission process described in section 2.5.1.2.

Bidders must contact the Contracting Authority (see section 2.3.1 Communications) to advise of a modification and/or withdrawal of a completed proposal before the bid period closing date. A proposal withdrawn after the bid period closing cannot be resubmitted.

2.5.1.6 Canadian Currency

All proposal submissions must be priced in Canadian currency.

2.5.2 Stage 1: Synopsis

The CFP process begins with Stage 1: Synopsis. A Synopsis is an outline of the work that will be proposed in more detail in Stage 2: Full Proposal.

2.5.2.1 Synopsis Proposal Submission

All Synopsis proposals must be submitted using the online tool as outlined in Section 2.5.1.2 "Submission Tool".

2.5.2.2 Synopsis Evaluation

2.5.2.2.1 Synopsis Mandatory Criteria

Each Synopsis proposal will be assessed against mandatory criteria by DRDC CSS. The proposals that successfully address all mandatory criteria will be evaluated against the technical point rated criteria.

Each Synopsis proposal seeking CSSP investment must meet the following seven (7) mandatory requirements:

SM1 - All unclassified proposal submissions must be completed and submitted via the online submission tool provided. All other submissions of unclassified proposals will be rejected.

SM2 - All proposal submissions must be completed fully. Failure to populate the forms correctly or to submit the required information will result in the rejection of the proposal.

SM3 - Proposal submissions, both classified and unclassified, must be received by the due date published in the Notice of Proposed Procurement (NPP) in order to be considered.

SM4 - All proposal submissions must address the CSSP Investment Priorities (see Annex B, Investment Priorities) by indicating relevance to:

- one (1) capability area
- one (1) specific objective; and
- one (1) CSSP threat/hazard.

SM5 - All proposal submissions must be categorized by a project type and adhere to the project parameters for TRL, duration, and funding range outlined in section 2.2 for the project type.

SM6 - All proposal submissions must indicate a co-investment contribution.

SM7 - In submitting a proposal, the Lead Bidder must certify to the following terms:

- That the Lead Bidder has read, understood and agreed to the contents, terms, and conditions contained in this Proposal Bidder Guidebook.
- That the Lead Bidder 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 proposal.
- That all the information the Lead Bidder has provided in this proposal is true and complete.

- ∉ That all partners listed in the proposal have agreed with their roles and resource implications.
- ∉ That the Lead Bidder understands that a signature may be requested later during the PWGSC Contracting Process (Stage Three).
- ∉ The Lead Bidder is a Canadian.

2.5.2.2.2 Synopsis Technical Point Rated Criteria

The technical point rated criteria will assist the Proposal Selection Committee (PSC) to establish a pool of proposals to be considered for investment. Proposals that do not achieve a pass mark of 60% or above on the technical point rated evaluation criteria will not be given further consideration.

The following six (6) point-rated criteria will be used to evaluate the synopsis proposals:

1. Relevance to program priority investment areas;
2. Improvement over existing and potential to impact operational, intelligence or policy capabilities, and level of innovation of proposed solution;
3. Operational, intelligence or policy need and user demand (pull/transition potential);
4. Value of solution compared to cost of project and additional strategic or tactical value (i.e., value for money);
5. Quality of project proposal and team; and
6. Co-Investment, risk sharing for CSSP investment.

The first five criteria (i.e., 1 to 5) will be evaluated by assigned reviewers and will account for 80% (0.80) of the overall proposal evaluation. The reviewers will be subject matter experts (SMEs) from government, industry and academia. The SMEs are selected based on their expertise and knowledge of the areas concerned.

The co-investment criterion (i.e., 6) will be evaluated by DRDC CSS and will account for 20% (0.20) of the overall proposal evaluation.

Additional detail on the technical point rated criteria is presented in Annex E Technical Point Rated Evaluation Criteria.

2.5.2.3 Synopsis Selection

The PSC will use the results of the mandatory and technical point rated evaluation to establish a pool of pre-qualified proposals to be considered for investment.

2.5.2.4 Synopsis Debrief

DRDC CSS and PWGSC cannot provide information on the results of a proposal's review to anyone other than the Lead Bidder. DRDC CSS and PWGSC will only correspond and provide feedback to the Lead Bidder identified on the proposal. Lead Bidders must

reference their proposal number provided by the online submission tool in all correspondence.

Following the evaluation of the synopsis proposals, Bidders will be advised of their evaluation results, in writing by PWGSC, via an email message addressed to the Lead Bidder. Bidders will receive one of the following replies:

- The Synopsis proposal did not meet mandatory criteria or was considered outside of the program scope and mandate.
- The Synopsis proposal did not rank high enough at this time to be considered for a Full Proposal.
- The Synopsis proposal has been accepted and the Bidder will be asked to submit a Full Proposal.

Due to the large volume of Synopsis proposals, further feedback will not be possible.

Proposal Amalgamation

Where two or more Synopses are similar in scope and purpose, DRDC CSS may recommend project teams to combine their resources to submit one Full Proposal.

2.5.3 Stage 2: Full Proposal

A Full Proposal elaborates on the information presented in the Synopsis and provides comprehensive detail of the proposed work.

2.5.3.1 Full Proposal Submission

Bidders will be invited to submit a full proposal based on the result of the evaluation of their Synopsis proposal. All Full Proposals must be submitted using the online tool as outlined in Section 2.5.1.2 “Submission Tool”.

2.5.3.2 Full Proposal Evaluation

2.5.3.2.1 Mandatory Criteria

Full Proposal submissions will be assessed against mandatory criteria by DRDC CSS. The proposals that successfully address all mandatory criteria will be evaluated against the technical point rated criteria.

Each Full Proposal submission seeking CSSP investment must meet the following seven (7) mandatory requirements:

FM1 - All unclassified proposal submissions must be completed and submitted via the online submission tool provided. All other submissions of unclassified proposals will be rejected.

FM2 - All proposal submissions must be completed fully. Failure to populate the forms correctly or to submit the required information may result in the rejection of the proposal.

FM3 - Proposal submissions, both classified and unclassified, must be received by the due date specified in the selection schedule (see Annex H, CSSP CFP Selection Schedule) in order to be considered.

FM4 - All proposal submissions must indicate a co-investment contribution.

FM5 – A government department or organisation must lead each investment project funded by CSSP under the CFP method of supply. If one of the partners is a federal government department, that federal government department must be the lead. If no partners are federal government departments, a Provincial/Territorial/Municipal department or organisation must be the Lead Government Department.

FM6- All proposal submissions must have a minimum of two partner organizations, with one being a government (Federal/Provincial/Territorial/Municipal) organization who will assume the role as the Lead Government Department if the proposal is approved for funding. The other mandatory partner can be from government, academia or industry. The partners must be capable of authoritatively representing at least two of the following three areas associated with the capability area being addressed by the project:

- Policy (regulatory/legislative);
- Operations; and
- S&T.

FM7 - In submitting a proposal, the Lead Bidder must certify to the following terms:

- That the Lead Bidder has read, understood and agreed to the contents, terms, and conditions contained in this Proposal Bidder Guidebook.
- That the Lead Bidder 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 proposal.
- That all the information he or she has provided in this proposal is true and complete.

- ∉ That all partners listed in the proposal have agreed with their roles and resource implications.
- ∉ That the Lead Bidder understands that a signature may be requested later during the PWGSC Contracting Process (Stage 3).
- ∉ The Lead Bidder is Canadian.

2.5.3.2.2 Technical Point Rated Criteria

The technical point rated criteria will assist the Proposal Selection Committee (PSC) to establish a pool of proposals to be considered for investment. Proposals that do not achieve a minimum pass mark of 60% or above on the technical point rated evaluation criteria will not be given further consideration.

The same six (6) point-rated criteria used for the synopsis will be used to evaluate the full proposals as follows:

1. Relevance to program priority investment areas;
2. Improvement over existing and potential to impact operational, intelligence or policy capabilities, and level of innovation of proposed solution;
3. Operational, intelligence or policy need and user demand (pull/transition potential);
4. Value of solution compared to cost of project and additional strategic or tactical value (i.e., value for money);
5. Quality of project proposal and team; and
6. Co-Investment, risk sharing for CSSP investment.

The first five criteria (i.e., 1 to 5) will be evaluated by assigned reviewers and will account for 80% (0.80) of the overall proposal evaluation. The reviewers will be subject matter experts (SMEs) from government, industry and academia. The SMEs are selected based on their expertise and knowledge of the areas concerned.

The co-investment criterion (i.e., 6) will be evaluated by DRDC CSS and will account for 20% (0.20) of the overall proposal evaluation.

Additional detail on the technical point rated criteria is presented in Annex E Technical Point Rated Evaluation Criteria.

2.5.3.3 Full Proposal Selection

The PSC will use the results of the mandatory and technical point rated evaluation to determine a pool of pre-qualified proposals to be considered for investment.

2.5.3.3.1 Balance of Investment

The CSSP aims to balance investments in support of Canadian public safety and security needs across specific areas of interest in order to balance program risk and return, such as: Communities of Practice, Investment Priorities, program outcomes and project types.

2.5.3.3.2 Program Management Board and Steering Committee Endorsement

At the end of the Full Proposal stage, DRDC CSS will provide a list of recommended proposals to the Program Management Board (PMB) based on the deliberations of the PSC and the balance of investment. The PMB will review and forward their recommendations to the Steering Committee for endorsement.

Final determination for funding approval of fully or partially approved projects is made based on the recommendations of the PSC, the balance of investment and available funding. The program will allocate up to approximately CAD $15 million to new projects aligned with Investment Priorities identified for each bid submission period.

2.5.3.4 Full Proposal Selection Debrief

Once the CSSP CFP selection announcement is made public by DRDC CSS and/or PWGSC, all Bidders will be advised of the status of their Full Proposal submissions. Bidders will receive one of the following debrief messages:

- The Full Proposal submission did not meet the mandatory criteria or was outside the program scope and mandate.
- The Full Proposal submission did not rank high enough to be considered for funding.
- The Full Proposal submission has been accepted, partially conditional on refinements and/or further clarification made to the project work plan, scope, or budget identified during the selection process.
- The Full Proposal submission has been accepted in full.

Bidders will be provided with the full review results for their proposal within 60 days of the PSC's decision following the completion of Stage 2, Full Proposal.

Situations may arise where feedback is provided to the Lead Bidder to implement refinements or seek further clarification to the project scope, budget, schedule, or work plan that have been identified during the selection process. Recommendations for full or partial funding, based on the scope and program objectives, may also be made. These refinements or further clarifications will be reflected in any resulting contract as appropriate.

2.5.4 Stage 3: PWGSC Contracting

As the Technical Authority for the approved project, the Lead Government Department for each of the selected and full or partially funded projects is responsible for initiating a

properly authorized and approved requisition for goods or services, or both, through their materiel management department. The materiel management department, in turn, must forward the funded requisition to PWGSC as the Contracting Authority (see section 2.3.1"Communications") for all resulting contracts under the Call for Proposal process. Bidders for recommended projects under Stage 1 and Stage 2 represent a pool of pre-qualified Bidders.

Upon receipt of the approved requisition, Statement of Work, signed Project Charter and Security Requirement Check List (SRCL), which may include the Employee Employer Relationship (EER) form and the Intellectual Property form, the PWGSC Contract Authority will send the proposed resulting contract, and may request additional information to obtain pricing details and to confirm that the project Bidder or Bidders have the technical, financial, and managerial competence to discharge the contract.

The resultant contract clauses and template are shown under Annex F, PWGSC Contracting Documents.

2.5.4.1 Acquisition of Resulting Goods and or Services

The Contractor grants to Canada the irrevocable option to acquire additional units of the goods and or services for testing and evaluation with the objective of advancing the state of the art to determine the feasibility of future operational utilization. The option shall only be exercised to acquire goods and or services which were developed as part of this CSSP contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment prior to contract completion. Funding for this option will not be provided by CSSP.

2.6 Additional Considerations

The following are additional considerations for Bidders as they are forming teams and preparing proposals. Establishing a common understanding of these considerations across all the proposal partners lays the foundation of project execution success.

2.6.1 Role and Responsibility of Lead Government Department

On behalf of DRDC CSS, the Lead Government Department will act as the Project Manager and manage the implementation (initiation, execution and close out) of the approved project under the Program Lead, the DG, DRDC CSS. The Program Lead exercises oversight of deliverables through the CSSP reporting requirements. The Lead Government Department is required to respond to any request made by the Program Lead regarding the project.

A project organizational chart depicting the management structure for the selected CSSP investment projects is presented in Annex G, Project Management Framework. Within this structure, there must be a Lead Government Department assigned for each project. The Lead Government Department can be a federal, provincial, territorial or municipal department. It is important that the Lead Government Department for a given project

understands its roles and responsibilities for the duration of the project; these may differ depending on the level of government.

The Lead Government Department responsibilities are included in Table 2.

	Lead Federal Departments	Lead Provincial/Territorial/Municipal Departments
Assign a Project Champion	The Project Champion (PC) should be a senior manager at the Director General (DG) level, or equivalent. The PC is responsible for ensuring that the project meets its objectives within the agreed schedule and budget and chairs the Project Review Committee (PRC) if applicable (see Annex I section I.2,Project Execution).	
Assign a Project Manager	A Project Manager (PM) must be assigned from within the Lead Government Department. The PM is responsible to the PC for day-to-day management of the project and compliance with the agreed objectives, schedule, and budget. DRDC CSS strongly recommends that the PM have formal training or is certified in project management. The PM will act as the DRDC CSS liaison for the project.	
Assign a Financial Officer	A Financial Officer must be assigned to ensure that all financial transactions are conducted and documented accurately.	
Coordinate Project Partners	Partners are involved in delivering the project forming a project team, and supporting the PM in project execution.	
Create Project Charter	Within one month of project approval (see Annex I section I.3, Project Close-out), the PM must develop a charter including an abstract and impact summary. The project charter is not a contract and a valid contract must be issued. Any resultant contract will take precedence over the project charter.	
Execute Articles of Agreement	Federal Lead Departments/Agencies signatory to any existing Memorandum of Understanding (MoU) will abide by the stated terms and conditions. Those federal Departments/Agencies not signatory to these MOUs will negotiate a separate MOU/Letter of Agreement (LOA) with DRDC CSS.	Lead Government Departments who are not federal entities will negotiate a Memorandum (MOA) of Agreement with co-signatories DRDC CSS and PWGSC. Terms and conditions contained within the MOA will include funding, roles and responsibilities and deliverables.
Receive CSSP Funding	Funding for the project and any resultant contracts will be provided through an interdepartmental transfer from DRDC CSS to the Lead Government Department at the federal level. All relevant points of contact and financial transfer procedures will be outlined in the Project Charter.	Funding for the project and any resultant contract will be provided through a contract that will be facilitated by the MOA and issued by PWGSC from DRDC CSS and the lead department. All relevant points of contact, invoice and payment procedures will be outlined in the Project Charter and or the MOA.
Manage Procurement	Following submission of a signed project charter during Stage 3, PWGSC Contracting Process, the Lead Government Department will be responsible for submitting a requisition through the PWGSC office designated to support the CFP.	
Manage Project Execution	Management of the day-to-day operations of the project in compliance with the agreed-upon objectives, schedule, and budget (this task is often supported by a Deputy PM) and the co-investment contribution commitments by project partners.	
Manage Project Close Out	Deliver the final report and associated deliverables as per Section I.2.1, “Deliverables.”	

Table 2: Lead Government Department Roles and Responsibilities

Further guidance on these requirements in Table 2 will be provided to the selected applicants at the Project Implementation Workshop to be held within one (1) month after project selection for each bid period.

2.6.2 Project Implementation Deliverables

The summary in Table 3 below presents an overview of the key project implementation stages and expected deliverables for program investment projects. Additional detail can be found in Annex I, Project Implementation, and will be explained in full at the Project Implementation Workshop.

Implementation Stage	Documents/ Deliverables	Relevant Projects
Initiation	▪ Charter ▪ Impact Summary ▪ Abstract	▪ All ▪ All ▪ All
Execution	▪ Trimester Reports (Progress and Financial) ▪ Mid-Year Progress Meeting - Project Review Committee (PRC) ▪ Impact Summary updates ▪ Abstract updates	▪ All ▪ All projects funded at or exceeding CAD$200K or spanning more than one fiscal year ▪ All ▪ All
Close-out	▪ Final documentation of the output of the investment as appropriate to the project type ▪ Final Impact Summary ▪ Final Abstract ▪ Final PRC presentation	▪ All ▪ All ▪ All ▪ All projects funded at or exceeding CAD$200K or spanning more than one fiscal year
Optional Activities	▪ Example: Annual Public Security S&T Summer Symposium presentation	▪ Project teams may be invited to submit a poster or provide a presentation at the completion of their projects. All projects funded at or exceeding CAD$200K should budget to participate in the Symposium.

Table 3: Project Implementation Deliverables

2.6.3 Sensitive or Proprietary Information

The contents of all proposals will be considered sensitive and will be maintained in confidence by DRDC CSS, 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).

2.6.4 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 $25K or more. Any contracts for goods or services or both initiated by the Lead Government Department that will use funding received from DRDC CSS will be assessed by PWGSC for Canadian content. The aim is to achieve a minimum of 50 percent Canadian content. As a result, successful project Bidders may be requested to provide additional information on Canadian content during Stage 3, 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.

2.6.5 Intellectual Property

The importance of Intellectual Property (IP) and the complexities surrounding it demand that active IP management take place. Public servants may create IP "internally" 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 Full Proposal submission and during the development of the Project Charter before contract negotiations take place.

The PWGSC's General Conditions No. 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 project implementation, and prior to the execution of any contracts. The following questions will be helpful in managing IP:

- What will be Canada's need to access Contractor-owned BIP, so that Canada will, if necessary, be able to use the FIP?
- What will be Canada's licensing requirements for future improvements to the IP?

---

[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 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.

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

- What are Canada'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*[4], ownership is typically vested in the Contractor.

IP must be addressed in all contracts. There are two options: either Canada 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 project will manage IP according to the following principles:

- Identification and "right to use" of BIP will be made before project initiation. Project participants will normally make their background IP available to the extent appropriate for the successful execution of the project.
- Project 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 project participants.
- Parameters for the ownership, management, administration, and exploitation of FIP (i.e., IP generated in the course of the project) 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 project. 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 project to best support the interests of all parties.
- 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.

2.6.5.1 Software IP

The CSSP encourages a software approach which considers the benefits of free and Open Source software (OSS), where available, to mature and deliver innovative products and services to fill capability gaps in multi-stakeholder safety and security environments. To the maximum extent possible, we encourage project teams to adopt an IP approach that will

[4] Implementation Guide for the Policy: Title to Intellectual Property Arising Under Crown Procurement Contracts <Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts>.

enable end users to seamlessly integrate technologies developed with CSSP funding. Such an approach would also include Open Architecture and Open Standards.

We encourage stakeholders to consider the following TBS guidance when establishing IP protection requirements:

http://www.collectionscanada.gc.ca/webarchives/20071212130456/http://www.tbs-sct.gc.ca/fap-paf/oss-ll/position_e.asp (please cut and paste into your web browser).

2.6.6 Security Considerations

Participants in DRDC CSS program investment projects may be required to possess valid security clearances, depending on the nature of the project, in order to have access to information necessary for its execution. The Lead Government Department and the project team will determine the level of security required for the project 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) of PWGSC. For further information, refer to the CISD website, at < ISS - Security and Information Services - PWGSC http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>.

2.6.7 Disclosure and Use of Information

At the onset of the project, project partners must clearly identify all issues related to security and disclosure of information; this includes special or specific information requirements.

DRDC CSS reserves the right to disclose and/or use information for projects for which it provides funding when requested by the appropriate authorities (see section 2.3.1.2 “Public Announcements”).

2.6.8 Human and Animal Ethics

A project involving human subjects, human tissues, laboratory animals, or animal tissues, must not proceed without prior approval of the partners’ 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.

2.6.9 Dispute Resolution

Projects that will receive CSSP funding for a value of or exceeding CAD$200,000 and/or spanning more than one fiscal year will have a PRC established to manage project issues including the resolution of any disputes. If a project does not have a PRC, any disputes at the project level must be brought to the attention of the responsible DRDC CSS Portfolio Manager. If additional steps are required to arrive at a solution, a DRDC CSS Director will manage the dispute resolution process; unresolved issues will be brought to the Program Lead and, if required, the PMB.

2.6.10 Project Termination

Should it be required, the Project Lead, in consultation with the PC, will make recommendations to the PMB regarding the termination of a project. The PMB will make the final recommendation on the termination of a project. If one of the following conditions occurs, the contract may be terminated:

- Charter has not been signed by project partners within one (1) month of project award;
- There is a forecasted inability to deliver as intended (e.g., project non-performance; key personnel have left the department or project); or
- Failure of a contractor to meet CSS MOU reporting requirements.

Procedures for project termination will be initiated with written notification between the Program Lead and the PC.

2.6.11 Contract Termination

PWGSC's General Conditions 2040 – Research and Development, include provisions respecting contract termination.

Annex A: Program Outcomes

Strategic Outcome

The principle Public Safety & Security Strategic Outcome is that:

Canada's socio-economic fabric has a greater resilience to global and domestic public safety and security events.

To this end:

- There are three Public Safety & Security **long-term** (five years) outcomes;
- There are six Public Safety & Security **intermediate** (three to five years) outcomes; and
- Each of the six intermediate outcomes has related **immediate** outcomes (one to three years).

The following Figure A.1 presents the CSSP the long-term, intermediate and immediate outcomes within the CSSP logic model.

Figure A.1: CSSP Logic Model

Annex B: Investment Priorities

B.1 Introduction

This Annex outlines the CSSP Investment Priorities for the CSSP CFP bid submission period 2012. It presents the capability areas, objectives (specific and cross-cutting) and threats/hazards that are relevant to the current Investment Priorities. In addition to the three investment priority elements required for the mandatory SM4 (indicate one capability area, objectives objective and threat/hazard), Bidders are also encouraged to indicate a cross cutting objective in their proposal, if applicable.

B.2 Investment Priority Dashboard

Table B outlines Investment Priorities that will be presented in the submission form.

Additional information in subsections of this Annex provides the CSSP context to aid Bidders in indicating their applicability to CSSP Investment Priorities.

CSSP Investment Priorities 2012			
Capability Areas	**Specific Objectives**	**Cross-Cutting Objectives**	**Threats/Hazards**
(Mandatory - check 1)	*(Mandatory - check 1)*	*(Optional - check 1)*	*(Mandatory - check 1)*
☐ P1.1 - Sharing situational awareness and decision support to track, monitor, report and coordinate response to the incident. ☐ P1.2 - Community resilience through psychosocial communications, crowdsourcing/social media, cell-broadcast alerting and emerging Web 2.0 technologies ☐ P1.3 - Disaster resilient, interoperable voice and broadband data communications for remote regions or telecom-disrupted urban centres ☐ P1.4 - Crowd management tools/techniques/information for mass evacuation, unruly crowd/traffic control, to include ambulatory, non-ambulatory, and fatalities ☐ P1.5 - Persistent wide-area surveillance of Canada's coastal waters, EEZ and approaches, including the North and inland border regions ☐ P1.6 - Border and critical infrastructure perimeter screening technologies/ protocols for rapidly detecting and identifying threats ☐ P1.7 - Enhanced cargo screening technologies/protocols for illegal/hazardous materials (drugs, currency, materiel) ☐ P1.8 - Public health - mass decontamination of people and infrastructure - best practices/guidelines for managing logistics, psychosocial, resumption/recovery management ☐ P1.9 – Homemade explosives (HME) threat characterization, including early detection and identification ☐ P1.10 – Advanced disruption/render safe procedures and tools to neutralize a device (e.g. Improvised Explosive Device, Radiological Dispersal Device) ☐ P1.11 - Characterizing the cyber threats, and assessment of impacts (including criminal investigation/forensic tools, techniques and procedures)	☐ O1 - Enhance efficient and comprehensive screening of people and cargo (identify threats as early as possible) so as to improve the free flow of legitimate goods and travelers across borders, and to align/coordinate security systems for goods, cargo and baggage; ☐ O2 - Enhance "crowd/mass-population management" methods to address civil unrest, evacuation, mass decontamination, or casualty management operations; ☐ O3 - Enhance protection, surveillance, decontamination, recovery, restoration of cyber/physical critical infrastructure – with special focus on ports of entry. *See section B.2.2 for more information*	☐ CO1 - Engage in Rapid assessment, transition and deployment of innovative technologies for public safety and security Practitioners to achieve Specific Objectives; ☐ CO2 - Enhance interoperability and situational awareness capabilities that support Specific Key Objectives. *See section B.2.2 for more information*	☐ A – Health Emergency – e.g. Pandemic ☐ B - Natural disasters – e.g. Severe earthquakes, floods, hurricanes, tornados, other ☐ C - Technical failure – e.g. toxic chemical release ☐ D - Malicious incident – e.g. Explosive device with or without CBRN material ☐ E - Malicious incident – e.g. cyber ☐ F - Major trans-border criminal activity – e.g. smuggling people/ material ☐ Other: _____

Table B.1: CSSP Investment Priorities 2012

B.2.1 Background

The CSSP has established a series of high level or long term outcomes to enable the development of greater resilience to global and domestic high-consequence public safety and security events (see Annex A, CSSP Program Outcomes for the full, immediate to intermediate to long term, outcome set).

Analysis of the past and current investment balance has been used to identify specific priorities for the CFP which will be largely restricted to a sub-set of the immediate outcomes set, down selected to align with key objectives for this CFP for balance of investment reasons. Immediate outcomes not included at this time are being supported through either ongoing investments or by one of the other investment instruments (Community Development or Targeted Investments).

The following section lays out the framework for key specific and cross-cutting objectives for the current CFP as derived from the above process and the selected priority capabilities. To facilitate the development of relevant proposals by Bidders, a set of "context-setting exemplar scenario vignettes" has been provided in Section B.3 of this Annex.

B.2.2 Mapping CFP Outcomes to Investment Priority Objectives

Each Investment Priority Objective can be mapped to corresponding CSSP program intermediate and immediate outcomes. This mapping illustrates the linkages between Investment Priorities and CSSP outcomes.

Specific Objective Themes	O1 - Border-related Economic Vitality and Sovereign Integrity	O2 - Resilient Communities Prepared for Emergencies and Extremism	O3 - Resilient Cyber/Physical Critical Infrastructure
Corresponding Intermediate/ Immediate Outcomes	**Intermediate Outcome 5 - Canada's border-related economic vitality and sovereign integrity is enabled:** - Perimeter and border security policy and operational imperatives related to CBRNE are S&T and evidenced based and enabled - Perimeter and border security policy and operational imperatives related to interoperability are S&T and evidenced based and enabled - Perimeter and border security policy and operational imperatives related to surveillance and interdiction are S&T and evidence based and enabled - Perimeter and border security policy and operational imperatives related to physical and cyber infrastructure are S&T and evidence based and enabled	**Intermediate Outcome 6 - Canada's communities are prepared for, and resilient to emergency events and violent extremism through risk and evidence based assessments, new technological capabilities and sociological analyses:** - Implemented metrics measure indicators of community resilience - Community-based best practices enhance resilience and provide communities with tools to develop and implement resilience roadmaps - New technological capabilities available to the public are implemented and enhance community resilience - Risk and evidence based assessments and sociological analyses inform counter violent extremism activities and programs	**Intermediate Outcome 4 - Enhanced resilience of the physical and cyber infrastructure domains are risk and evidence based:** - Inter-dependencies within and across national security institutions are informed through S&T products and advice - Regionally based analyses and assessments of risk and vulnerability help shape national approaches to infrastructure risk mitigation investments - Emerging and emerged risks to Canada's physical and cyber infrastructure are rapidly assessed and inform action

Table B.2: CSSP Investment Priorities - Specific Objectives

Cross-cutting Objective Themes	CO1 - Rapid evaluation, deployment and transition of S&T solutions	CO2 - Interoperability and Situational Awareness
Corresponding Intermediate/ Immediate Outcomes	**Intermediate Outcome 3 - Safety and security technologies are rapidly assessed, tested and delivered:** -The assessment, transition and exploitation of S&T productivity supported through innovative instruments that engage industry - Technologies are rapidly adopted or adapted for use through testing and evaluation of Commercial Off the Shelf (COTS) capabilities	**Intermediate Outcome 2 - Public safety and national security practitioners are supported by risk and capability gap -based technology investments:** - Public safety and security practitioners, intelligence operational and planning entities are more interoperable and situationally aware

Table B.3: CSSP Investment Priorities –Cross-Cutting Objectives

B.3 Threat/Hazard Context-Setting Exemplar Vignette Scenarios

A set of "context-setting exemplar vignettes", inspired in part from a collection of all hazards risk scenarios assessed under the Federal All Hazards Risk Assessment Framework, is provided in this Annex. These "exemplar" vignette scenarios are intended to give context to the CFP Priority Capability Areas shown in the CSSP Investment Priority Dashboard (see section B.2 of this Annex).

Proposals should address an identified shortfall in science, technology, policy, operational capability or other components that can be addressed to contribute to the prevention/mitigation, preparedness, response and recovery associated with these or similar types of events. As such, project proposals may vary the parameters so as to emphasize or challenge some particular aspect of the pre- to post-event dimensions of the scenario vignette. Furthermore, since these vignettes are 'exemplars,' proposals can reference alternate scenarios in the same threat/hazard domains (health emergency, malicious (CBRNE), malicious (Cyber), natural disaster, technical failure, criminal activity) if they so wish. However, if other vignette scenarios are used to give context, it will be incumbent on the proposal team to ensure the proposal includes information to show the relevance of the scenario in the Canadian context and has undergone some form of documented assessment by an authoritative government department or agency with a role in public safety and security.

A) Health Emergency

Exemplar Scenario: Pandemic Influenza – Animal Source*

Exemplar Scenario: In this vignette, the setting is a petting farm which features a pumpkin patch, a corn maze and also has a variety of farm animals. During the same week that a school group visited the farm, a few of the turkeys developed a mild respiratory illness. By the end of the week most of the flock is affected and a few have died. By the weekend several members of the farm family, including school age children who routinely feed the turkeys and clean their pens, have developed "a cold". The children attend school despite having a persistent cough. The school observes some decrease in attendance due to flu-like illness. On Tuesday, the school is notified that one child has been hospitalized after developing a high fever, cough and shortness of breath. Specimens taken from the hospitalized child tested positive for influenza A. Later that week the hospital receives two more cases in children from the same school. The public health unit is notified by the school of statistics on the sharp increase in absenteeism and hospitalization of children. Follow-up testing identified a new strain of H7N7 influenza in the hospitalized children.

- This scenario could be generalized to other pandemic or emerging diseases affecting humans (or animals) that pose an identified or potential risk.

Highlighted challenge areas:

- Public health care response and communications systems remain challenged by interoperability, reliability, availability (capacity in times of surge demand) issues and are vulnerable to wide disruption from limited resources and absenteeism. This capability is even more critical in remote and northern regions where communications and resources for health care are limited.
- Pandemics/disease outbreaks are evolving events that are rarely recognized at onset therefore strongly dependent on timely and sensitive tracking and reporting.
- Biological threat agents themselves are continually evolving emphasizing the need for rapid and accurate characterization of the threat.
- Biological threat agents are likely to be broadly dispersed even before they are recognized as a threat. Mitigation (decontamination and management) is dependent on retrospective analysis.
- Mass culling of animals may have a huge psychosocial and economic impact.
- At a time of a major health disaster all resources become scarce.

Priority Capability Areas Relevant for current CFP:

P1.1 - Sharing situational awareness and decision support to track, monitor, report and coordinate response to the incident

P1.8 - Public Health - Mass decontamination of people and infrastructure - Best practices/guidelines for managing logistics, psychosocial, resumption/recovery management

B) Natural Disaster *Exemplar Scenario*: Earthquake*
Exemplar Scenario: In the early morning hours in February a 7+ Mw earthquake occurs in the region of 49º North and 123º West. The earthquake is a crustal, surficial event along a northwards dipping fault in the Strait of Georgia with an epicentre 30 km west of Vancouver. The earthquake lasts for over 60 seconds and causes violent to strong shaking across Greater Vancouver and light to strong shaking across southwestern BC, northwestern Washington State, and southern Vancouver Island. The shaking is intense enough to cause moderate to heavy damage in Vancouver and on Vancouver Island and very light to light damage across the rest of southern BC. Aftershocks of the crustal event range from a 4.0 to 6.0 magnitude. A wide variety of critical infrastructure and services are disrupted including power, communications and many roadways and bridges are rendered impassable. The population, first responders and medical aid operations are under severe stress with significant numbers of casualties, uncontrolled fires and an unknown number of trapped people. ∉ This scenario could be generalized to various major weather events that can also have broad area impact on infrastructure (floods, landslides, major hurricanes, tornadoes, space weather) and can affect various locations across Canada. **Highlighted challenge areas:** ∉ Public safety communications systems remain challenged by interoperability, reliability, availability (capacity in times of surge demand) issues and are vulnerable to wide area disruption from many forms of natural disasters. This capability is equally critical in remote and northern regions where communication capacity for disasters is weak. ∉ Major disasters displace large numbers of people: this requires rapid development and execution of orderly evacuation plans and ingress/egress of supplies/equipment/people/debris. ∉ Recent Canadian disasters have highlighted the need for 'Virtual Emergency Operations Centre' capabilities in circumstances where operations centres are not accessible during a crisis. ∉ Psychosocial tools/techniques/media for assessing harm to public/infrastructure and exchanging information so as to promote community response (crowd sourcing) and resilience. ∉ Mass population evacuation planning and implementation tools, including psychosocial best practices/communications are of interest to many emergency management organizations. ∉ Public and official-use alerts and warnings systems would benefit from S&T support, including enhanced situational awareness sharing, wireless public alerting, tsunami alerts and warnings.
Priority Capability Areas Relevant for current CFP:
P1.1 - Sharing situational awareness and decision support to track, monitor, report and coordinate response to the incident
P1.2 - Community resilience through psychosocial communications, crowdsourcing/social media, cell-broadcast alerting and emerging Web 2.0 technologies
P1.3 - Disaster resilient, interoperable voice and broadband data communications for remote regions or telecom-disrupted urban centres
P1.4 - Crowd Management tools/techniques/information for mass evacuation, unruly crowd/traffic control, to include ambulatory, non-ambulatory, and fatalities

C) Technical Failure

Exemplar Scenario: Chemical Release, Marine Transport*

Exemplar Scenario: A large ocean-going cargo container vessel or tanker is approaching a major Canadian port from international waters. A fire/explosion of unknown origin takes place and as a result, toxic gases and toxic by-products of combustion arise, posing an immediate threat to the crew and a more general threat to the people and places in the vicinity of the vessel and where it is heading. Adding additional risk is deteriorating weather condition, and changing wind direction, making rescue of the crew difficult and hampering efforts to mitigate the effects of the fire and efforts to control the vessel; which might conceivably run aground.

- This scenario could be generalized to other modes of transportation (rail and truck transportation) and applied to different hazardous chemical, biological, or radiological materials that pose an identified or potential risk.

Highlighted challenge areas:

- While the implementation of the Automatic Identification System and the Long Range Tracking and Identification System significantly improve domain awareness, there remains a lack of persistent wide-area surveillance of Canada's EEZ and approaches, particularly in the North.
- As with any large area release of a potentially toxic plume, the importance of rapid assessment of the hazard, projection of expected area coverage and impact, and the rapid development of plans to mitigate harm to people and infrastructure are critical.

Priority Capability Areas Relevant for this CFP:

P1.1 - Sharing situational awareness and decision support to track, monitor, report and coordinate response to the incident

P1.4 - Crowd Management tools/techniques/information for mass evacuation, unruly crowd/traffic control, to include ambulatory, non-ambulatory, and fatalities

P1.8 - Public health - Mass decontamination of people and infrastructure - Best practices/guidelines for managing logistics, psychosocial, resumption/recovery management

D) Malicious Activity – Physical

Exemplar Scenario: Explosive Device with or without CBRN Material – Urban Centre*

Exemplar Scenario: A group plans to detonate a large vehicle-borne improvised explosive device (VBIED) in an urban centre in proximity to iconic structures or landmarks. The vehicle is parked in the vicinity of the landmarks but it is discovered prior to the detonation. The potential detonation would have caused considerable damage to the local structures, within a large radius, with the potential of killing and injuring people in the vicinity; from the effects of the blast, flying debris and potential collapse of structures. The collaboration of multiple agencies and alert citizens would have contributed to the discovery and render safe of the device.

- This scenario could be generalized to radiological or other agents and their effects after dispersal by the VBIED. It could also be generalized to include other threat devices and critical infrastructure targets (mass transportation, utilities or other). It could also be generalized for a different mode of transport/delivery. The potential detonation of the devices and the resulting impacts could also be considered in formulating proposals.

Highlighted challenge areas:

- The availability of precursor materials for manufacturing explosives and other threat agents that are out of regulatory control.
- An open society with large symbolic and iconic infrastructures presents a challenge for their physical security.
- The render safe and disruption of large explosives devices in confined spaces of difficult access.
- The prospect of having to deal with large numbers of casualties from the primary effects of a blast, potential collapse of structures, or contaminants (CBR).

Priority Capability Areas Relevant for this CFP:

P1.1 - Sharing situational awareness and decision support to track, monitor, report and coordinate response to the incident

P1.8 - Public Health - Mass decontamination of people and infrastructure - Best practices/guidelines for managing logistics, psychosocial, resumption/recovery management

P1.9 - Home Made Explosives (HME) Threat Characterization, including early detection and identification

P1.10 – Advanced Disruption/Render Safe procedures and tools to neutralize a device (e.g., Improvised Explosive Device, Radiological Dispersal Device)

E) Malicious Activity – Cyber

Exemplar Scenario: Information Exfiltration & Destruction*

Exemplar Scenario: There is a malicious attack unfolding on multiple public and/or private organizations to acquire sensitive information to be used for gaining an economic or intellectual advantage, use for ransom or leak for ideological reasons. The action would unfold over a period of weeks or months until detected and require a sophisticated group or organization to carry out. The suspect group or organization could have some type of foreign government connection/backing. Investigations would be ongoing to determine the risk exposure, the potential injury and economic loss to the victim organization(s), and establish attribution. The targeted information could be for system specifications, procurement information, technology research, related legal/intellectual property/market/brand plans, business/product plans and Canadian company capabilities. It could also involve the planned exploitation of personal information.

- This scenario could be generalized to other types of actors, motives, means and targets, where such events have been identified or pose a potential risk.

Highlighted challenge areas:

- Ability to combat cybercrime is critical, but ability to share actionable intelligence to start to act.
- Robust Industrial control systems are critical but vulnerabilities, when/if discovered, are rarely countered by robust-enough and tested protection measures.
- Though of paramount importance, resiliency of key national critical digital Infrastructure sectors such as Telecoms, Finance and Energy is rarely measured.

Priority Capability Areas Relevant for this CFP:

P1.1 - Sharing situational awareness and decision support to track, monitor, report and coordinate response to the incident (including cyber response/coordination/jurisdiction)

P1.11 - Characterizing the cyber threats, and assessment of impacts (including criminal investigation/forensic tools, techniques and procedures)

F) Trans-Border Criminal Activity

Exemplar Scenario: Major Smuggling*

Exemplar Scenario: An international smuggling operation has established multiple crossing points across the Canada-US border and from international locations into Canada through and between Ports of Entry. The operation has been running for a number of months, if not years, and is facilitated by individuals close to or inside certain organizations with responsibilities for shipping, monitoring and enforcing anti-smuggling and trafficking laws. The operation is suspected of smuggling people, weapons, drugs and possibly nuclear materials outside of regulatory control. It is also suspected of having established maritime, rail, road and air inbound and outbound bridges. Investigations and surveillance are ongoing following the discovery of an illegal shipment of weapons during a random search.

- This scenario could be generalized to other types of actors, motives, and means where such events have been identified or pose a potential risk.

Highlighted challenge areas:

- Smuggling of materiel across Canada's maritime borders including inland waters is an ongoing concern that requires integrated wide-area surveillance technologies and agile means for vessel interdiction.
- Major smuggling activity (people or materiel) or credible intelligence of a heightened threat that might be associated with the border would likely have severe and immediate impact on border operations.
- In addition to enhanced border screening technologies, improved cross-border sharing of information on people and shipments of concern merits further attention.
- While the implementation of the Automatic Identification System and the Long Range Tracking and Identification System significantly improve domain awareness, there remains a lack of persistent wide-area surveillance of Canada's EEZ and approaches, particularly in the North.
- National security statements and other publicly available reports have indicated the vulnerability of our border to illegal movement of people and material by small vessels in the Great Lakes and St. Lawrence Seaway.

Priority Capability Areas Relevant for current CFP:

P1.5 - Persistent wide-area surveillance of Canada's coastal waters, EEZ and approaches, including the North and inland border regions

P1.6 - Border and critical infrastructure perimeter screening technologies/ protocols for rapidly detecting and identifying threats

P1.7 - Enhanced cargo screening technologies/protocols for illegal/hazardous materials (drugs, currency, materiel)

Annex C: Technology Readiness Levels

DRDC CSS leverages the use of Technology Readiness Levels (TRL) as a framework for describing the R&D continuum from basic research through to engineering development and the eventual commercialization of a product.

Use of the TRL concept enables assists in understanding issues associated with transitioning S&T to end users.

Broad Terminology	TRL Level	Description	Level of Risk Tolerance	Relative Cost
Basic Research	**1**	Basic principles observed and reported.	**High**	**Low**
	2	Technology concept or application formulated through analytical studies.	↓	↓
Applied Research/ Research to Prove Feasibility	**3**	Analytical and experimental critical function or characteristic proof of concept.	↓	↓
	4	Concept, process, component, or subsystem validation in a laboratory environment.	↓	↓
Experimental or Technology Development	**5**	Concept, process, component, or subsystem validation in a relevant environment.	↓	↓
Demonstration and Validation/Engineering Feasibility	**6**	Concept, process, system/subsystem model or prototype demonstration in a relevant, high-fidelity environment.	↓	↓
	7	Concept, process, or system prototype demonstration in an operational environment.	↓	↓
Engineering and Manufacturing Development	**8**	Actual concept, process, or system completed and qualified through test and demonstration.	↓	↓
System Test and Operations/ Operational Systems Development	**9**	Actual concept, process, or system proven through successful mission operations (operational test and evaluation).	**Low**	**High**

Table C-1: Technology Readiness Levels

Annex D: Co-Investment Model

Collaborative delivery is an underlying characteristic of the CSSP. In most circumstances, the degree and extent to which the project partners co-invest in an activity can be a direct measure of the strategic and tactical importance that they place on the activity and their willingness to assume some project-related risk. Consequently, a co-investment contribution that indicates a commitment to the project that is commensurate with risk is required for all projects.

Proposal evaluation using the technical point rated criteria will include assessment of the level and nature of co-investment. The project team should demonstrate that the level of contribution is appropriate to the CSSP investment being requested based on the ability of the partners to commit resources and the level of risk of the proposed project.

Co-investment can be through the provision of cash towards project expenses and/or non-cash contributions (i.e., in-kind). Co-investment contributions considered to be legitimate project expenses are those considered essential to carry out the work and which can be thoroughly documented and justified. All committed contributions must conform to Lead Government Department policies regarding allowability, allocability, and reasonableness and must be verifiable through documentation.

Co-investment as cash contributions

Project partners are strongly encouraged to articulate their direct support for the project with cash contributions to the best of their ability.

Participating members in other federal programs may solicit financial support from those programs as a contribution to the project. These contributions must respect any limitations imposed by the partner organisations (such as stacking provisions associated with some federal programs).

Co-investment as in-kind contributions

In-kind contributions to the direct costs of the project and considered essential to the research could be in the form of cash equivalent goods or services that represent an incremental expense that would not normally occur and which would have to be purchased by project funds if not donated. In-kind contributions will only be taken into consideration if they are from participating project partners.

Table D-1 outlines the acceptable and not acceptable in-kind contributions for CSSP invested projects:

In-Kind Category	Accepted	Not Accepted
Access to unique databases	-Incremental costs of access	-Cost of developing the database and collecting the 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 -Rental equivalents exceeding accepted values had the 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	-Patent protection -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 license 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 stakeholder premises or on field work -Internal rates for use of specialized equipment by project personnel or use of process or production lines -Internal rates for value of lost production resulting from downtime	-Space for stakeholder activities outside the scope of the specific proposal -Equivalent commercial rates

Table D-1: Co-investment acceptable and not acceptable in-kind contributions

Co-investment Financial Management

The Lead Government Department's Project Manager will determine the management of all funds within the project and will provide a cash value for in-kind contributions within the guidelines of what are acceptable contributions as stated above. Project Managers are responsible for ensuring that their proposed co-investment cash and in-kind contributions will total the amount stipulated in the original proposal and subsequent project charter and must be supported by detailed calculations, explaining all proposed inputs and valuations in the project charter. Co-investment contributions may be spread over an agreed number of years, within the duration of the project.

Tracking of Co-investment Contributions

Project Managers will ensure that all co-investment contributions are tracked and adequate documentation is retained in the project files at the Lead Government Department site and included in the Trimester Financial Reports required by CSSP. This documentation will be audited and must be maintained in order to measure the progress of the given project and the program as a whole.

The tracking of in-kind contributions can be complex but their documentation is just as important as cash contributions. The following provides examples of tracking mechanisms for different types of contribution:

- Personnel time should be tracked by the hour devoted to the project. Please note that this is not an issue of accounting for the time of an individual, but rather the amount of time devoted to the project. In the absence of a more sophisticated system for tracking time, a spreadsheet may be used, logging the name of the individual, the project, and the dates/times devoted to the project. For confidentiality purposes, the salary valuation should be calculated separately.
- 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 project, and the value.
- Use of equipment/facilities should be tracked on an 'hours used' basis. This can be done on a spreadsheet.

Annex E: Technical Point Rated Evaluation Criteria

Technical point rated evaluation criteria have been established in order to assist the CFP proposal selection committee in their deliberations. The following six (6) point rated criteria will be used to evaluate the proposals:

1. **Relevance** to program priority investment areas;
2. **Improvement over existing** and **potential to impact** operational, intelligence or policy capabilities, and level of **innovation** of the proposed solution;
3. Operational, intelligence or policy **need and user demand (pull/transition potential);**
4. **Value** of solution compared to cost of project and additional strategic or tactical value (i.e., **value for money**);
5. **Quality of project proposal and team; and**
6. **Co-investment, risk sharing** for CSSP investment.

The first five criteria (i.e., 1. to 5.) will be evaluated by assigned external reviewers and will account for 80% (0.80) of the overall proposal evaluation.

The co-investment criterion (i.e., 6.) will be evaluated by DRDC CSS and will account for 20% (0.20) of the overall proposal evaluation.

The detail regarding the point rated criteria is presented in the sections below. For each criterion, the definition, elements through which the proposal should demonstrate the criteria and the point value scoring grid is included.

E.1 Relevance to program priority investment area

Definition

- This criterion measures the ability of the proposal to meet the priority investment areas published for the specific process.

Demonstrated by the following elements:

- Identification of which priority investment area(s) the project addresses.
- Evidence and examples of degree of relevance to one or more priority areas.

To what degree does the proposal demonstrate relevance to program priority investment areas?	Point Value
None (No evidence provided in proposal or no response)	**0**
Low (Weak evidence and no supporting example or the example is not relevant)	**1**
Moderate (Some evidence supported by at least one relevant example, but limited in ability to outline the connection between the challenge and the proposed solution)	**2**
High (Clear evidence supported by at least one relevant example that outlines the connection between the challenge and proposed solution)	**3**
Exceptional (Clear evidence to all elements supported by at least one relevant example that is quantitatively substantiated and outlines the connection between the challenge and proposed solution; there is application across multiple priority investment areas)	**4**

E.2 Improvement over existing and potential to impact operational, intelligence or policy capabilities, and level of innovation of proposed solution

Definition:

- The proposal should state specifically and clearly the improvement over existing technologies/products/capabilities/services and why they are needed. Improvements should be defined in terms of current in-service AND known developmental solutions. This criterion measures the influence of successful completion of the project on current Canadian operational capability to prevent, prepare for, respond to or recover from a public safety or security event. It also considers the time frame for influence to take effect based on the maturity of the solution. Finally, this criterion measures the innovation of the proposal and potential within the proposed work to find new ways to achieve a solution.

    - The improvements resulting from the project will depend on whether the project is advancing technology, producing a product, addressing a capability gap or providing a service.

Demonstrated by the following elements:

- An analysis of the weaknesses of the current capability(ies) that requires improvement
- How the solution will achieve the claimed improvement.
- Why the claimed improvement is important.
- Degree of improvement and enduring potential of solution.
- Breadth and depth of the potential improvement on one or more operational communities including which operational community(ies) it will impact and if it will be of value at local, regional, national and/or international levels.
- The solution will reach an appropriate level of maturity for the project type.
- Novel processes, policy and/or technology contribute to the development of best practices or new capabilities and recognize the importance of the active engagement of end users.
- Potential to patent or otherwise protect the technology (if applicable).

- Ability to promote and support developmental S&T (through people, processes, policy and/or technology).

To what degree does the proposal demonstrate improvement(s) over existing and potential to impact operational, intelligence or policy capabilities, and level of innovation of proposed solution?	Point Value
None (No evidence that the project provides improvements to current solutions, of the potential, and of any new technology or capability provided in proposal)	**0**
Low (Weak evidence of the potential improvement and potential to impact to Operational, Intelligence or Policy Capabilities, and evidence of innovation of solution with no compelling or relevant supporting example)	**1**
Moderate (Some evidence of a potential improvement over existing solutions supported by an example, but the improvement is small, short-lived or based on a cursory analysis of alternate solutions. It is supported by at least one relevant example, however, the example is limited in breadth and the solution is not likely to be sufficient to meet the full potential. Evidence of innovation in the solution is supported by at least one relevant example, however, the example is limited in its demonstration)	**2**
High (Clear evidence of a potential significant and enduring improvement over existing and developmental solution, with impact in at least one operational capability, supported by at least one relevant example that is confirmed by operational staff. The maturity of the solution is appropriate, and a strategy to fully mature and transition the solution is provided. There is clear evidence of significant innovation of the solution supported by at least one relevant example of the resulting ideas/ products/ processes/ policies/ practice	**3**
Exceptional (Clear evidence supported by multiple relevant examples demonstrating a potential major improvement over existing and developmental solutions affecting a broad area, or a new solution to a priority problem that currently has no realistic solution, or a solution that has broad applicability across numerous areas. The maturity of the solution is appropriate, and a strategy to fully mature and transition the solution is provided with substantial documented operational need across multiple end user groups. There is clear evidence of exceptional innovation of the solution supported by several examples illustrating how the results will be used in unexpected ways to effect a "step" (non-incremental) change in operational capability and/or capacity for end users)	**4**

E.3 Operational, intelligence or policy need and user demand (pull/transition potential)

Definition:

- This criterion represents the market or operational "pull" for the solution (technology, product, service or capability) being proposed. The proposal should describe how the solution will address an operational need that is documented by an end user or stakeholder group, and whether potential commercial opportunities exist for the deliverable of the project.

Demonstrated by the following elements:

- Statement of requirement from end user(s) who will receive the solution at the end of the project.
- The proposal contains information to predict and plan the direction of future progress to allow it to be ultimately transitioned to operations.
- Defined and sustainable long term use opportunity for the solution within the defined end user group(s).
- Future potential for the solution (i.e., contribution to policy development, commercial opportunities, knowledge sharing with other end users (i.e., another operational group, another region).

To what degree does the proposal demonstrate operational user demand (end user pull)?	**Point Value**
None (No evidence of operational need or user demand provided in proposal)	**0**
Low (Weak evidence of operational need or user demand provided in proposal and it is not clear which end users will be "customers " for the solution; there are no supporting examples or the examples are not relevant)	**1**
Moderate (Some evidence of operational need and user demand supported by at least one relevant example, however, no specific statement of operational need is provided and it is not clear which end users will be "customers " for the solution)	**2**
High (Clear evidence of operational need and user demand supported by statement(s) of operational need from end user(s) and a documented end user "customer" for the solution with written confirmation)	**3**
Exceptional (Clear evidence of broad operational need and user demand supported by multiple statements of operational need and/or multiple end users for the solution, participating in the project, that have provided written confirmation of their intent to operationalize the solution if it is successful)	**4**

E.4 Value of solution compared to cost of project and additional strategic or tactical value (i.e., value for money)

Definition:

- This criterion measures the impact of the solution on capability and/or capacity of prevention, preparedness, response and/or recovery relative to the cost of the project. This criterion allows reviewers to give additional credit for value and benefits that are not adequately captured in the other criteria

    - Evidence can be provided in terms of the many benefits (impact, level of advance, maturity of output, degree of leverage) compared to the level of the current budget request and the future investments that are required to reap the benefits.

Demonstrated by the following elements:

- Value of solution in terms of increased operational effectiveness, productivity improvements, risk reduction, cost/loss reduction, revenue generation.
- Budget that is appropriate for the expected level of effort and the impact of the solution.
- Probability of achieving value and whether partial value can be captured if the full solution is not achieved.
- Expectation for when value will be captured.
- Horizontal and interdepartmental partnerships.
- Encouraging effort that cannot be executed elsewhere.
- Fostering the integration of science and policy.

To what degree does the proposal demonstrate the value of the solution compared to the cost of the project (i.e., Return on Investment)?	**Point Value**
None (No evidence of value versus cost provided in proposal)	**0**
Low (Weak value proposition of solution and little supporting information or examples, or the examples are not relevant)	**1**
Moderate (Evidence of some value with supporting information but the budget seems high relative to the level of effort or the value has a low to moderated probability of being realized, and it is supported by evidence to at least one element by a relevant example representative of additional strategic or tactical value)	**2**
High (Clear evidence of good value supported by a budget that is appropriate for the level of effort. The solution has an impact that is appropriate for the costs proposed and it is likely to be realized, and it is supported by evidence to two elements by relevant examples representative of additional strategic or tactical value)	**3**
Exceptional (Clear evidence of a very high value supported by a budget that is appropriate for the level of effort. Strong end user engagement suggests immediate impact and realization of value should the project be successful, and it is supported by evidence to three or more elements by relevant examples representative of additional strategic or tactical value)	**4**

E.5 Quality of project proposal and team

Definition:

- This criterion measures the likelihood that the project will be successful based on the quality of the project plan and team composition.

    - At the Synopsis Stage, the intended team composition will be considered and rated. The actual team (confirmed members) will be evaluated and rated at the full proposal stage.

Demonstrated by the following elements:

- Project plan contains precise information detailing tasks, budget, schedule, milestones and deliverables as well as a risk management plan with mitigation strategies and off-

ramps that provide partial value. The depth of the project plan should be appropriate for the level of funding requested.

- Facilities and infrastructure are in place or included in the project costs to ensure success
- Team member(s) are identified with direct experience in the subject area(s) as appropriate, for example:
  - Technical team lead with documented education, expertise and experience.
  - Operational end user familiar with the operational domain of the output *(government partner).*
  - Industry partner (if appropriate) with demonstrated success in transitioning similar outputs into an operational setting.
  - Project Manager with appropriate qualification and demonstrated experience managing similar projects.
- Competence in financial management and (preferably) working with government agencies.

To what degree does the proposal demonstrate the quality of the project plan, the quality of the team, and likelihood of success?	**Point Value**
None (No or extremely weak evidence that a successful solution is achievable based on the project plan elements and the team composition)	**0**
Low (Weak probability that a successful solution is achievable based on the project plan elements and the team composition)	**1**
Moderate (Some evidence that a successful solution is achievable but at least one element of the project plan or one key team member is missing, or the project plan and team membership/composition create unnecessary risks)	**2**
High (Clear evidence to all elements of the project plan and team composition support a high probability of successfully completing the project, may be some risks but they appear to be manageable)	**3**
Exceptional (Clear evidence that the project plan and team composition are excellent, all risks have effective contingency plans, and partial success/value can be achieved through the effective use of off-ramps and decision points)	**4**

E.6 Co-investment, risk sharing for CSSP investment

This sixth (6) criteria is used to rate the co-investment commitment by the project lead and its team members. The collaborative delivery of the Canadian Safety and Security Program is an underlying characteristic of the program. Consequently, the degree and extent to which the partners co-invest and share project risk, in most circumstances, can be a direct measure of the strategic and tactical importance that they place on the activity. The co-investment can be through the provision of cash towards project expenses and/or non-cash contributions (or in kind) such as labour costs and operations and maintenance (O&M) expenses (See Annex D, Co-Investment Model).

Definition:

- This criterion measures the appropriateness of the level of co-investment contribution relative to the CSSP investment being requested based on the ability of the partners to commit resources and the level of risk of the proposed project. Participants' co-investment contributions may include cash and non-cash (in-kind) contributions.
    - Evidence can be provided in terms of the potential of the organization's contribution to achieve the desired outcomes (impact, level of advance, maturity of output, degree of leverage) compared to the level of the proposal's CSSP funds request and the future investments that are required to reap the benefits.

Demonstrated by the following elements:

- Contribution of partners' organizational assets to the project including cash contributions.
- Increased overall investment reward and value of solution in terms of operational, intelligence or policy effectiveness, level of innovation, productivity improvements, risk reduction, cost/loss reduction, revenue generation.
- Co-investment undertakings are articulated in a budget that reflects the proponent's commitment to achieving the desired outcome.

To what degree does the proposal demonstrate the risk sharing for the CSSP investment and proponent/end user stake in the results?	**Point Value**
None (No evidence of proponent co-investment undertakings and no indication of a willingness to share investment risk(s))	**0**
Low (Weak value of proponent co-investment undertakings and little indication of a willingness to share investment risk(s))	**1**
Moderate (Evidence of some co-investment undertakings but the level of CSSP funding appears high relative to the proposed co-investment undertakings and consequently, the potential value has a low to moderate probability of being realized)	**2**
High (Clear evidence of co-investment undertakings and a budget that is appropriate for the level of effort. The solution has a potential impact that is appropriate for the costs proposed and the potential results of the investment are greater due to the co-sharing of risks)	**3**
Exceptional (Clear evidence of very high co-investment undertakings that have a potential to increase innovation and potential success. The budget is designed to meet the challenges of the project in a cost-effective manner. Strong end user engagement suggests immediate impact and realization of value as well as a potential for sustainability over time should the project be successful)	**4**

Annex F: PWGSC Contracting Documents

F.1 Resulting Contracting Clauses

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=2010-01-11&eid=1

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

http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=13697&section=text#cha4

F.2 Security Requirements Check List

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

http://www.tbs-sct.gc.ca/tbsf-fsct/350-103.pdf

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

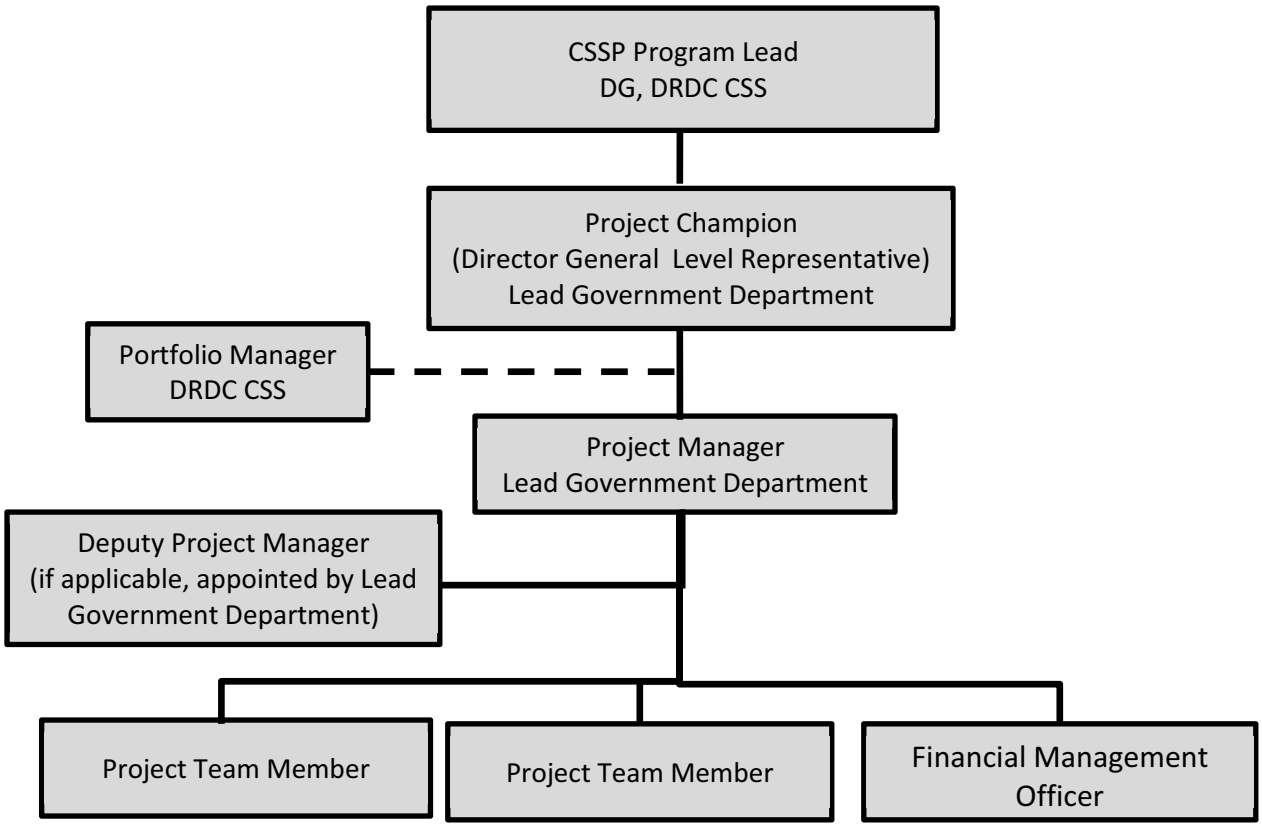
F.3 Writing Better Proposals

Writing Better Proposals - Business Access Canada

http://contractscanada.gc.ca/rpe-wbp-eng.html

Annex G: Project Management Framework

The following organizational chart depicts the typical partner roles in the projects as well as how the investments are managed within the program framework.



Annex H: CSSP Call for Proposals Selection Schedule

Selection Schedule for CSSP CFP Bid Period 2012

Call for Proposals Announcement	5 September 2012
Closing Date for Synopsis Proposal Submission	5 October 2012
Request for Full Proposals	5 November 2012
Closing Date for Full Proposal Submission	5 December 2012
Projects Announcement	February 2013
Project Implementation Workshops	February 2013
Bid Validity End Date	November 2013
Follow-up Debrief to Potential Projects	As required March 2013 to November 2013
Follow-up Project Implementation Workshop for Potential Projects now Approved	As required March 2013 to November 2013

Annex I: Project Implementation

Once a proposal has been approved at Stage 2, it progresses to Stage 3, PWGSC Contracting, as appropriate, and then full project implementation. This Section provides a general overview of key implementation considerations as the project progresses through Stage 3 and beyond.

I.1 Initiation

The high level Project Initiation process steps are:

1. Project funds recipient sign-off (i.e., Charter is prepared);
2. DRDC CSS project sign-off (i.e., Charter reviewed and approved);
3. Funds transfer (this step is only applicable if the project lead is a federal government department. If the Government Lead is not a federal department, funds will be disbursed through a contract issued in the normal procurement processes; and
4. Procurement (the Proposal or Charter are not contractual in themselves. If required, a contract will be issued through DRDC CSS or the Lead Government Department by PWGSC).

I.1.1 Memorandum of Understanding

A MOU has been established between participating federal departments/agencies and the Department of National Defence (DND) to define the financial and project responsibilities to be undertaken in the execution of DRDC CSS projects for which these departments are the recipients of program funds.

If the Lead Government Department is a federal department that is not a signatory to the MOU, a Letter of Agreement (LOA) will be issued between the lead department and DRDC CSS. If the Lead Government Department is a provincial/territorial/municipal government department, a Memorandum of Agreement (MOA) will be issued between the Lead Department, DRDC CSS and PWGSC.

I.1.2 Project Implementation

A Project Implementation Workshop delivered by DRDC CSS will be held following project award for each bid period. The workshop is targeted to the Project Lead organizations and their participating PMs, Financial Officers and Procurement Officers. At the workshop, the PMs and team managers will receive guidance and further information in the development of the project plan, charter, reporting, financial, and accountability mechanisms.

I.1.2.1 Project-Sign off

All projects must be signed-off for official records. Sign-off for CFP Projects take the form of an approved Project Charter.

The project's PM is responsible to ensure that all the partnerships, resources, and project information included in the charter are true and accurate. For projects that have a federal Lead Government Department, this Project Charter is then attached to the signed PSTP MOU or LOA of the federal department. For projects that have a provincial/territorial/municipal Lead Government Department, the Project Charter is then attached to the MOA between the government department, DRDC CSS and PWGSC.

Project work plan, milestones, financial planning, the responsibilities of the team members, and the charter must be signed by all required partners and by DRDC CSS *before the funds can be transferred to the Lead Government Department.* A template is provided.

I.1.2.2 Abstracts and Impact Summary

Proposals that will receive CSSP funding will be required to submit an abstract. The project team must submit an updated abstract each spring and/or at project close.

A single page Impact Summary Chart with basic overview information, objectives and impact details is required for all projects; templates are provided by CSS. These documents must be updated annually.

I.1.2.3 Financial Accountability

All funding recipients will assume responsibility for received funds in accordance with approved project work plans presented in the project charter. The Lead Organization must retain a project file that documents all financial transactions including co-investment (cash and/or in-kind) contributions. Copies of documentation from this file may be requested during a program audit.

Federal departments and agencies will follow their departmental expenditure authorities. Financial accountability for any federal partner will be in accordance with the *Financial Administration Act* as administered within each participating department or agency.

I.1.2.4 Procurement

Any contracting process must be consistent with Canada's procurement principles (refer to the *PWGSC Supply Manual* at <http://www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/index-eng.html>)**.** All 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 Canada. Contracting should stand the test of public scrutiny, ensure the pre-eminence of operational requirements, and be consistent with Canada's trade agreement obligations. Contracts will be issued by PWGSC based in accordance with the Statement of Work (SOW) and the Contractor's technical bid with a designated federal department or agency participating in the project as the contract Technical Authority as determined by the PM. PWGSC may update, as applicable, the standard terms and conditions of resultant contracts. This includes coordinating

with PWGSC for Contract Demand documentation through departmental material managers and a PWGSC Contracting Officer (as applicable), including the:

- Applicable SOW;
- Security Clearance Requirement Checklist, if applicable;
- Employee–Employer Relationship Form;
- Intellectual Property Declaration; and
- Departmentally Approved Contract Requisition Form, PWGSC Requisition 9200.

I.2 Project Execution

DRDC CSS requires that all projects are executed in a manner that enables the program to progress successfully towards achieving its desired outcomes.

I.2.1 Deliverables

There are two required types of deliverables:

1. Technical project deliverables, as detailed in the proposal and subsequent project Charter; and

2. CSSP reporting deliverables, such as trimester reports, to provide DRDC CSS with oversight of CSSP investments.

I.2.1.1 Deliverable Format

Documents will be delivered in electronic (Microsoft (MS) Word or pdf) format. The deliverables can be submitted in the official language of preference. All project documentation, including project deliverables and publications resulting from the project, will be kept for retention in the CSSP Knowledge Base.

I.2.1.2 Publications Related to Project

In order to ensure the appropriate security classification, the attribution of CSSP funding and the provisions of Controlled Goods accounted for, DRDC CSS must review publications concerning CSSP funded work prior to publication.

I.2.1.3 Project Progress Reports

The following documents are required for financial accountability and oversight:

> **Trimester financial and progress reports –** All projects are required to submit a trimester report that will provide an overview of the project budget and progress; a template and instructions are provided.

I.2.1.4 Project Review Committee (PRC)

For projects spanning more than one fiscal year or having a DRDC CSS funded value of or exceeding CAD$200K, a PRC and project team will assess the project once a year, traditionally in the fall. A PRC, chaired by the Lead Government Department's PC, provides oversight of the project, including approval of changes to the schedule and cash profile, recommends changes in the project's profile for approval, and addresses other exceptional circumstances that cannot be resolved by the project team. The assessment will include the following key aspects:

1. Annual review of project performance against objectives and work plan; and
2. Annual review of project impact.

I.3 Project Close-out

Project close-out is a critical part of any project because it provides opportunities to capture deliverables and other valuable outcomes of the project. The size of reports and level of detail should be appropriate for the level of funding and complexity of the project.

After work on the project is complete, the project documentation must be submitted to DRDC CSS to formally document the results of the investment and capture the knowledge for the Canadian public safety and security knowledge base. The project is considered to be complete only after the required close-out documentation is received and approved.

I.3.1 Final Project Report

Project final documentation must be submitted consistent with the formats and templates supplied by DRDC CSS to the extent practicable. Documents will be delivered in hard copies (2) and electronic format (MS Word or pdf). The deliverables can be submitted in the official language of preference.

For <u>all projects</u> the minimum close-out requirements are:

- Documentation of the outputs of the investment is to be appropriate to the project type and include both a TRL assessment and outcome assessment, accounting the project's progress toward realizing its target impacts and its contribution toward program outcomes which may take the form of one of the following as indicated in the project charter:
    - A statement as to the advice and guidance provided, including to whom the advice and guidance was provided and what the outcomes and impacts were;
    - A study report providing details on the outcomes, deliverables and impacts on future operations or projects if appropriate;
    - A workshop report describing the Record of Discussion, a road map or other deliverables from the Workshop, and recommendations or next steps; or
    - A technical report describing the outcomes and impacts on operational, intelligence or policy capability and capacity.

- All hardware, software and infrastructure developed using program funds are delivered to DRDC CSS or disposed of in accordance with government rules;
- A Final Impact Summary that highlights outcomes and impact at the end of the project;
- A final trimester progress and financial report; and
- Inclusion of all publications resulting from or related to the work.

For projects that received DRDC CSS funding for a value equal to or exceeding CAD$200K, or that was executed over more than one fiscal year, a final PRC presentation is also required.

I.3.2 Summer Symposium

Project teams are requested to present their findings upon completion of the project either at the annual Public Security S&T Summer Symposium during the month of June or at an event of a similar nature.