



**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Travaux publics et Services gouvernementaux  
Canada  
Place Bonaventure, portail Sud-Est  
800, rue de La Gauchetière Ouest  
7<sup>ème</sup> étage  
Montréal  
Québec  
H5A 1L6  
FAX pour soumissions: (514) 496-3822

**REQUEST FOR PROPOSAL**  
**DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government Services Canada**

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

**Proposition aux: Travaux Publics et Services Gouvernementaux Canada**

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

**Comments - Commentaires**

<b>Title - Sujet</b> Dev. of Applications for Disaster	
<b>Solicitation No. - N° de l'invitation</b> 9F013-150992/A	<b>Date</b> 2016-05-25
<b>Client Reference No. - N° de référence du client</b> 9F013-15-0992	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$MTB-690-13873	
<b>File No. - N° de dossier</b> MTB-6-39012 (690)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2016-06-30</b>	
<b>Time Zone</b> <b>Fuseau horaire</b> Heure Avancée de l'Est HAE	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Paquin, Esther	<b>Buyer Id - Id de l'acheteur</b> mtb690
<b>Telephone No. - N° de téléphone</b> (514) 496-3889 ( )	<b>FAX No. - N° de FAX</b> (514) 496-3822
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> AGENCE SPATIALE CANADIENNE 9F013-Satellite Operation, I&A 6767 RTE DE L AEROPORT ST HUBERT Québec J3Y8Y9 Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Travaux publics et Services gouvernementaux Canada  
Place Bonaventure, portail Sud-Est  
800, rue de La Gauchetière Ouest  
7<sup>ème</sup> étage  
Montréal  
Québec  
H5A 1L6

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



Item Article	Description	Dest. Code Dest.	Inv. Code Fact.	Qty Qté	U. of I. U. de D.	Unit Price/Prix unitaire FOB/FAM	Destination	Plant/Usine	Delivery Req. Livraison Req.	Del. Offered Liv. offerte
1	Dev. of Applications for Disaster	9F013	9F013	1	EA	\$	XXXXXXXXXXXX			

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## TABLE OF CONTENTS

---

<b>PART 1 - GENERAL INFORMATION</b> .....	3
1.1 INTRODUCTION.....	3
1.2 SUMMARY.....	4
1.3 DEBRIEFINGS.....	5
1.4 COMMUNICATIONS.....	5
<b>PART 2 - BIDDER INSTRUCTIONS</b> .....	6
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS .....	6
2.2 SUBMISSION OF BIDS.....	6
2.3 FORMER PUBLIC SERVANT.....	6
2.4 ENQUIRIES - BID SOLICITATION .....	8
2.5 APPLICABLE LAWS .....	8
2.6 IMPROVEMENT OF REQUIREMENT DURING SOLICITATION PERIOD .....	8
2.7 MAXIMUM FUNDING.....	8
2.8 NUMBER OF CONTRACTS AWARDED .....	8
<b>PART 3 - BID PREPARATION INSTRUCTIONS</b> .....	9
3.1 BID PREPARATION INSTRUCTIONS.....	9
<b>PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION</b> .....	12
4.1 EVALUATION PROCEDURES .....	12
4.2 BASIS OF SELECTION – HIGHEST RATED WITHIN BUDGET.....	12
<b>PART 5 - CERTIFICATIONS</b> .....	13
5.1 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION.....	13
<b>PART 6 - FINANCIAL AND OTHER REQUIREMENTS</b> .....	16
6.1 FINANCIAL CAPABILITY .....	16
<b>PART 7 - RESULTING CONTRACT CLAUSES</b> .....	17
7.1 STATEMENT OF WORK .....	17
7.2 STANDARD CLAUSES AND CONDITIONS.....	17
7.3 PERIOD OF THE CONTRACT ( <i>WILL BE INSERTED AT CONTRACT AWARD</i> ) .....	17
7.4 AUTHORITIES.....	17
7.5 PROACTIVE DISCLOSURE OF CONTRACTS WITH FORMER PUBLIC SERVANTS.....	18
7.6 PAYMENT.....	18
7.7 SACC MANUAL CLAUSES.....	19
7.8 INVOICING INSTRUCTIONS - PROGRESS CLAIM - FIRM PRICE .....	19
7.9 COMPLIANCE .....	21
7.10 APPLICABLE LAWS .....	21
7.11 PRIORITY OF DOCUMENTS.....	21
7.12 FOREIGN NATIONALS (CANADIAN CONTRACTOR).....	21
7.13 INSURANCE.....	21
<b>ANNEX "A"</b> .....	22
STATEMENT OF WORK, CONTRACT DELIVERABLES AND MEETINGS .....	22
<b>ANNEX B</b> .....	23
BASIS OF PAYMENT .....	23

Solicitation No. - N° de l'invitation  
9F013-150992/A  
Client Ref. No. - N° de réf. du client  
9F013-15-0992

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTB-6-39012

Buyer ID - Id de l'acheteur  
mtb690  
CCC No./N° CCC - FMS No./N° VME

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<b>ANNEX C</b> .....	24
PROPOSAL PREPARATION INSTRUCTIONS.....	24
<b>ANNEX D</b> .....	25
POINT RATED CRITERIA AND BENCHMARK STATEMENTS.....	25

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## **PART 1 - GENERAL INFORMATION**

### 1.1 Introduction

The bid solicitation is divided into seven parts plus annexes and attachments, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Financial Requirements: includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract

#### **The following Annexes:**

- Annex A Statement of Work, Contract Deliverables and Meeting
- Annex B Basis of Payment
- Annex C Proposal Preparation Instructions
- Annex D Point Rated Criteria and Benchmark Statements
- Appendix A-1 Documentation Page
- Appendix A-2 Contractor Disclosure of intellectual Property

## 1.2 Summary

### Project title

Development of Innovative Earth Observation Solutions for Disaster Management in a Canadian Context

### Description

Public Works and Government Services Canada (PWGSC) on behalf of Canadian Space Agency (CSA) located in St-Hubert, (Quebec), plans to award several contracts through the Canadian Space Agency's (CSA's) Earth Observation (EO) Applications Development Program (EOADP) to: 1) Develop innovative Earth Observation solutions that address Disaster Management application needs in a Canadian context and 2) Demonstrate the added-value of the EO solution, relative to existing practices and plan its operationalization.

### Period of Contract

The contract will be issued for a period of twenty-four (24) months.

### Actual Available Budget

The budget available for the contract resulting from this bid solicitation is \$3,000,000.00, all applicable taxes extra. Annex A (Statement of Work) includes a description of the work required. The Maximum amount of funding available for each contract will not exceed \$300,000.00, all applicable taxes extra. Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

### Intellectual Property

The Intellectual property will vest with the contractor.

### Security Requirements

There are no security requirements associated with this requirement.

### Integrity provisions for procurement

As per the Integrity Provisions under section 01 of *Standard Instructions 2003 and 2004*, bidders must provide a list of all owners and/or Directors and other associated information as required. Refer to section 4.21, 5.16 and 8.70.2 of the *Supply Manual* for additional information on the Integrity Provisions.

### Former Public Servant

For services requirements, Bidders must provide the required information as detailed in article 2.3 of Part 2 of *the bid solicitation*, in order to comply with Treasury Board policies and directives on contracts awarded to former public servants. Please also refer to Part 5 – Certifications.

### Trade agreements

This requirement is not subject to the trade agreements.

### Canadian Content

The requirement is limited to Canadian goods and/or services.

### Federal Contractors Program for Employment Equity

The Federal Contractors Program (FCP) for employment equity applies to this procurement; see Part 5 – Certifications and Part 7 - Resulting Contract Clauses.

Solicitation No. - N° de l'invitation  
9F013-150992/A  
Client Ref. No. - N° de réf. du client  
9F013-15-0992

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTB-6-39012

Buyer ID - Id de l'acheteur  
mtb690  
CCC No./N° CCC - FMS No./N° VME

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### **1.3 Debriefings**

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

### **1.4 Communications**

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

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## **PART 2 - BIDDER INSTRUCTIONS**

### **2.1 Standard Instructions, Clauses and Conditions**

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditionsmanual/>) issued by Public Works and Government Services Canada. Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

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

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days  
Insert: 240 days

#### **2.1.1 SACC Manual Clauses**

A7035T (2007-05-25), List of Proposed Subcontractors

### **2.2 Submission of Bids**

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

Public Works and Government Services Canada  
Quebec Region  
Place Bonaventure, South-East Portal  
800 de La Gauchetière Street West  
7th Floor, Suite 7300  
Montreal, Quebec, Canada  
H5A 1L6

**Due to the nature of the bid solicitation, bids transmitted by facsimile or by electronic mail to PWGSC will not be accepted.**

### **2.3 Former Public Servant**

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

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## Definitions

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

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

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

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

## Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes ( ) No ( )**

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

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

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

## Work Force Adjustment Directive

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

**If so, the Bidder must provide the following information:**

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

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

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## 2.4 Enquiries - Bid Solicitation

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

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

## 2.5 Applicable Laws

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

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

## 2.6 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least ten (10) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

## 2.7 Maximum Funding

The maximum available funding, applicable taxes extra, as appropriate, for the contract for the purposes of this bid solicitation is indicated under the heading Actual Available Budget in Part 1- Section 1.2-Summary. Bids valued in excess of this amount will be considered non-responsive, pursuant to Part 4-Evaluation Procedures and Basis of Selection, Section 4.1.2-Financial Evaluation. This disclosure does not commit Canada to pay the maximum funding available.

## 2.8 Number of contracts awarded

**To encourage the greatest possible number of bidders to submit bids, PWGSC may limit to one (1) the number of contracts awarded to a bidder.** However, bidders may submit more than one bid provided that each of their bids is distinct and different from one another in terms of the elements proposed. In such a case, the highest ranked responsible bid would be considered for the contract award.

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## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **3.1 Bid Preparation Instructions**

Canada requests that bidders provide their bid in separately bound sections as follows:

- Section I: Technical and Managerial Bid, Executive Summary (in separate stand-alone documents) **one (1) paper copy and two (2) electronic copies on CD or USB**  
Section II: Financial Bid **one (1) paper copy and one (1) electronic copy on CD or USB**  
Section III: Certifications **one (1) paper copy**

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

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy;

For the electronic copies of Section I (Technical and Managerial Bid and Executive Summary), all of the information must be contained in one file. The only acceptable formats are: MS Word, PDF and HTML;

For the electronic copy of Section II (Financial Bid), all of the information must be contained in one file. The only acceptable formats are: MS Word, PDF and HTML;

The electronic copy of Section II must be submitted on a separate CD or USB than the electronic copy submitted for Section I;

Prices must appear in Section II (Financial Bid) only. No prices must be indicated in any other section of the bid;

The total number of pages for Section I should not exceed 50 pages (8.5 X 11 inches) 216 mm X 279 mm) paper excluding bid appendices;

The bid should use a numbering system that corresponds to the bid solicitation; In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process **Policy on Green Procurement** (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achatsprocurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

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

The bid should use a numbering system that corresponds to the bid solicitation;

The bidder should ensure that the cover page in their bid (Section I, II and III) includes the following table duly filled out:

<b>Company Name</b>	<b>Company address</b>
<b>Project Title</b>	<b>Title of the Request for Proposal</b>
<b>Development of Innovative Earth Observation Solutions for Disaster Management in a Canadian Context</b>	
<b>Disaster Category</b>	
<b>Project summary (8 lines)</b>	

### Section I: Technical and Managerial Bid

In their technical and managerial bid, bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical and managerial bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Part 4: *Evaluation Procedures and Basis of Selection* contains additional instructions that bidders should consider when preparing their technical and managerial bid.

The structure and content requested for the Technical and Managerial Bid (Section I) are detailed in Annex C: Proposal Preparation Instructions.

### Section II: Financial Bid

**3.1.1** Bidders must submit their financial bid in accordance with the basis of payment Annex B, included in the Request for Proposal. The total amount of Applicable Taxes must be shown separately.

Prices must be in Canadian funds, Applicable Taxes excluded and Canadian customs duties and excise taxes included.

#### 3.1.2 Price Breakdown

Bidders are requested to detail the following elements for the performance of each task, milestone or phase of the Work, as applicable:

(a) Labour: For each individual and (or) labour category to be assigned to the Work, indicate: i) the hourly rate, inclusive of overhead and profit; and ii) the estimated number of hours.

(b) Equipment: Specify each item required to complete the Work and provide the pricing basis of each one, Canadian customs duty and excise taxes included, as applicable.

(c) Materials and Supplies: Identify each category of materials and supplies required to complete the Work and provide the pricing basis.

Solicitation No. - N° de l'invitation  
9F013-150992/A  
Client Ref. No. - N° de réf. du client  
9F013-15-0992

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTB-6-39012

Buyer ID - Id de l'acheteur  
mtb690  
CCC No./N° CCC - FMS No./N° VME

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(d) Travel and Living Expenses: Indicate the number of trips and the number of days for each trip, the cost, destination and purpose of each journey, together with the basis of these costs which must not exceed the limits of the National Joint Council (NJC) Directive. With respect to the National Joint Council (NJC) Travel Directive, only the meal, private vehicle and incidental allowances specified in Appendices B, C and D of the Directive (<http://www.njc-cnm.gc.ca/directive/travel-voyage/index-eng.php>), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees" are applicable. All travel must have prior authorization of the Project Authority. All payments are subject to government audit.

(e) Subcontracts: Identify any proposed subcontractor and provide for each one the same price breakdown information as contained in this article.

(f) Other Direct Charges: Identify any other direct charges anticipated, such as long distance communications and rentals, and provide the pricing basis.

(g) Applicable Taxes: Identify any Applicable Taxes separately.

**Section III: Certifications**

Bidders must submit the certifications required under Part 5.

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## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

### **4.1 Evaluation Procedures**

(a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and managerial evaluation criteria;

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

#### **4.1.1 Technical and Management Evaluation**

##### **4.1.1.1 Point Rated Technical and Management Criteria**

The Point Rated Technical and Management Criteria are described at Annex D: Point Rated Technical Criteria and Benchmark Statements. **Criteria not addressed will be given a score of zero.**

#### **4.1.2 Financial Evaluation**

##### **4.1.2.1 Mandatory Financial Criterion**

Bids must meet the mandatory financial criterion. Bidder must respect the maximum funding available under the heading Actual Available Budget in Part 1, Section 1.2-Summary (Applicable Taxes extra, as appropriate).

Bids that fail to meet this mandatory financial criterion will be declared non-responsive. Bids valued in excess of this amount will be considered non-responsive.

This disclosure does not commit Canada to pay the maximum funding available.

##### **4.1.2.2 Evaluation of Price**

The price of the bid will be evaluated in Canadian dollars, all Applicable Taxes excluded, FOB destination, Canadian customs duties and excise taxes included.

### **4.2 Basis of Selection – Highest Rated Within Budget**

- 1) To be declared responsive, each bid must:
  - (a) meet the mandatory financial criterion;
  - (b) comply with all the requirements of the bid solicitation; and
  - (c) obtain the minimum overall score of sixty (60) points in the evaluation of rated technical criteria. The rating scale contains one hundred (100) points.
2. Bids not meeting (a) or (b) or (c) will be declared non-responsive;
3. Responsive bids received will be classified in order of decreasing overall score. Responsive bid obtaining the greatest number of points and submitted by **various** bidders will then be recommended for a contract award, provided that the assessed total price does not exceed the maximum budget available for this requirement.
4. If a sufficient number of bids from **various** bidders obtain the minimum pass score (60/100) for the maximum budget available for this requirement, PWGSC may award additional contracts to bidders who submitted more than one responsive bid. Bids obtaining the highest number of points, in descending order, will be recommended for a second contract award, provided that the assessed total price does not exceed the maximum budget available for this requirement. A bidder cannot be awarded a second

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contract if all of the responsive bidders have not received a contract. Additionally, a bidder cannot be awarded a third contract if all of the responsive bidders have not received two (2) contracts, and so forth.

5. The overall score will be obtained by calculating the total of the scores for the «Technical and Management» set of criteria.
6. If more than one responsive bid has the same overall score, the bid with highest score for rated Criterion no#2 «Methodology» will be recommended for a contract award.
7. If more than one responsive bid has the same overall score and the same score for rated Criterion no#2 «Methodology», the responsive bid with the highest number of points for rated Criterion no#5 «Added Value of the Proposed EO Solution» will be recommended for a contract award.

## **PART 5 - CERTIFICATIONS**

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

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default in carrying out any of its obligations under the Contract, if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

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

### **5.1 Certifications Precedent to Contract Award and Additional Information**

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

#### **5.1.1 Integrity Provision-Required Documentation**

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

#### **5.1.2 Federal Contractors Program for Employment Equity-Bid Certification**

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the federal Contractor Program (FCP) for employment equity «FCP Limited Eligibility to Bid» list ([http://www.labour.gc.ca/eng/standards\\_equality/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equality/eq/emp/fcp/list/inelig.shtml)) available from Human Resources and Skills Development Canada (HRSDC)-Labour's website.

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Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

### 5.1.3 Additional Certifications Precedent to Contract Award

#### 5.1.3.1 Former Public Servant

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

##### Definitions

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

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

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

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

##### Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes ( ) No ( )**  
If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

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

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

##### Work Force Adjustment Directive

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

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**If so, the Bidder must provide the following information:**

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

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

### **5.1.3.2 Canadian Content Certification**

This procurement is conditionally limited to Canadian goods.

Subject to the evaluation procedures contained in the bid solicitation, bidders acknowledge that only bids with a certification that the good(s) offered are Canadian goods, as defined in clause [A3050T](#), may be considered.

Failure to provide this certification completed with the bid will result in the good(s) offered being treated as non-Canadian goods.

The Bidder certifies that:

( ) a minimum of 80 percent of the total bid price consist of Canadian goods as defined in paragraph 1 of clause [A3050T](#).

For more information on how to determine the Canadian content for a mix of goods, a mix of services or a mix of goods and services, consult Annex 3.6.(9), Example 2, of the [Supply Manual](#).

#### **5.1.3.2.1 SACC Manual clause A3050T (2014-11-27) Canadian Content Definition.**

### **5.1.3.3 Status and Availability of Resources**

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

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

Solicitation No. - N° de l'invitation  
9F013-150992/A  
Client Ref. No. - N° de réf. du client  
9F013-15-0992

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTB-6-39012

Buyer ID - Id de l'acheteur  
mtb690  
CCC No./N° CCC - FMS No./N° VME

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#### **5.1.3.4 Education and Experience**

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

### **PART 6 - FINANCIAL AND OTHER REQUIREMENTS**

#### **6.1 Financial Capability**

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

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## **PART 7 - RESULTING CONTRACT CLAUSES**

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### **7.1 Statement of Work**

The Contractor must perform the Work in accordance with the Statement of Work, Contract Deliverables and Meetings in Annex A and the Contractor's technical and Managerial Bid entitled \_\_\_\_\_, dated \_\_\_\_\_ (*will be inserted at contract award*).

### **7.2 Standard Clauses and Conditions**

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

#### **7.2.1 General Conditions**

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

#### **7.2.2 Supplemental General Conditions**

The following supplemental general conditions apply to and form part of the Contract:  
4002 (2010-08-16), Software Development or Modification Services

### **7.3 Period of the Contract** (*will be inserted at contract award*)

### **7.4 Authorities**

#### **7.4.1 Contracting Authority**

The Contracting Authority for the Contract is:

Esther Paquin  
Contract Specialist  
Public Works and Government Services Canada  
Quebec Region  
7th Floor  
Place Bonaventure, South-East Portal  
800 de La Gauchetière Street West  
Suite 7300  
Montreal, Quebec, H5A 1L6  
Telephone: 514-496-3889  
Facsimile: 514-496-3822  
E-mail address: [esther.paquin@tpsgc-pwgsc.gc.ca](mailto:esther.paquin@tpsgc-pwgsc.gc.ca)

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

Solicitation No. - N° de l'invitation  
9F013-150992/A  
Client Ref. No. - N° de réf. du client  
9F013-15-0992

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTB-6-39012

Buyer ID - Id de l'acheteur  
mtb690  
CCC No./N° CCC - FMS No./N° VME

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**7.4.2 Technical Authority** *(will be inserted at contract award)*

The Technical Authority for the Contract is:

Name : \_\_\_\_\_  
Title : \_\_\_\_\_  
Organization : \_\_\_\_\_  
Address : \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

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

**7.4.3 Project Authority** *(will be inserted at contract award)*

The Project Authority for the Contract is:

Name:  
Title:  
Organization:  
Address:  
Telephone:  
Facsimile:  
E-mail address:

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

**7.4.4 Contractor's Representative** *(will be inserted at contract award)*

The Contractor's Representative for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail: \_\_\_\_\_

**7.5 Proactive Disclosure of Contracts with Former Public Servants**

SACC Manual Clause A3025C (2013-03-21)

**7.6 Payment****7.6.1 Basis of Payment (Milestone Payment)**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price, as specified in the Contract for a cost of \$ \_\_\_\_\_ *(the amount will be inserted at contract award)*. Customs duties are included and Applicable taxes are extra, if applicable.

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Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

## **7.6.2 Method of Payment**

### **7.6.2.1 Milestone Payments**

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

(a) an accurate and complete claim for payment using form PWGSC-TPSGC 1111 (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>) and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;

(b) all the certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives;

(c) all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

### **7.6.2.2 Schedule of Milestones**

The schedule of milestones for which payments will be made in accordance with the Contract is detailed in Annex B, Annex B-1.

## **7.7 SACC Manual Clauses**

SACC Manual Clause A9117C (2007-11-30), T1204 - Direct Request by Customer Department

## **7.8 Invoicing Instructions - Progress Claim - Firm Price**

### **7.8.1 Progress Claim - Firm Price**

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

Each claim must show:

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

2. Applicable Taxes must be calculated on the total amount of the claim before the holdback

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is applied. At the time the holdback is claimed, there will be no Applicable Taxes payable as it was claimed and payable under the previous claims for progress payments.

3. The Contractor must prepare and certify **one (1) original and two (2) copies** of the claim on form PWGSC-TPSGC 1111, forward:

a) the **original and one (1) copy** to the Canadian Space Agency at the address shown on page 1 of the Contract under "Invoices" (Financial Services Section) for appropriate certification by the Project Authority identified herein after inspection and acceptance of the Work takes place;

and,

b) **one (1) copy of the original** progress claim to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

4. The CSA's Financial Services Section will then forward the original and one (1) copy of the claim to the Contracting Authority for certification and onward submission to the Payment Office for the remaining certification and payment action.

5. The Contractor must not submit claims until all work identified in the claim is completed and has been approved by CSA.

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### 7.9 Compliance

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

### 7.10 Applicable Laws

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

### 7.11 Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the supplemental general conditions 4002 (2010-08-16), Software Development or Modification Services;
- (c) the general conditions 2040 (2016-04-04) General Conditions - Research & Development;
- (d) Annex A, Statement of Work;
- (e) Annex B- Basis of Payment and
- (f) the Contractor's bid dated \_\_\_\_\_ (insert date of bid) (If the bid was clarified or amended, insert at the time of contract award: "as clarified on \_\_\_\_\_" **or** ", as amended on \_\_\_\_\_" and insert date(s) of clarification(s) or amendment(s))

### 7.12 Foreign Nationals (Canadian Contractor)

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

### 7.13 Insurance

SACC Manual clause G1005C (2008-05-12), Insurance

Solicitation No. - N° de l'invitation  
9F013-150992/A  
Client Ref. No. - N° de réf. du client  
9F013-15-0992

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTB-6-39012

Buyer ID - Id de l'acheteur  
mtb690  
CCC No./N° CCC - FMS No./N° VME

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**ANNEX "A"**

**STATEMENT OF WORK, CONTRACT DELIVERABLES AND MEETINGS**

The Statement of Work, Contract Deliverables and Meetings ((Annex A) appended to the bid solicitation package, forms part of this document. **(See appended document).**

Solicitation No. - N° de l'invitation  
9F013-150992/A  
Client Ref. No. - N° de réf. du client  
9F013-15-0992

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTB-6-39012

Buyer ID - Id de l'acheteur  
mtb690  
CCC No./N° CCC - FMS No./N° VME

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**ANNEX B**

**BASIS OF PAYMENT  
SCHEDULE OF MILESTONES**

The schedule of milestones for which payments will be made in accordance with the Contract is as follows:

<b>Milestone No.</b>	<b>Description of Deliverable</b>	<b>Firm Amount</b>	<b>Delivery Date</b>
1	Specify		
2	Specify		
3	Specify		
Etc			

**Total Firm Price \$ \_\_\_\_\_ (All Taxes applicable extra)**

Solicitation No. - N° de l'invitation  
9F013-150992/A  
Client Ref. No. - N° de réf. du client  
9F013-15-0992

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTB-6-39012

Buyer ID - Id de l'acheteur  
mtb690  
CCC No./N° CCC - FMS No./N° VME

---

**ANNEX C**

**PROPOSAL PREPARATION INSTRUCTIONS**  
**(see appended document)**

Solicitation No. - N° de l'invitation  
9F013-150992/A  
Client Ref. No. - N° de réf. du client  
9F013-15-0992

Amd. No. - N° de la modif.  
File No. - N° du dossier  
MTB-6-39012

Buyer ID - Id de l'acheteur  
mtb690  
CCC No./N° CCC - FMS No./N° VME

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**ANNEX D**

**POINT RATED CRITERIA AND BENCHMARK STATEMENTS**  
**(see appended document)**

## ANNEX A

### STATEMENT OF WORK, CONTRACT DELIVERABLES AND MEETINGS

#### A.1 BACKGROUND

Considering Canada's vast landforms and variable weather conditions, the possibilities of geological events and severe weather (exacerbated by climate change over recent years) are a constant reality for numerous reasons. Indeed, Canada is surrounded by three oceans, six time zones, mountains, plains, forests and tundra. Moreover, the weather patterns range from Arctic to moderate conditions, from heavy rains to severe drought, from numbing cold to heat waves.

As a result of its unique geography, Canada suffers from a full range of disaster types, which are either naturally caused or human induced. For example, Canada has seen some major disasters in the past years as reported in the Canadian Disaster Database:

- Wildfires in Fort McMurray, Alberta in May 2016.
- The rail disaster in Lac-Mégantic, Quebec in July of 2013 caused 47 deaths and the devastation of the town's business area.
- Flooding in southern Alberta in June of 2013 caused an estimated total cost of \$2.2 billion.
- A severe storm in Atlantic Canada in August of 2011 cost an estimated total of \$138 million.
- Wildfires in Alberta in May of 2011 caused an estimated total cost of \$799 million.
- A tornado in Southern Ontario in August of 2005 resulted in an estimated total cost of \$500 million.
- Canada's most costly disaster was the ice storm in January of 1998 that caused an estimated total cost of over \$4.6 billion and 28 fatalities from Ontario through Quebec and into New Brunswick.
- Drought in the Prairie Provinces from 1990 to 1992 resulted in an estimated total cost of \$1.3 billion.

In this context, Earth Observation (EO) data has proven to be a valuable asset in support of all stages in the disaster management cycle. The main advantages for using space-based EO in support of disaster management are that the sensors are not vulnerable to the disaster itself and that inaccessible and hazardous areas can be monitored without risk. EO offers accurate, frequent and near real time data over large areas. In a disaster situation, the use of EO imagery is often the only reliable way to know what is happening on the ground. Currently, several disaster applications have been well served by the use of EO data and analysis methods, such as flood mapping and terrain mass movement events. However, improvements can still be made to disaster applications with the enhanced data offerings that will be inaugurated with the introduction of new missions.

The RADARSAT Constellation Mission (RCM), which is entering its final stage of development, will become a key asset to address these disaster application challenges. The RCM is being designed for three main uses: Disaster Management, Maritime Surveillance, and Ecosystem Monitoring. RCM may be used to minimize disaster impacts (loss of life and property) and will help to support disaster management activities through all phases of the disaster cycle, including mitigation, preparedness, response and recovery.

Moreover, the Canadian Space Agency (CSA) is part of the Committee on Earth Observation Satellites, specifically the CEOS Working Group on Disasters whose overarching goals are to increase and strengthen satellite Earth Observation contributions to the various Disaster Risk Management (DRM) phases and to inform politicians, decision-makers, and major stakeholders on the benefits of using satellite Earth Observation data in each of those phases. In addition, since 2000, the CSA has been a member of the

International Charter on Space and Major Disaster which, when activated, provides space satellite data to relief organizations in the event of major disasters.

In order to address the ongoing challenge of assisting disaster management operations and to take advantage of the EO-derived solutions potential, Public Services and Procurement Canada (PSPC), on behalf of the Canadian Space Agency (CSA), plans to award contracts to qualified Canadian suppliers through the Earth Observation Application Development Program (EOADP) to support the development of innovative technologies and applications for disaster management in the Canadian context. The focus is on the development of advancements in the technologies and applications of EO data that will provide tangible solutions to evolving disaster challenges in Canada.

For this Request for Proposals (RFP), innovations may be either incremental improvements to the disaster technologies or to the application, or they may be entirely new technologies or applications, provided that they enhance and add value to existing practices and their applications.

## **A.2 OBJECTIVES**

The CSA, through the EOADP, seeks proposals for projects that will:

- Develop innovative Earth Observation solutions that address Disaster Management application needs in a Canadian context;
- Demonstrate the added-value of the EO solution, relative to existing practices and plan its operationalization;
- Optimize the use of CSA-supported EO mission data (RADARSAT, Sentinel).

## **A.3 SCOPE**

Proposals are requested for the development of Earth Observation Solutions that address Disaster Management application needs and that demonstrate the added-value of the EO Solutions relative to existing approaches.

The project will reach a level of EO solution readiness that demonstrates the basic elements of the EO solution in an operational context, and that includes the development of a plan for the integration of the technical issues of the proposed EO solution into an operational context for the disaster application.

Although the proposed EO solution may not be integrated into an actual operational context at the end of the project, one of the project deliverables will be the development of an operationalization plan presenting how the EO solution may eventually be integrated at a later time. This must include the identification of the technical aspects of the integration along with the organizational challenges and human processes (such as training) that may be involved in the integration.

**For this RFP, the EO Solution that will be developed must use data from at least one of the following CSA-supported missions: RADARSAT and/or Sentinel.**

Other complementary data sources from the missions listed in the Government of Canada National Master Standing Offer (NMSO) may be included in the EO solution. Details regarding data sources related to this RFP are presented in section C.3.4.2.2 Data Plan in Annex C.

For the purposes of this RFP, a disaster is defined as a hazard that affects Canadians to the extent that the community involved needs assistance dealing with the harm that has occurred to people, and possibly to the surrounding property and environment. EO Solutions can address any of the disaster cycle phases (i.e. mitigation, preparedness, response and recovery).

In January 2011, Canada adopted an Emergency Management Framework that involved the collaboration of the federal government, the provinces and the territories. As part of that Framework, an all-hazards approach was adopted that addressed the vulnerabilities and risks exposed by both natural and human induced hazards and disasters in Canada. As listed by Public Safety Canada and in accordance with the Canadian Disaster Database, the following examples of disaster categories will be considered for the purposes of the RFP, along with any other disaster types that may be compatible with the use of EO data in the Canadian context:

- Earthquakes
- Floods
- Drought
- Hail
- Icebergs, sea ice and fog
- Landslides and snow avalanches
- Volcanoes
- Tornadoes
- Hurricanes and severe storms
- Tsunamis and storm surges
- Winter Storms
- Wildfires
- Chemical and Oil Spills
- Pollution: air, water and land
- Transportation accidents: rail, marine, air, highway
- Infrastructure failure

Some disaster application areas where EO solutions are emerging with further potential for improvements include model integration (e.g. physical and economic models), improved baseline information and infrastructure monitoring.

#### **A.4 CONTRACT DELIVERABLES AND MEETINGS**

This section describes contract deliverables and meetings. These items are described here in some detail to depict the level of effort anticipated. A summary of contract meetings and deliverables is presented in Table A-1. It indicates which deliverables are standard and which are contract specific, and what titles to be used for the documents.

<b>TABLE A-1</b> <b>SUMMARY OF CONTRACT MEETINGS AND DELIVERABLES</b>
--

	Check List Topics for the Meetings	Deliverables	Standard	Specific
Applicable to all Meetings		Meeting agenda # 01, 02, etc.	✓	
		Meeting presentation # 01, 02, etc.	✓	
		Meeting minutes # 01, 02, etc.	✓	
Kickoff Meeting	Review contract deliverables			
	Review work requirements (WBS, WP) and schedule			
	Review background (BIP) and expected foreground intellectual property (FIP); Discuss licensing issues			
	Review executive summary (separate doc.; public domain)			
	Review communication deliverables			
	Review preliminary data plan			
	Review funding and expected cash flow			
	Review risk management plan			
Meet the assigned personnel				
Milestone Review Meetings	Review milestone report			
	Review technical work for each task			
	Review risk management plan, Review BIP & FIP			
	Discuss project management issues			
		Milestone report # 01, 02, etc.	✓	
	Data plan – updated version	✓		
	Communication products	✓		
	Others: software (beta version), image products		✓	
Final Review Meeting	Review the contents of the final deliverables			
		Final deliverables include:		
		Executive summary (updated; public domain)	✓	
		Final milestone report	✓	
		Operationalization plan	✓	
		Contractor disclosure of intellectual property (updated BIP & FIP tables) and Disclosure Certification	✓	
		Communication products	✓	
	Software (including user manual and source code of FIP), if applicable		✓	
	Government furnished equipment and data, if applicable		✓	
Monthly and Trip Reports		Monthly report # 01, 02, etc.	✓	
		Trip reports # 01, 02, etc.	✓	

#### A.4.1 Documentation, Reporting, Presentation Material and Other Deliverables

This section lists the contract deliverables and describes their respective content and format. All documents must be typed and all diagrams must be clearly drawn and labeled. The Contractor must submit an electronic copy of each of the deliverable documents.

Each deliverables (reports, presentations, software, etc.) must be named in accordance with Table A-1. Each electronic file must be named as follows:

- For Milestone Reports:

*“Milestone# - Company name – Contract number”*

- Monthly Reports:

*“Month/Year covered - Company name – Contract number”*

These documents will not be placed in the public domain, except for the Executive Summary as described below in Section A.4.1.3.1. The Contractor is to indicate the following proprietary notices:

- On the cover:

© Contractor, 201X

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- And, on all internal pages/slides:

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#### **A.4.1.1 Monthly Report**

On a monthly basis, the Contractor must provide monthly reports. It is requested that an electronic copy of this report be sent to the Project Authority (PA) and the Technical Authority (TA) as soon as it is available (acceptable electronic formats are: MS Word, PDF). Refer to Section A.4 (Table A-1) above for instructions on how to name electronic documents. Each report must discuss the progress of the work and must include, but not be limited to, the following information:

- Statement indicating whether or not the project is on schedule. If not, provide an explanation for any delays and/or a recovery plan. The report must include an updated schedule showing progress of work and modifications, if any;
- Statement indicating whether or not the project is within budget. If not, provide an explanation for the deviation from the budget and a proposed updated budget and/or a recovery plan;
- Brief summary of the technical progress of the work for each work package;
- Summary of the proposed work for the following month;
- Summary of problems anticipated or encountered (e.g. data acquisition, risks, etc.), their impact on the project and the subsequent solutions proposed or effected;
- Description of major items developed or purchased during the reporting period, along with a description and status of the new Intellectual Property (IP) (including invention disclosures);

- Identification and any new Background Intellectual Property (BIP) expected to be used on the project;
- Description of major items to be purchased or leased during the next reporting period, including any software packages;
- Trip reports for each meeting attended in the course of this contract.

#### **A.4.1.2 Milestone Reports**

The Contractor must submit to the Technical Authority (TA) and to the Project Authority (PA), at least two (2) weeks prior to the due date of Milestone Review Meetings, a draft Milestone Report. The TA and PA will review the report and may request changes, as appropriate. The Contractor will then submit the revised version.

The Milestone Report, which needs to be protected, is to contain a complete description of the work undertaken and results obtained. If applicable, it must also include an update of the methodology and management plan initially submitted. Moreover, it must provide sufficient details of the work performed to date to enable the TA to perform a full and accurate progress evaluation.

Milestone reports also include an assessment of results with respect to the following topics:

- A clear identification of the advancements in the technologies and applications of EO data required to meet the objectives, along with the expected new IP and results of applicable patent searches;
- A detailed description of all FIP generated during this period and additional BIP used during the period under review;
- Details of all R&D and/or commercial licenses required to secure access to third-party BIP, if applicable;
- All other Contractor's findings prior to the milestones.

The following items must be updated as applicable:

- The Development Plan to support the technology development activities;
- Changes to the team, work breakdown structure (WBS), level of effort, schedule, data plan, risk management plan, and resource assignment matrix (RAM).

#### **A.4.1.3 Final Deliverables**

At least two (2) weeks prior to the due date, the Contractor must submit to the TA and PA the draft Final Deliverables. The TA and PA will review the deliverables and may request changes, as appropriate. Following the Final Review Meeting, the Contractor will submit the final version. These deliverables must consist of stand-alone documents and will encompass all work performed throughout the contract.

The Final Deliverables should consist of the following separate elements (one (1) electronic copy):

1. Executive Summary (updated version; public domain);
2. Final Milestone Report;
3. Operationalization Plan;

4. Contractor Disclosure of Intellectual Property & Disclosure Certification;
5. Communication Products;
6. Project Summary Form for CSA Database.

If applicable, the following items should be part of the Final Deliverables:

7. Software (including user manual and source code of FIP);
8. Government furnished equipment and data.

#### **A.4.1.3.1 Executive Summary**

The Executive Summary will be placed in the public domain (e.g., CSA's library, publication and/or website, to promote the transfer and diffusion of space technologies). The summary will be a separate electronic document suitable for public dissemination and should not exceed ten (10) pages. Plain language is required and acronyms must be spelled out. Any confidential information concerning potential spin-off and commercialization, or any information that would constitute a public disclosure of the FIP must be placed in the Final Milestone Report, not in the Executive Summary.

At the end of the project, a recommended structure for the Executive Summary is as follows:

1. Project/Identification Page (See C.3.1 in Annex C);
2. Project description and objectives;
3. If applicable, identification of partners involved in the project;
4. EO data and any other data used;
5. Results:
  - 5.1 Description of what was developed during the course of the project;
  - 5.2 Added value of the developed EO Solution;
6. Benefits to:
  - 6.1 The disaster management community;
  - 6.2 The Canadian population;
7. Sample products illustrating the project (i.e. contextual images, EO-based products);
8. Ownership of Intellectual Property;
9. Publications/References, if any.

The CSA and the Contractor, or others designated by them, have the right to unrestricted reproduction and distribution of the Executive Summary. The document must include the following:

© Contractor, 201X

#### **A.4.1.3.2 Final Milestone Report**

This report covers all the work performed since the previous milestone and gives an overall review of the project results. This will enable a full and accurate evaluation of the work by the TA and PA. The report should include the following:

1. Documentation Page (Appendix A-1);
2. Executive Summary;
3. Background information and references to relevant documentation;
4. Review of results and benefits (for the Contractor and the Disaster Management Community).

Where applicable, the following items shall be included:

- A summary of the literature search, with copies of the main publications supplied in an appendix (without infringing upon any copyrights);
- The system requirements specifications and the interface requirements specifications;
- Feasibility studies and identification of technological risks, alternatives approaches, and trade-off analysis results;
- Assessment of results;
- Recommendations including the potential for any further R&D of a follow-on nature;
- An explicit and detailed description of all Foreground Intellectual Property (FIP) and Background Intellectual Property (BIP), if any;
- Conclusions;
- Any additional relevant information deemed important by the Contractor.

#### **A.4.1.3.3 Operationalization Plan**

The document containing the operationalization plan will be a stand-alone electronic document.

#### **A.4.1.3.4 Contractor Disclosure of Intellectual Property**

At the completion of the contract, Table 1 which lists and describes all of the BIP required for CSA use of the FIP must be updated and provided with the Final Deliverables and reviewed at the Final Review Meeting. Table 2 which lists and describes all of the FIP resulting from project work must also be provided (See Tables 1 and 2 in Appendix A-2).

#### **A.4.1.3.5. Communication Products**

**Important:** The Contractor must obtain the authorization of the CSA representative before releasing any products intended to publicize contract award information, and during the course of the contract, the project's objectives or results.

Sample products illustrating the project (i.e. contextual images, EO-based products), will be provided by the contractor as follows:

- Prototype image of a value added product (300 DPI or higher, original format: i.e. PhotoShop, Illustrator, Corel, Quark, etc.);
- Context images, images related to the project ex. Landscape (300 DPI or higher, in TIFF or JPEG format).

#### **A.4.1.3.6 Project Summary Form for CSA Database**

At the end of the project, the Contractor must fill the CSA-provided project summary form describing the project, its objectives, results and benefits, in simple terms.

#### **A.4.1.3.7 Software**

Contractors whose projects include software development or improvements on pre-existing software, programs/applications must comply with the obligations stated in PWGSC 2040 and 4002 contract conditions.

Note: When applicable, the Interface Configuration Document (ICD) between the existing modules of pre-existing software and its new modules, and the executables of the existing modules are a deliverable, in addition to the source code of the FIP and user manuals.

### **A.4.2 Meetings**

The Contractor must schedule the following meetings:

- Kick-off meeting;
- Milestone review meetings;
- Final review meeting.

For all meetings, the Contractor must:

- Suggest the meeting content and deliver the suggested meeting agenda to the PA and the TA at least five (5) working days before the meeting;
- Deliver to the PA, the TA and the Contract Authority, any reports as prescribed in this RFP;
- Record the minutes of the meeting; and
- Deliver one (1) electronic copy of the minutes of the meeting to the PA and TA within five (5) working days of the meeting.

In support of the project meetings, presentation materials must be prepared. One (1) electronic copy must be presented to the PA and TA. Half of the meetings presented in Table A-1 should be held at CSA facilities in St- Hubert, Quebec.

#### **A.4.2.1 Kick-off Meeting**

Within two (2) weeks of the contract award (or at a date mutually agreeable to by the PA, the TA and the Contractor) a kick-off meeting will be held to:

- Review contract deliverables;
- Review the requirements of the work;
- Review the work schedule;
- Review risks and mitigation;
- Review work breakdown structure and work packages;
- Review the preliminary data plan;
- Discuss the BIP and review Table 1 of Appendix A-2 (Contractor Disclosure of Intellectual Property);
- Discuss the expected FIP;
- Review funding, expected cash flow, and invoice format;
- Review reporting requirements;
- Review communication deliverables, including the executive summary;
- Discuss any licensing issues;
- Meet the personnel assigned to the work.

All key project participants should attend the kick-off meeting. Representatives from subcontractors may also participate in the meetings.

#### **A.4.2.2 Milestone Review Meetings**

The milestone review meetings will be held at the end-point of each milestone. They are intended to provide an opportunity for the Contractor, the PA, the TA, and other invited attendees to review and discuss the following in detail:

- Contents of the milestone report;
- Current % of work completion and accomplishments;
- Technical work of each task and preliminary results;
- Data plan;
- Risks and mitigation;
- Newly generated IP, status and progress of any inventions, including any experiments or other work needed to support a patent application;
- Project management issues; and
- Other items as deemed appropriate.

The PA and the TA reserve the right to invite additional people (Public Servants or others under Non-disclosure Agreement) to Milestone Review Meetings. Key Contractor personnel involved in the work under review will attend Milestone Review Meetings. The exact location, date and time of the Milestone Review Meetings will be mutually agreeable to by the PA, the TA, and the Contractor.

#### **A.4.2.3 Final Review Meeting**

The Final Review Meeting will be held at the end of the contract. The specific intent of this meeting will be to discuss project results and any proposed follow-on activities.

The Final Review Meeting is intended to provide an opportunity for the Contractor, the PA, the TA, and other invited attendees to review and discuss the contents of the Final Deliverables:

- Executive Summary (updated version; max. ten (10) pages);
- Final Milestone Report;
- Operationalization Plan;
- Contractor disclosure of intellectual property, also include Disclosure Certification;
- Communication products;
- Meeting presentation material;
- Software (including user manual and source code of FIP), if applicable;
- Government furnished equipment and data, if applicable;
- Other items as deemed appropriate.

#### **A.4.3 Forms**

The Documentation Page (See Appendix A-1) shall be included in the Milestone Reports and the Final Milestone Report.

As part of the Final Deliverables, the Contractor Disclosure of Intellectual Property (Appendix A-2) shall be completed by the Contractor and submitted as part of the Final Deliverables.

APPENDIX A-1

DOCUMENTATION PAGE
<b>Canadian Space Agency</b>
<b>Report Date:</b>
<b>Title:</b>
<b>Author(s):</b>
<b>Performing Organization Name and Address:</b>
<b>Contract # and Title:</b>
<b>Canadian Space Agency</b> 6767 Route de l'Aéroport Longueuil, Québec, Canada J3Y 8Y9 <b>Tel: (450) 926-4800 Fax: (450) 926-4613</b> <b>Technical Authority:</b> <b>Program Authority:</b>
<b>Abstract (7 lines max):</b>
<b>Key Words:</b>
<b>Supplementary Notes:</b>
<b>Distribution/Availability:</b>

APPENDIX A-2

CONTRACTOR DISCLOSURE OF INTELLECTUAL PROPERTY

1. Contractor Legal Name:
  
2. Project Title supported by the Contract:
  
3. CSA Project Authority of the Contract:
  
4. Contract #:
  
5. Date of the disclosure:
  
6. Will there be Contractor's Background Intellectual Property brought to the project:
  - Yes\_ Complete Table 1 attached (Disclosure of Background Intellectual Property)
  - No

**Definitions**

Intellectual Property (IP): means any information or knowledge of an industrial, scientific, technical, commercial artistic or otherwise creative nature relating to the work recorded in any form or medium; this includes patents, copyright, industrial design, integrated circuit topography, patterns, samples, know-how, prototypes, reports, plans, drawings, Software, etc.

Background Intellectual Property (BIP): IP that is incorporated into the Work or necessary for the performance of the Work and that is proprietary to or the confidential information of the Contractor, its subcontractors or any other third party.

<u>Foreground Intellectual Property (FIP):</u> IP that is first conceived, developed, produced or reduced to practice as part of the Work under the Contract.

### **Instructions to the Contractor**

#### **Identification**

- The Contractor must respond to the 6 questions at the top of this page when Foreground Intellectual Property (FIP) is created under the Contract with the CSA.

#### **BIP**

- If the Contractor intends to use Background Intellectual Property (BIP) to develop the FIP, the Contractor must complete Table 1 (Disclosure of BIP brought to the project by the Contractor) and forward it to the CSA Project Authority before the beginning of the Contract if any.
- At the end of the Contract, the Contractor must review and update the BIP disclosure (Table 1) when applicable before closing of the Contract. Only the BIP elements that were used to develop the FIP elements should be listed.

#### **FIP**

- At the end of the Contract, the Contractor must complete Table 2 (Disclosure of the FIP developed under the Contract).
- If Canada is the owner of the FIP and identifies some FIP elements that would benefit from being patented by Canada, the Contractor must also complete Table 3 (Canada's Owned FIP Additional Information).
- The Contractor must sign below and deliver the completed Contractor Disclosure of Intellectual Property to the CSA Project Authority of the Contract for his/her approval before closing the Contract.

#### **General Instructions for BIP and FIP tables**

- Tables must be structured according to the CSA IP form provided.
- Each IP element must have a unique ID # in order to easily link the elements of the different tables.
- Titles of IP elements must be descriptive enough for project stakeholders to get a general idea of the nature of the IP.
- Numbers and complete titles of reference documents must be included.

### **Instructions to the Project Authority**

- The CSA Project Authority is responsible to review and approve Table 1 (Disclosure of BIP brought to the project by the Contractor) upon receipt.

- He/she also has to approve the Contractor Disclosure of Intellectual Property before closing the Contract and confirm his approval of the Disclosure by signing it below.
- He/she will then forward the Disclosure to the Intellectual Property Management and Technology Transfer (IPMTT) office: [PITT-IPTT@asc-csa.gc.ca](mailto:PITT-IPTT@asc-csa.gc.ca)
- He/she can consult with the IPMTT office when needed.

<p><i>For the Contractor</i></p> <hr/> <p><i>Signature</i></p>	<hr/> <p><i>Date</i></p>
<p><i>For the CSA Project Authority</i></p> <hr/> <p><i>Signature</i></p>	<hr/> <p><i>Date</i></p>

**Table 1. Disclosure of Background Intellectual Property (BIP) brought to the project by the Contractor**

1	2	3	4	5	6	7	8	9
BIP ID#	Project Element	Title of the BIP	Type of IP	Type of access to the BIP required to use/improve the FIP	Description of the BIP	Reference documentation	Origin of the BIP	Owner of the BIP
Provide ID # specific to each BIP element brought to the project e.g. BIP-CON-99 where CON is the contract acronym	Describe the system or sub system in which BIP is integrated (e.g. camera, control unit, etc)	Use a title that is descriptive of the BIP element integrated to the work	Is the BIP in the form of an invention, trade secret, copyright, design, patent?	Describe how the BIP will be available for Canada to use the FIP (e.g. BIP information will be incorporated in deliverable documents, software will be in object code, etc)	Describe briefly the nature of the BIP (e.g. mechanical design, algorithm, software, method, etc)	Provide the number and fill title of the reference documents where the BIP is fully described. The reference document must be available to Canada. Provide patent# for Canada if BIP is patented.	Describe circumstances of the creation of the BIP Was it developed from internal research or through a contract with Canada? If so, provide contract number.	Name the organization that owns the BIP. Provide the name of the subcontractor if not owned by the prime contractor.

**Table 2. Disclosure of the Foreground Intellectual Property (FIP) developed under the Contract**

1 FIP ID #	2 Project Element	3 Title of FIP	4 Type of FIP	5 Description of the FIP	6 Reference documentation	7 BIP used to generate the FIP	8 Owner of the FIP	9 Patentability
<p>Enter an ID # specific to each FIP element e.g.FIP-CON-99 where CON is the contract acronym</p>	<p>Describe the system or sub-system for which the FIP element was developed (e.g. a camera, ground control, etc)</p>	<p>Use a title that is descriptive of the FIP element.</p>	<p>Specify the form of the FIP e.g. invention, trade secret, copyright, industrial design, patent</p>	<p>Specify the nature of the FIP e.g. software, design, algorithm, etc?</p>	<p>Provide the full title and number of the reference document where the FIP is fully described. The reference document must be available to Canada</p>	<p>BIP referenced in table 1 e.g. BIP-CON-2, 15</p>	<p>Specify which organization owns the FIP e.g. Contractor, Canada* or Subcontractor.  Provide the name of the subcontractor if not owned by the prime contractor.  *If Canada is the owner of the FIP, complete Table 3 below  Provide reference to contract clauses that support FIP ownership.  Provide reference to WPDs under which the technical work has been performed.</p>	<p>In the case where the IP is owned by Canada, indicate with an "X", any IP elements described is patentable and complete Table 3 only for this IP.</p>

**Table 3. Canada's Owned FIP Additional Information**

1 FIP ID #	2 Title of FIP	3 Aspects of FIP that are novel, useful and non obvious	4 Limitations or drawback of the FIP	5 References in literature or patents pertaining to the FIP	6 Has the FIP been prototyped, tested or demonstrated? (e.g. analytically, simulation, hardware)? Provide results	7 Inventor(s)	8 Was the FIP disclosed to other parties?
<i>ID# should be same as corresponding FIP element in Table2</i>	<i>Title of FIP should be same as corresponding FIP element in Table2</i>	<i>How is the FIP addressing a problem (useful) and what is thought to be novel in this solution (novel)?</i>	<i>Describe the limitations of present apparatus, product or process</i>	<i>Provide references in published literature or patents relating to the problem or subject if any.</i>	<i>Describe briefly how the process, product or apparatus performed during testing or simulation. Provide reference document # where the performance is compiled if applicable.</i>	<i>Provide name and coordinates of the person(s) who created the FIP</i>	<i>Has any publication or disclosure of the FIP or any of its elements been made to third parties? If so, provide when, where and to whom.</i>

## ANNEX C

### PROPOSAL PREPARATION INSTRUCTIONS

#### C.1 INTRODUCTION

The proposal should be concise, but sufficiently detailed to address each of the required topics that are being evaluated. This annex describes the specific instructions for construction of the Bidder's technical proposal.

#### C.2 PARTNERS

The Bidder may propose partnering with Canadian federal, provincial, regional or local government organizations. However, no portion of the contract funds, provided under this RFP, will be expended on these organizations. Their participation could be to evaluate and ensure product or service utility for the particular application, or to give access to other complementary data, as well as to provide additional information and recommendations related to their applications.

#### C.3 SECTION I: TECHNICAL BID

Section I must address only one project and be contained within a single document/file. The information should be organized in the following order:

1. Project/Identification Page;
2. Executive Summary;
3. Table of Contents;
4. Technical Sections; and
5. Appendices.

##### C.3.1 Project/Identification Page

This page must clearly state:

- a) The Bidder's name and address;
- b) Contact Person (communication coordinates);
- c) The title of the project (the use of acronyms in the title is discouraged, unless they are described);
- d) The RFP Title: **Development of Innovative Earth Observation Solutions for Disaster Management in a Canadian Context**;
- e) Disaster category and phase(s) of the disaster cycle (i.e. mitigation, preparedness, response and recovery);
- f) A short extract from the Executive Summary that describes the project (not to exceed seven lines);
- g) Identification of the CSA-supported missions data to be used.

### **C.3.2 Executive Summary**

The Executive Summary of Section I will be a stand-alone electronic document suitable for public dissemination through for example the CSA web site, if the bid is successful. It should not exceed two (2) pages and should highlight the following elements:

1. Project objectives;
2. Disaster category and phase(s) of the disaster cycle;
3. If applicable, identification of partners involved in the project;
4. CSA-supported missions data to be used, and any other complementary imagery;
5. Description of what will be developed during the course of the project;
6. Expected results and benefits.

### **C.3.3 Table of Contents**

The table of contents should be formatted such that its headings are linked to their respective location in the Bid for ease of reference when using the Bid's electronic version.

### **C.3.4 Technical Sections**

The following section describes the details required for the proposal material in relation to each of the evaluation criteria. In addition to carefully following the instructions in this section, the Bidders are urged to read the evaluation descriptions and benchmark definitions in Annex D to become familiar with the details against which the proposals will be evaluated, and to ensure that these details are fully addressed in the Technical Bid.

#### **C.3.4.1 Understanding the Technology and its Application (Evaluation Criterion 1)**

This section should provide a detailed description of the fundamental concepts of the technology for the disaster application related to the proposed EO solution. It should also identify the specific disaster application category and indicate the phase in the disaster cycle for which the EO solution applies (i.e. mitigation, preparedness, response and/or recovery). A discussion of the current state-of-the-art for the technology as it is described in the literature and how the proposed development relates to the state-of-the-art should be included.

#### **C.3.4.2 Methodology (Evaluation Criterion 2)**

In this section, the Bidder should provide a description of the methodology and a risk analysis addressing the technical components of the project and any relevant issue that could potentially affect the progression of the work plan. The methodology describes how the work will be conducted through the utilization of analytical methods, procedures, techniques, industry standards, best practices and the state-of-the-art for pertinent disciplines. The Bidder should detail the activities of the work plan, including the data plan, through the use of a Work Breakdown Structure (WBS).

##### **C.3.4.2.1 Work Breakdown Structure**

The Work Breakdown Structure should flow down to a low enough level and the associated Work Packages (WP) should be defined in sufficient depth in order for the Bidder to demonstrate a clear

understanding of the process that will be followed to perform the project. Each WP should focus on specific activities that will form the total project and, as a minimum, should define and describe the specific work to be carried out and should also indicate the person responsible, the WP's associated levels-of-effort and required resources, the schedule (start and finish dates), and the associated deliverable(s) or output(s).

#### **C.3.4.2.2 Data Plan**

Each proposal should provide a data plan for the imagery that is intended to be used for the project. Data plan should be chosen to best demonstrate the feasibility, performance, and success of the project objectives. The spaceborne data used should best suit the specific disaster application proposed, provided that they enhance and add value to existing practices and their applications.

The data plan should describe all of the CSA-supported missions data that will be used, including areas of interest, dates and volume of data, and any other complementary imagery or other data types, whether they have been previously acquired or if they need to be acquired during the project. The data plan should explain why these data are needed. Data request must be commensurate to RFP scope. The final selection of the project data will be approved by the CSA before contract award.

##### *Specific to RADARSAT:*

The CSA will only provide access to a reasonable amount of RADARSAT imagery free of charge to the successful Bidders. However, a large volume of archived imagery is maintained that the Bidders are encouraged to try to incorporate into their proposed activities, which can be reviewed at <http://ceocat.ccrs.nrcan.gc.ca/portal/index.html>. All commercially available RADARSAT beam modes are eligible under this RFP.

The data plan should take into consideration the potential constraints related to RADARSAT data acquisition (e.g., priority levels, scheduling conflicts, end user license agreement). It should be noted that data orders under these projects have lower acquisition priority than for Government of Canada operational needs. Some areas in Canada are particularly susceptible to RADARSAT data acquisition conflicts. As a result, the risk associated with these areas, with respect to data availability, might increase. Projects that focus on these areas and/or planning to use time series, InSAR imagery should propose a solid mitigation strategy (archive data, alternative study sites or data, reducing the number of sites, etc.). The following areas are particularly susceptible to RADARSAT data acquisition conflicts:

- The Atlantic Coast Region, including all Atlantic provinces and the coast of Labrador;
- The British Columbia Coast Region, including all areas west of the Coast Mountains;
- The Great Lakes Region;
- Most major Canadian urban areas, and especially the Ottawa-Montreal Corridor;
- The Saint Lawrence River Basin area;
- The Athabasca River and oil sands sites in Northern Alberta;
- The Eastern and Western Arctic, Hudson Bay and Arctic Ocean regions.

Table C-1 below is an example of the format that should be used for the RADARSAT data plan. For other satellite data, airborne or in situ data proposed in the project, a separate table should be provided.

TABLE C-1 RADARSAT Data Plan										
Acquisition Date	Study Area	Beam Mode	Polarization (Single Co, Single Cross, Dual, Quad)	Processing Level (SLC, SGX, SGF, SSG) <sup>1</sup>	RADARSAT Data provided by CSA			RADARSAT Data available from _____ (insert organization's name)		
					Number of Scenes		Concurrent field data collection <sup>2</sup> (Yes/No)	Archive Data (a)	New Acquisition (b)	Number of scenes (a) + (b)
					Archive Data	New Acquisition				
Total							Total			

**Notes :** <sup>1</sup> ScanSAR beam modes are only available as SCN or SCW products which are similar to SGF products. Quad Pol beam modes are only available as SLC or SGX products (i.e. they cannot be processed as SGF products).

<sup>2</sup> Specify if fieldwork data collection is planned during satellite data acquisition.

**Sentinel Mission:**

In the event that imagery from Sentinel is required, the Bidder will be responsible to obtain the required data to conduct its research activities, and include this cost, if applicable, in the Financial Bid.

**National Master Standing Offer:**

Other sources of complementary imagery may be used to support the proposed EO solution. The CSA will provide a reasonable amount of complementary imagery, free of charge, from the following missions as part of the Government of Canada National Master Standing Offer (NMSO) for commercial satellite imagery:

TABLE C-2 Complementary Imagery (NMSO) Satellites
TerraSAR-X/TanDEM-X KOMPSAT-2, 3 & 5 ZY-3 GF-1 & 2 DEIMOS-2 QuickBird WorldView-1 to 3 GeoEye-1 UK-DMC 2 Deimos-1

<p style="text-align: center;">SPOT 4 to 7 RapidEye Pleiades EROS-B Dove satellites / ISS Flock &amp; SSO Flock constellations</p>
--

The RADARSAT imagery and other data provided through NMSOs, as identified in Table C-2, do not need to be purchased by the Contractor and the cost will therefore not be included by the Bidder in the Financial Bid.

Any other data:

If imagery from other EO space missions, airborne data and in-situ data identified in the data plan are needed, the Bidder will be responsible for obtaining the necessary complementary data to conduct its research activities, and will include this cost in the Financial Bid.

**C.3.4.2.3 Technical Risk Analysis**

An assessment of the technical risks involved should be provided, as well as a risk mitigation strategy that identifies critical issues that may jeopardize the successful completion of the project.

**C.3.4.3 Team Technical and Management Experience (Evaluation Criterion 3)**

This section of the proposal should describe the team members' previous work and experience with the development of related solutions, particularly those involving spaceborne data. The combined technical and management experience should be addressed. The experience for all of the participating organizations, including prime contractor and any subcontractors should be summarized in this section.

This section should also include a brief (one (1) paragraph) description for each of the proposed team member and indicate which particular role the team member will play in the proposed work. In particular, the proposed Project Manager should be clearly identified and the description for this person should include a summary of his/her previous project management experience. Detailed resumes should be included in an Appendix in Section I of the proposal. This should include all personnel to be funded under the project, including back-up personnel, and any subcontractors.

The Bidder should identify any previous experience with EO projects of a similar scope as the one proposed, including any projects undertaken with the CSA or other government institutions. The Bidder will list a maximum of three (3) previous projects which are relevant to the proposed work and which support the team's experience profile. The Bidder should identify any team members in the current proposal that participated in those other projects and describe the nature of their activities in those projects.

The Bidder is asked to use a Project Summary form like the one presented below (Table C-3) to provide basic information for each relevant project, which describes the previous project details and experience.

<p><b>TABLE C-3</b> <b>PREVIOUS PROJECT SUMMARY</b></p>
---

Project Title:		
Client Organization:	Client Point of Contact (POC):	POC Phone Number:
Contract Value:	Start Date:	End Date:
Project Personnel and Roles:		
Project Description:		

Under the *Project Description* area for each of the Previous Project Summary forms, the Bidder should provide a narrative that includes the following elements:

- a) The project overview;
- b) Roles and responsibilities in the project;
- c) Approach and methodology;
- d) The relevance of the previous projects to the requirements outlined in the current RFP; and
- e) The project performance (how well the projects met the management, technical and schedule objectives).

#### **C.3.4.4 Management Plan (Evaluation Criterion 4)**

This section of the proposal should include the following items: project organizational chart, responsibility assignment matrix (RAM), including levels of effort, milestones and deliverables, schedule, managerial risk analysis, and description of intellectual property.

##### **C.3.4.4.1 Project Organizational Chart**

A project organizational chart should be included that illustrates the structure of the proposed project team, including back-up personnel and subcontractors.

##### **C.3.4.4.2 Responsibility Assignment Matrix**

A responsibility assignment matrix (RAM) should be provided (Table C-4) that shows the level of effort for each individual team member that has been allocated to each WP, including all subcontractors. The matrix should identify each individual by name, and provide the estimated time (number of hours or days) required to complete each task. Also, the RAM should identify the role of the individual, either being the person who is accountable (A) for the WP or being a participant (P). The following hypothetical example shows the make-up of the RAM that should be provided.

<b>TABLE C-4 RESPONSIBILITY ASSIGNMENT MATRIX</b>					
<b>WBS Number</b>	<b>Work Packages (WP) Task Title</b>	<b>Resource A</b>	<b>Resource B</b>	<b>Resource C</b>	<b>Total Days</b>

1	WP1.1 - Title	A	200	P	25	P	25	250
	WP1.2 - Title	A	25	P	100	-	0	125
2	WP2 - Title	P	50	A	100	P	100	250
3	WP3 - Title	P	100	A	100	P	150	350
4	WP4 - Title	-	0	P	200	A	150	350
5	WP5 - Title	A	100	P	200	P	200	500
etc.								
Total Days:			475		725		625	1 825

Where: A = *Accountable Role*, and P = *Participant Role*.

#### **C.3.4.4.3 Milestones and Deliverables**

This Management Plan subsection should contain a definition of the milestones and describe in details all expected deliverables, software, and relevant documentation. When appropriate, the milestones and deliverables should contain all elements identified in Table A-1 in Annex A and should relate to the corresponding WP definition in a manner that enables clear monitoring of progress.

#### **C.3.4.4.4 Schedule**

This Management Plan subsection should relate tasks, milestones and deliverables to a project timetable. Charts (such as Gantt and PERT) should be used to illustrate the schedule.

#### **C.3.4.4.5 Managerial Risk Analysis**

An assessment of the managerial risks involved should be provided, as well as a risk mitigation strategy that identifies critical issues that may jeopardize the successful completion of the project.

#### **C.3.4.4.6 Description of Intellectual Property (IP)**

The Bidder needs to complete Table 1 (Disclosure of BIP brought to the project) in Appendix A-2.

This subsection should identify and describe all Background Intellectual Property (BIP) that is required to conduct and/or support the project and all Foreground Intellectual Property (FIP) expected to arise from the proposed work. The development activities related to FIP should be identified in the Management Plan and be apparent in the WBS with identifiable WP items. BIP and FIP elements should be described in sufficient detail so as to be clearly distinguishable. Use of graphical representations that include block diagrams is encouraged in order to demonstrate the relationships between the various elements of the BIP and the FIP.

The BIP and the expected FIP will be reviewed at the Kick-Off Meeting, and updated at each Review Meeting. At the final meeting, a final version of BIP and FIP tables will be reviewed. For the table presenting the FIP developed under the Contract see Table 2 in Appendix A-2.

#### **C.3.4.5 Added Value of the Proposed EO Solution (Evaluation Criterion 5)**

This section should include a clear description of the proposed EO solution and how it would be used. It should explain whether it would replace existing information sources or provide supplementary information. The Bidder should describe how well and to what extent the proposed EO solution will improve the quality of information available and the benefits to stakeholders in the Canadian disaster management context when compared to current practices. The expected results and the overall benefits to the disaster management community, in terms of superior performance, reduced costs, enhanced output products, or improvements to modeling accuracies, or increases in processing and turnaround efficiencies should be clearly described.

### C.3.5 Appendices

The following items should be addressed in individual Appendices as part of Section I of the proposal:

- a) List of Acronyms: All the acronyms used in Section I of the proposal should be explained.
- b) Resumes: The proposal should include resumes of all the team members.
- c) Relevant Brochures and Technical Papers Published by Team Members: Include only literature that is relevant and that would be useful to support the proposal.
- e) List of Contacts: The list of contacts shall be in a format suitable for distribution and shall include all the Bidder's points-of-contact involved in the proposal development and/or during the contract. Table C-5 below is an example of the format that should be used:

TABLE C-5 LIST OF CONTACTS				
Role	Name	Telephone	Fax	E-mail
Project Manager				
Contract Authority				
Claims Officer				
Communications Contact				

- f) Any other Appendix deemed appropriate by the Bidder.

## ANNEX D

### POINT RATED TECHNICAL CRITERIA AND BENCHMARK STATEMENTS

#### D.1 INTRODUCTION

The Canadian Space Agency (CSA) will appoint a Committee to evaluate the proposals received following this Request for Proposals (RFP).

It is essential that the elements contained in the proposals be stated in a clear and concise manner. Failure to provide complete information as requested will be to the Bidders' disadvantage. The CSA will select proposals as determined by the selection criteria contained in this solicitation document.

#### D.2. POINT RATED EVALUATION CRITERIA

Section I of the proposal will be evaluated and scored in accordance with Table D-1 below: Evaluation Criteria and Associated Ratings.

**To be responsive, the Bidder must achieve the total minimum score requirement for the combined criteria of (60/100) as indicated in Table D-1.**

<b>TABLE D-1</b>								
<b>EVALUATION CRITERIA AND ASSOCIATED RATINGS</b>								
<b>Criteria</b>	Overall maximum points for corresponding criterion <b>(a*b)</b>	Maximum points for evaluation <b>(a)</b>	Weighting factors <b>(b)</b>	Minimum points (Pass mark)	Benchmark definition corresponding to point rating (1 to 8 points)			
					Level A	Level B	Level C	Level D
1. Understanding the Technology and its Application	<b>15</b>	8	1.875	N/A	1 or 2	3 or 4	5 or 6	7 or 8
2. Methodology	<b>20</b>	8	2.5	N/A	1 or 2	3 or 4	5 or 6	7 or 8
3. Team Technical and Management Experience	<b>20</b>	8	2.5	N/A	1 or 2	3 or 4	5 or 6	7 or 8
4. Management Plan	<b>15</b>	8	1.875	N/A	1 or 2	3 or 4	5 or 6	7 or 8
5. Added Value of the Proposed EO Solution	<b>30</b>	8	3.75	N/A	1 or 2	3 or 4	5 or 6	7 or 8
<b>TOTAL POINTS</b>	<b>100</b>							
<b>Pass Mark</b>				<b><u>60</u></b>				

The proposal information for the five (5) Criteria will be evaluated using the following scoring method: the proposal scoring for each evaluation criterion, as listed in Table D-1 above, will be determined using a range of scoring (from 1 to 8 points, 8 being the highest rating):

- 1 or 2 points (Level A)
- 3 or 4 points (Level B)
- 5 or 6 points (Level C)
- 7 or 8 points (Level D)

As an example, the maximum point rating, including the weighting factor, for the "Methodology" criterion is 8 points. If a proposal receives "6" for this criterion in the evaluation process, the final score attributed to the criterion will be:

$$6 * 2.5 \text{ (weighting factor)} = \underline{15 \text{ points}} \text{ (score)}$$

**Point rated evaluation criteria that are not addressed in the proposal will be given a score of zero.**

### **D.3 TECHNICAL CRITERIA BENCHMARK STATEMENTS**

As guidelines, a series of four (4) evaluation benchmark definitions (A, B, C or D) will be used by the Evaluation Committee. Table D-1 above shows the points available for each benchmark definition.

#### **CRITERIA**

##### **1. Understanding the Technology and its Application**

This criterion assesses the degree to which the proposal exhibits an understanding of the fundamental concepts of the technology for the disaster application related to the proposed research activity. This should include a discussion of the current state-of-the-art for the technology as it is described in the literature and how the proposed development relates to the state-of-the-art.

The proposal:

- A) Demonstrates only a limited understanding of the background or "state-of-the-art" of the technical concept(s) involved for the particular disaster application.
- B) Demonstrates a general understanding of the state-of-the-art of the technical concept(s) involved for the particular disaster application and includes a review of other works.
- C) Demonstrates a good understanding of the state-of-the-art of the technical concept(s) involved for the particular disaster application and includes a review of other works relevant to the central concept upon which the proposed work is based.
- D) Demonstrates a detailed understanding of the state-of-the-art for the particular disaster application and includes a complete review of other works relevant to the central concept upon which the proposed work is based, as well as describes where the current state-of-the-art is still lacking or requires further development.

## **2. Methodology**

This criterion assesses the effectiveness of the proposed methodology in attaining the stated objectives of the work and the appropriate EO solution readiness level for potential implementation into the particular disaster application. The methodology demonstrates that the work packages, their sequence and the data plan (including the use of RADARSAT or Sentinel data) are clearly substantiated, coherent and feasible. A technical risk analysis will be included.

The proposal:

- A) Is not clear about the research objectives of the study. The methodology is not appropriate or is not adequately elaborated. The data plan lacks detail.
- B) States and describes specific research objectives of the study that may not be feasible. The methodology shows an adequate approach to conducting the work. However, there are gaps in its effectiveness in achieving the objectives and the EO solution readiness level of the work for implementation into the particular disaster application. A marginal data plan is included.
- C) States and describes specific research objectives of the study that appear to be feasible. The methodology shows a good approach to conducting the work. Its effectiveness in achieving the objectives and the EO solution readiness level of the work for implementation into the particular disaster application is not fully substantiated. A good data plan is included.
- D) Clearly states and describes specific research objectives that are feasible. The methodology shows a sound and methodical approach to conducting the work and achieving the objectives and the EO solution readiness level of the work for implementation into the particular disaster application. An excellent data plan is included.

## **3. Team Technical and Management Experience**

This criterion assesses the combined technical and management experience, as well as the capabilities of the proposed team members.

The team (including back-up personnel and subcontractors):

- A) Has little or no experience in conducting and managing projects of this nature. Few if any relevant project descriptions have been included in the proposal. The background material, such as resumes, are missing.
- B) Has some experience in conducting and managing projects of this nature. The proposal includes brief descriptions of some related projects, although the overall experience is limited.
- C) Has high levels of experience in conducting and managing projects of a similar nature. The proposal includes project descriptions.
- D) Has extensive experience in conducting and managing projects directly related to the technologies and applications proposed under this RFP. The proposal includes relevant project descriptions and related material.

#### **4. Management Plan**

This criterion evaluates the Management Plan for its completeness and also assesses its effectiveness in directing the project to a successful completion. The following items should be covered: project organizational chart, responsibility assignment matrix (RAM), including levels of effort, milestones and deliverables), schedule, managerial risk analysis, and description of intellectual property.

The proposal:

- A) Does not provide an adequate Management Plan and contains minimal explanations and details.
- B) Provides a marginal Management Plan with some explanations and details.
- C) Provides a credible Management Plan, but demonstration of its ability to effectively deliver on the project is somewhat limited.
- D) Provides a coherent and comprehensive Management Plan and demonstrates its effectiveness in delivering on the project.

#### **5. Added Value of the Proposed EO Solution**

This criterion assesses how well and to what extent the proposed EO solution will improve the quality of information available to stakeholders in the Canadian disaster management context.

The proposal should include a clear description of the EO solution, how it will be used, a summary of the expected results, and the overall benefits to the Disaster Management community.

The proposal:

- A) Provides an indication of how the EO solution will improve the quality of the available information. Benefits over existing practices are not addressed or are insignificant.
- B) Provides a brief description of how the EO solution will be used to improve the quality of the available information. Benefits over existing practices are indicated but are minor.
- C) Provides a good description of how the EO solution will be used to improve the quality of the available information. Benefits over existing practices are presented and are considerable.
- D) Provides a full description of how the EO solution will be used to improve the quality of the available information. Benefits over existing practices are well presented and are significant.