

REQUEST FOR PROPOSAL (RFP)

Feasibility Studies for the Development of Space-Based Automatic Identification System (S-AIS) Applications

For the Canadian Space Agency (CSA).

Bid Submission Deadline: March 18 2016 at 2:00 PM (EST)

Submit Bids to:

Canadian Space Agency TENDERS RECEPTION OFFICE Receiving/Shipping (8:00 to 16:30) Closed between 12:00 and 13:00 6767 route de l'Aeroport Saint-Hubert (Quebec) J3Y 8Y9 Canada

Attention to: Isabelle Doray

Or by E-Mail: asc.soumissionscontrats-contractssubmissions.csa@canada.ca

Reference: CSA File No. 9F013-15-0511

Note: Please read this Request for Proposal carefully for further details on the requirements and bid

submission instructions.



February 23, 2016



TABLE OF CONTENTS

PART 1 - GENERAL INFORMATION

- 1. Security Requirement
- 2. Statement of Work
- 3. Maximum funding
- 4. Communications Notification
- 5. Debriefings

PART 2 - BIDDER INSTRUCTIONS

- 1. Standard Instructions, Clauses and Conditions
- 2. Submission of Bids
- 3. Enquiries Bid Solicitation

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

Section I: Technical bid Section II: Financial bid Section III: Certifications

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

- 1. Evaluation Procedures
- Mandatory Technical Criteria
- 3. Mandatory Financial Criteria
- 4. Rated Technical Criteria
- 5. Basis of Selection

PART 5 - CERTIFICATIONS

1. Certifications Required with the Bid

PART 6 - RESULTING CONTRACT CLAUSES

- 1. Statement of Work
- Standard Clauses and Conditions
- 3. Performance Evaluation
- 4. Term of Contract
- 5. Contracting Authority
- 6. Project Authority
- 7. Technical Authority
- 8. Basis of Payment
- 9. Terms of Payment
- 10. Invoicing Instructions
- 11. Travel and Living Expenses
- 12. Applicable Laws
- 13. Priority of Documents
- 14. Office of the procurement Ombudsman

List of Annexes:

Annex "A" - Statement of Work (SOW)

Annex "B" - Pricing - Basis of payment

Annex "C" - Proposal Preparation Instructions

Annex "D" - Point Rated Technical Criteria and Benchmark Statements

Annex "E" - Integrity Form

Annex "F" - Performance Evaluation



PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with this Request for proposals (RFP).

2. Statement of Work

The primary purpose of this RFP is to examine the feasibility of improving the identification and monitoring of vessels in the maritime operations context through the use of Space-Based Automatic Identification Systems (S-AIS) data in conjunction with Earth Observation (EO) imagery, particularly in anticipation of the RADARSAT Constellation Mission (RCM).

The Earth Observation Applications and Utilization (EOAU) section of the Canadian Space Agency (CSA), through its Earth Observation Applications Development Program (EOADP), intends to award an estimate of five (5) to seven (7) contracts to successful bidders to conduct Feasibility Studies that address one or more of the challenges that have been identified in this Statement of Work (SOW).

This SOW includes additional background information, a list of objectives for the Feasibility Studies and the Scope of the work.

Period of the Contract From May 2016 to February 28, 2017

Work location At the Contractor's location

3. Maximum funding

The funding available for the Contracts resulting from the bid solicitation is \$500,000.00 all applicable taxes extra. The maximum funding available for each contract will not exceed \$ 100,000.00 CDN, plus applicable taxes.

4. Communications Notification

As a courtesy, the Government of Canada requests that successful bidders notify the Contracting Authority in advance of their intention to make public an announcement related to the award of a contract.

5. Debriefings

After contract award, bidders may request a debriefing on the results of the bid solicitation. Bidders should make the request to the Contracting Authority within 15 working days of receipt of notification that their bid was unsuccessful. The debriefing may be provided in writing, by telephone or in person.



PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions

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

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

1.1. SACC Manual Clauses

The document 2003 (2015-07-03) - Standard Instructions - Request for Proposal - Goods or Services - Competitive Requirements are incorporated by reference into and form part of the bid solicitation.

Modification 1. Section 5.4 of 2003, Standard Instructions - Request for Proposal - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days

Insert: hundred twenty (120) days

Modification 2. Sections 06 and 07 of 2003, Standard Instructions - Request for Proposal - Goods or

Services - Competitive Requirements, are amended as follows:

Delete: PWGSC **Insert:** Canada

Modification 3. Section 08 of 2003, Standard Instructions - Request for Proposal - Goods or Services -

Competitive Requirements, is **deleted** in its entirety.

Modification 4. Sections 12.1.a. and 12.1.b. of 2003, Standard Instructions - Request for Proposal - Goods or Services - Competitive Requirements, are amended as follows:

Delete: "Vendor Performance Corrective Measure, under the Vendor Performance

Corrective Measure Policy"

Insert: "corrective measure under the CSA's Contractor Performance Evaluation

policy".

Modification 5. Section 20.2. of 2003, Standard Instructions - Request for Proposal - Goods or

Services - Competitive Requirements, is **deleted** in its entirety.

For the purposes of this RFP, all references to "Canada", "Crown", "Her Majesty" or "the Government" in the clauses and conditions herein, including those incorporated by reference, shall designate the **Canadian Space Agency**.

If there is a conflict between the provisions of 2003 and this document, this document prevails.

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



2. Submission of Bids

Bids must be submitted only to:

- the CSA's Tenders Reception Office or
- ❖ E-Mail: asc.soumissionscontrats-contractssubmissions.csa@canada.ca

at the date, time and place indicated on the front page of this bid solicitation.

Due to the nature of the bid solicitation, bids transmitted by facsimile will not be accepted.

To encourage the greatest possible number of bidders to submit bids, CSA 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 responsive bid would be considered for the contract award.

3. Enquiries - Bid Solicitation

All enquiries must be submitted **BY E-MAIL ONLY** to the Contracting Authority <u>isabelle.doray@canada.ca</u> **no later than three (3) 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 questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.



PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

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

Section I: Technical bid

Section II: Financial bid

Section III: Certifications

Prices must appear in the financial bid only.

No prices must be indicated in any other section of the offer.

Canada requests that bidders follow the format instructions described below in the preparation of their offer.

- a) use 8.5 x 11 inch (216 mm x 279 mm) paper, preferably using a 12 point font;
- b) use a numbering system that corresponds to that of the Request for proposal

❖ If Submitted to Canadian Space Agency Tenders Reception Office

1 hardcopy in 3 sections and 1 electronic support including the 3 separate files plus a separate Executive Summary file (Word or .pdf format).

If Submitted to Canadian Space Agency E-Mail: <u>asc.soumissionscontrats-contractssubmissions.csa@canada.ca</u>:

4 separate files (Word or .pdf format): 1) Technical Bid, 2) Financial Bid, 3) Certifications and 4) the Executive Summary.

Section I: Technical Bid

In their technical bid, bidders should demonstrate their understanding of the requirements contained in the RFP 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 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.



Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment and the $\underline{\text{Annex B}}$ - Pricing.

Unless otherwise specified in the RFP, bids must be in Canadian currency.

The requirement does not provide for exchange rate fluctuation protection. Any request for exchange rate fluctuation protection will not be considered and will render the bid non-responsive.

Section III: Certifications

Bidders must submit the certifications required under Part 5.



PART 4 – EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

- (a) The Canadian Space Agency (CSA) will appoint a Committee to evaluate the proposals received following this Request for Proposals (RFP).
- **(b)** The EOADP will select proposals as determined by the selection criteria contained in this RFP.

2. Mandatory technical Criteria

At Bid closing time, the Bidder must comply with the following Mandatory Requirements and provide the necessary documentation to support compliance.

Any Bid which fails to meet all the following Mandatory Requirements will be declared non-responsive.

Each requirement is requested to be addressed separately.

- MC 1. Bidders MUST submit and sign the certifications required under Part 5.
- **MC 2.** Proposal **MUST** address at least one of the application challenges identified in Section 2.1 of Annex A;
- **MC 3.** The Bidder **MUST** at least achieve the total minimum score requirements for the Criteria combined (60/100) as indicated in Table D-1.

3. Mandatory Financial Criteria

The funding available resulting from the bid solicitation is \$500,000.00, Goods and Services Tax or Harmonized Sales Tax extra, as appropriate.

The maximum funding available for each contract will not exceed \$100,000.00, Goods and Services Tax or Harmonized Sales Tax extra, as appropriate. Bids valued in excess of this amount will be considered non-responsive.

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

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

4. Rated Technical Criteria

Point Rated Technical Criteria are included in Annex D-Point Rated Technical Criteria.

5. Basis of Selection - Highest Rated Within Budget

To be declared responsive, a bid MUST:

- (a) comply with all the requirements of the bid solicitation;
- (b) meet all mandatory technical and financial criteria and
- (c) obtain the required minimum score of 60/100 for the Point Rated Technical Criteria of Annex D.



- Bids not meeting (a) or (b) or (c) will be declared non responsive.
- Responsive bids received will be classified in order of decreasing overall score.
- Responsive bids obtaining the greatest number of points and submitted by <u>different</u> 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.
- If an insufficient number of bids from <u>different</u> bidders obtain the minimum pass score (60/100) for the maximum budget available for this requirement, CSA 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 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.
- The overall score will be obtained by the total of Point Rated Technical Criteria.
 - i) 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.
 - ii) 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 (Expected Results and Benefits to the User Community) will be recommended for a contract award.



PART 5 - CERTIFICATIONS

1. Certifications Required with the Bid

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

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 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 will render the bid non-responsive or constitute a default under the Contract.

1.1 Procurement Business Number

Suppliers are required to have a Procurement Business Number (PBN) before contract award. Suppliers may register for a PBN online at Supplier Registration Information https://srisupplier.contractscanada.gc.ca/.

For non-Internet registration, suppliers may contact the InfoLine at 1-800-811-1148 to obtain the telephone number of the nearest Supplier Registration Agent.

Procurement Business Number (PBN):	
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1.2 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 or additional information 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 provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

1.3 Integrity Provisions – List of Names

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names. Bidder (See Annex E - Integrity Form).

1.4 Federal Contractors Program for Employment Equity

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from Employment and Social Development Canada (ESDC) - Labour's website.

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.



1.5 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.

1.3.1 Definitions

For the purposes of this clause,

"former public servant" is any former member of a department as defined in the <u>Financial Administration</u> <u>Act</u>, 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 <u>Public Service Superannuation Act</u> (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the <u>Supplementary Retirement Benefits Act</u>, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the <u>Canadian Forces Superannuation Act</u>, R.S., 1985, c.C-17, the <u>Defence Services Pension Continuation Act</u>, 1970, c.D-3, the <u>Royal Canadian Mounted Police Pension Continuation Act</u>, 1970, c.R-10, and the <u>Royal Canadian Mounted Police Superannuation Act</u>, R.S., 1985, c.R-11, the <u>Members of Parliament Retiring Allowances Act</u>, R.S., 1985, c.M-5, and that portion of pension payable to the <u>Canada Pension Plan Act</u>, R.S., 1985, c.C-8.

1.3.2 Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? $\bf 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.

1.3.3 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.

1.3.4 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a <u>Public Service Superannuation Act</u> (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with <u>Contracting Policy Notice: 2012-2</u> of the Treasury Board Secretariat of Canada.

1.6 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.

1.7 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.

1.8 Certification

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or 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.

CERTIFICATION SIGNATURE

We hereby certify compliance with the above noted certification requirements for:

- 1.1. Procurement Business Number
- **1.2.** Certifications Precedent to Contract Award and Additional Information
- **1.3.** Integrity Provisions List of Names
- 1.4. Federal Contractors Program for Employment Equity
- 1.5. Former Public Servant Certification
- 1.6. Status and Availability of Resources
- 1.7. Education and Experience
- 1.8. Certification

Name of Organization

We also certify that the signature below is that of a person authorized to sign on behalf of the firm.

Signature	
Date	
Name (print or type)	
Title of person authorized to sign on behalf of the 0	Organization



PART 6 - RESULTING CONTRACT CLAUSES

1. Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex A and the technical and management portions of the Contractor's bid entitled , dated .

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 issued by Public Works and Government Services Canada. https://buvandsell.gc.ca/policy-and-quidelines/standard-acquisition-clauses-and-conditions-manual

2.1. General conditions

2035 (2015-07-03), Higher Complexity – Services https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditionsmanual/3/2035/15

3. Performance Evaluation

Contractor shall take note that the performance of the Contractor during and upon completion of the work shall be evaluated by the Government of Canada. Should the Contractor's performance be considered unsatisfactory more than once, the Contractor's bidding privileges on future work may be suspended for a period of 18 months or 36 months.

Contractor Performance Evaluation Report Form in Annex F is used to record the performance.

4. Term of Contract

The period will be from May 2016 date to February 28, 2017

5. Contracting Authority

The Contracting Authority for the Contract is:

Isabelle Dorav **Procurement and Contract Administration**

Canadian Space Agency 6767 route de l'Aéroport Saint-Hubert, QC

Canada J3Y 8Y9

Telephone: (450) 926-4873

E-Mail: isabelle.doray@canada.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.



6. Project Authority

Name: To be inserted at contract award. Title: To be inserted at contract award.

Satellite Operations, Infrastructure and Applications

Canadian Space Agency

Address: 6767, Route de l'Aeroport St-Hubert, Québec, J3Y 8Y9

Telephone: (450) 926-XXX

E-Mail: xxxx.xxxx@canada.ca

The Project Authority (PA) is the Contractor's point-of-contact for all matters concerning the progress claims, changes in scope, schedule or cost and acceptance of the deliverable items of the work under this Contract. The Project Authority (PA) is responsible for accepting the technical content of the work and all deliverables items under this contract and specifically for implementing recommendations concerning progress claims, changes in scope, schedule and cost through the Contracting Authority (CA). Any proposed changes to the scope of the work can only be authorized by a contract amendment issued by the Contracting Authority.

7. Technical Authority

Name: To be inserted at contract award. Title: To be inserted at contract award.

Satellite Operations, Infrastructure and Applications

Canadian Space Agency

Address: 6767, Route de l'Aeroport

St-Hubert, Québec, J3Y 8Y9

Telephone: (450) 926-XXX E-Mail: xxxx.xxxx@canada.ca

The Technical Authority named above 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.

8. Basis of Payment – Limitation of Expenditures

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the Basis of Payment in Annex B, to a limitation of expenditure of \$_____ (insert the amount at contract award). Customs duties are included and Applicable Taxes are extra.

No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority.



The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:

- a) when it is 75 percent committed, or
- b) four (4) months before the contract expiry date, or
- c) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

whichever comes first.

If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

9. Terms of Payment

- 1. Canada will make progress payments in accordance with the payment provisions of the Contract, no more than once a month, for cost incurred in the performance of the Work, up to 100% of the amount claimed and approved by Canada if:
 - a) an accurate and complete claim for payment using form PWGSC-TPSGC 1111, Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
 - b) the amount claimed is in accordance with the basis of payment;
 - c) the total amount for all progress payments paid by Canada does not exceed 100% of the total amount to be paid under the Contract;
 - d) all certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives.
- The balance of the amount payable will be paid in accordance with the payment provisions of the Contract upon completion and delivery of the item if the Work has been accepted by Canada and a final claim for the payment is submitted.
- 3. Progress payments are interim payments only. Canada may conduct a government audit and interim time and cost verifications and reserves the rights to make adjustments to the Contract from time to time during the performance of the Work. Any overpayment resulting from progress payments or otherwise must be refunded promptly to Canada.

10. Invoicing Instructions

The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions along with the maintenance report described in the Statement of Work of the Contract.

Invoices cannot be submitted until all work identified in the invoice has been completed and that all maintenance service call reports related to the Work identified in the invoice have been received by the Project Authority. Invoices must be distributed as follows:

(a) One (1) copy must be forwarded to the following address for certification and payment

CANADIAN SPACE AGENCY
9F013 – FINANCIAL SERVICES
Satellite Operations, Infrastructure and Applications
6767 Route de l'Aeroport
Saint-Hubert (Québec) J3Y 8Y9
CANADA



OR BY E-MAIL: asc.facturation-invoicing.csa@canada.ca

(b) One (1) copy must be forwarded to the Project Authorities identified under paragraph 6

11. Travel and Living Expenses

In accordance with:

- a) The Treasury Board Travel Directive, Appendices B, C and D http://www.njc-cnm.gc.ca/directive/index.php?did=10&lang=eng&merge=2, and
- **b)** The "Special Travel Authorities" Directive, Section 7 for "Persons on contract" http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/TBM_113/sta-eng.asp :

The contractor will be reimbursed for authorized travel and living expenses reasonably and properly incurred in the performance of the Work, with no allowance for profit and/or administrative, upon presentation of supporting documentation except for meals, mileage and incidentals which will be reimbursed without receipts in accordance with the allowances specified in Appendices B, C and D.

The department will reimburse Contractors up to full-fare economy class only, upon presentation of an electronic ticket receipt indicating the class and price of the ticket.

All travel must have the prior authorization of the Project authority

12. Applicable Laws

Any	resulting	contract	must	be	interpreted	and	governed,	and	the	relations	between	the	parties
dete	rmined, by	the laws	in forc	e in		(Inse	ert the name	of th	e pro	ovince or t	erritory.)		

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.

13. 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) Appendix A, Supplementary Conditions and; General Conditions:
 - 2035 (2015-07-03), Higher Complexity Services
- c) Appendix B, Basis of payment
- d) Appendix C, Statement of Work;
- e) Appendix D, Performance Evaluation
- f) the Contractor's bid dated



14. Office of the procurement Ombudsman

14.1. Dispute Resolution Services

The parties understand that the Procurement Ombudsman appointed pursuant to Subsection 22.1(1) of the Department of Public Works and Government Services Act will, on request or consent of the parties to participate in an alternative dispute resolution process to resolve any dispute between the parties respecting the interpretation or application of a term and condition of this contract and their consent to bear the cost of such process, provide to the parties a proposal for an alternative dispute resolution process to resolve their dispute. The Office of the Procurement Ombudsman may be contacted by telephone at 1-866-734-5169 or by e-mail at boa.opo@boa-opo.gc.ca.

14.2. Contract Administration

The parties understand that the Procurement Ombudsman appointed pursuant to Subsection 22.1(1) of the Department of Public Works and Government Services Act will review a complaint filed by [the supplier or the contractor or the name of the entity awarded this contract] respecting administration of this contract if the requirements of Subsection 22.2(1) of the Department of Public Works and Government Services Act and Sections 15 and 16 of the Procurement Ombudsman Regulations have been met, and the interpretation and application of the terms and conditions and the scope of the work of this contract are not in dispute. The Office of the Procurement Ombudsman may be contacted by telephone at 1-866-734-5169 or by e-mail at boa.opo@boa-opo.gc.ca.



ANNEX A

STATEMENT OF WORK (SOW)



1. INTRODUCTION

The primary purpose of this Request for proposals (RFP) is to examine the feasibility of improving the identification and monitoring of vessels in the maritime operations context through the use of Space-Based Automatic Identification Systems (S-AIS) data in conjunction with Earth Observation (EO) imagery, particularly in anticipation of the RADARSAT Constellation Mission (RCM).

The Earth Observation Applications and Utilization (EOAU) section of the Canadian Space Agency (CSA), through its Earth Observation Applications Program (EOADP), intends to award contracts to successful Bidders to conduct Feasibility Studies that address one or more of the application challenges that have been identified in this Statement of Work (SOW).

This SOW includes additional background information, a list of objectives for the Feasibility Studies and the Scope of the work.

2. BACKGROUND

In 2004 the International Maritime Organization (IMO) mandated that all Class A ships must be equipped with Automatic Identification Systems (AIS). Class A vessels include the following categories:

- All vessels engaged in international voyages of a size ≥ 300 gross tons
- Cargo ships of ≥ 500 gross tons not engaged in international voyages
- · All passenger ships irrespective of size

AIS systems were instituted as a navigation aid for ship collision avoidance purposes. Initially, networks of shore based receivers were established along coastlines, but were line of sight limited in range. However, since AIS systems work in the VHF range of the spectrum, it was soon realized that broadcasted messages can be easily detected and relayed from space.

Since 2009, AIS sensors began to be deployed on spacecraft with immediate success. Today several Space-Based AIS (S-AIS) spacecraft are operational. The Canadian Government receives S-AIS data on a 24/7 basis. In excess of 125,000 Class A ships are currently tracked and this is expected to grow to between 150,000 to 200,000 vessels in the coming years. Given that each ship transmits its messages every 2 to 10 seconds while in motion, the resulting message volume is in the order of 35 million or more S-AIS messages per day to be received and analysed. However, no single operator currently supplies complete global coverage with near real time data reception. Future advances in satellite constellations will result in major improvements to the global coverage of S-AIS data at a time when RCM imagery will also be available.

The Maritime Domain Awareness situation with S-AIS data is further complicated with the introduction of AIS systems for the smaller Class B vessels, which include many millions of potential vessels.

The use of S-AIS data in conjunction with EO imagery is still in its early stages. And yet there have been some impressive demonstrations to show that the potential synergy between the two data types could be significant. In order to optimize this potential, a number of challenges remain to be addressed. By investigating the feasibility of incorporating future advances in the use of S-AIS data and the introduction of RCM imagery, along with new processing and modelling techniques, it is anticipated that major improvements to the monitoring of marine vessels could be achieved.



2.1. Application Challenges

The CSA will award contracts to successful bidders to conduct feasibility studies on their proposed solutions, which must address at least one of the following challenges. These applications challenges have been identified as important considerations by various Government of Canada (GoC) organizations within the S-AIS user community:

Non-Trusted Ship Detection: These vessels include ships that are often referred to as 'dark targets' that may not have an AIS system onboard, or have, intentionally or unintentionally, their AIS systems disabled or turned off, and are not transmitting messages as required. In addition, certain ship operators may attempt to intentionally mislead authorities as to their exact location by inputting an incorrect GPS position for their vessel in a process known as 'spoofing'. These ships are usually detected by other means, such as with SAR imagery. They become a serious challenge for authorities to then decide which ships require further surveillance and interrogation, and which vessels can be ignored. Their detection often requires the cross-cueing with a variety of EO imagery in conjunction with S-AIS messaging from other vessels in order to separate the non-reporting or spoofed ships from the properly reporting vessels, and to obtain a comprehensive picture of the Maritime Domain Awareness situation in an area of interest. Cross-cueing is particularly critical in emergency situations, as in the case of oil spills.

Examples of Related Challenges:

- · Reliable identification of unregulated, un-reporting, untrusted (dark targets) vessels
- · Cross-cueing of data sets
- · Identification of suspected 'spoofed' ship routes
- Creation of ship transit routes with S-AIS gaps
- Historical ship route summaries and behavior patterns
- ii. **Earth Observation Ship Detection:** The ability to detect a ship using EO data, particularly with SAR imagery, has received extensive attention over recent years. Having independent ship detection sources with SAR imagery and S-AIS data is quite helpful in increasing the effectiveness of characterizing the maritime domain, as well as the cross-cueing of various datasets. However, the threshold of detection by ship size continues to be a challenge. It is worth noting that from a Canadian perspective, the vessels of greatest interest for monitoring purposes are between 10m and 20m in length. In addition, the potential for confusion of the detection of ships with other high return signatures in SAR data increases when monitoring ship activities in ice and iceberg infested waters, where it is possible to mistake icebergs for ships when relying primarily on SAR imagery. Extra imaging and analysis care, as well as complementary datasets are required in certain regions and during seasons when icebergs may be prevalent.

Examples of Related Challenges:

- Reliable identification of all vessels, particularly of the size between 10m and 20m in length, using various imaging modes
- Cross-cueing of data sets
- Predictive final destination options
- Discrimination of vessel types and superstructures based on radar signatures, including the possible use of Inverse SAR processing methods.
- iii. **Data Analysis and Integration Systems:** This challenge involves the analysis and integration of the S-AIS data with EO imagery, where complex image processing and Geographic Information Systems (GIS) technologies are required to conduct data fusion exercises. At this time, there are no basic standards in approaching the analysis of the data and its integration into other systems. There is a division between the S-AIS systems and image processing technologies that makes data



transfer a challenge. There are many challenges to overcome in this area, particularly in preparation for the RCM satellites.

Examples of Related Challenges:

- Fusion of S-AIS data into the image processing domain with a variety of image types
- Development of multi-dimensional output products
- Combination of S-AIS management system architecture with image processing system architecture
- Design of a fully functional S-AIS/Image Processing workstation
- iv. **Model Integration:** Increasingly, the S-AIS data is becoming a valuable input to a variety of numeric models. This is because ship transits are directly affected by a variety of physical conditions in the region of their voyage. Wind, wave, weather, ice, ocean current, sea surface temperature and ocean color, marine drift and dispersion forecasts, oil spill and habitat modelling use the ship traffic information for prediction and hazard avoidance applications, as well as ship emission modelling for improved ship operating efficiencies. Much of the related activity requires database cross referencing and validation with other sources of data that depend on S-AIS information for accurate survey records. The full integration of the disparate databases within various modelling scenarios presents a major processing challenge.

Examples of Related Challenges:

- The incorporation of S-AIS data (and EO imagery if applicable) into one or more physical models as described in the challenges
- Creation of model compatible output products
- Ship emission monitoring and time of arrival management
- v. **Hazards to Navigation:** With the world's longest coastline, Canada has a particularly challenging mandate to identify and monitor major hazards to navigation, which are largely natural and sometimes man-made. The Arctic Marine Corridor is particularly of concern with increased shipping in the region and incomplete mapping of potential hazards to navigation. The corridor comprises the various channels of the Northwest Passage. The entire Arctic area covers about 4 million square kilometres. The Arctic Marine Corridor region includes some 400,000 square kilometres. Only 3% of this area has good survey data, while 40% of the area has acceptable data. The challenge is to identify and map potential hazards to navigation in the region that can then be cross referenced with S-AIS location information during ship transits in difficult areas.

Examples of Related Challenges:

- Methods for the identification of potential navigation hazards, particularly in the Arctic Marine Corridor or in the Marine Protected Areas, using EO imagery relative to ship routing using S-AIS data:
- Evaluation of potential navigation hazards under various high tide and low tide conditions using EO imagery relative to ship routing using S-AIS data;
- Creation of an alert system to identify vessels that may be heading to a dangerous or sensitive area.

3. OBJECTIVES

The CSA, through the EOADP, seeks proposals for Feasibility Studies that address the following objectives*:



- a) To develop a concept for credible solutions to one or more of the above application challenges related to the use of S-AIS data and EO imagery, as well as add value to existing practices and applications.
- b) To optimize the use of S-AIS data and CSA EO supported missions.

(* Note: The outcomes of the feasibility studies will be used to contribute to the Government of Canada planning for future new developments.)

4. SCOPE

The Scope of the Feasibility Studies is to develop a concept for credible solutions to one or more of the application challenges identified above in Section 2.1. The Bidders should be mindful of the following considerations:

- The concept for the proposed solution may be related to a method, system, product and/or service that incorporate the use of S-AIS data. The proposed S-AIS based solution concept will incorporate EO imagery for a given challenge (where appropriate).
- The concept for the proposed solution may be either a) a major enhancement or improvement to an existing method, system, product and/or service, or b) it could be an entirely new method, system, product and/or service.
- At this stage, the work should involve the development of the concept and not the actual development of the application itself. However, to demonstrate the utility of the application concept, an example of the expected outcome (e.g. sample product output, or expected system architecture or model functionality) will be included in the Feasibility Study.
- In addition to developing the concept, the feasibility study will include detailed recommendations on the next steps required for an operational implementation of the developed concept.

5. DELIVERABLES AND MEETINGS

The section describes the main contract deliverables and meetings.

5.1. Deliverables

The primary deliverable in this contract will be the final report that will include details as described below. Other deliverables are related to meetings and teleconference discussions.

Final Report

The Final Report is the main deliverable for the contract. It must include details related to the following items:

- A full description of the application concept for the chosen challenge(s), including a justification supported by appropriate literature references and a summary as to how the concept advances the technology or its use.
- A flowchart that illustrates the major steps and technologies involved in the developed concept.
- Detailed summaries for each of the steps in the developed concept, including the demonstration results.
- An analysis and assessment of the concept's feasibility and its potential effectiveness in addressing the chosen challenge(s). This will include detailed recommendations on the next steps required for an operational implementation of the developed concept.



Other Deliverables and Meetings

Additional deliverables will include:

- Monthly reports summarizing the activities and progress for the previous month, including the cumulative level of effort summaries.
- Meeting and teleconference summaries that include the discussion highlights and action items.

Meetings will occur at the following milestones:

- A kickoff meeting at the Contractor's premises or teleconference will be held at the start of the contract.
- A midterm teleconference will be held to review progress and the remaining contract plan.
- A final meeting will be held to review the final report and its outcomes. This will involve a meeting
 with a PPT presentation at the CSA (either in St-Hubert or Ottawa), subject to budget limits.



ANNEX B

PRICING Basis of payment



Pricing Schedule for Contract Period (From May 2016 to February 28, 2017)

During the period of the Contract, the Contractor will be paid as specified below, for Work performed in accordance with the Contract.

The Bidder should complete this pricing schedule and include it in its financial bid.

The rates specified below, when quoted by the Bidder, include any expenses that may need to be incurred to satisfy the terms of any contract that may result from its bid:

Labour: @ the following firm rates	Estimated Level of effort HOURLY / DAILY A	Firm HOURLY / DAILY Rates B
Category (or name)		\$XX,XXX.XX
Subcontracts: (if applicable) @ actual cost without markup (Identify subcontractors, if applicable.)		\$XX,XXX.XX
	Total A X B	\$XX,XXX.XX
Imagery / Data (if applicable) @ laid down cost without markup		\$XX,XXX.XX
Travel and living expenses: The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the Treasury Board Travel Directive http://www.tbs-sct.gc.ca/pubs-pol/hrpubs/TBM-113/td-dv-e.asp , and with the other provisions of the directive referring to "travellers", rather than those referring to "employees" are applicable.		\$XX,XXX.XX
Other direct charges: (if applicable) @ actual cost without markup (Specify what categories of direct charges.)		\$XX,XXX.XX
		\$XX,XXX.XX
Estimated Cost to a Limitation of Expenditure:		*Not to exceed \$100,000.00
GST Goods and Services Tax		\$XX,XXX.XX
or HST Harmonized Sales Tax		ΨΛΛ,ΛΛΛ.ΛΛ
TOTAL		\$XX,XXX.XX

1 day = 7.5 hours



ANNEX C

PROPOSAL PREPARATION INSTRUCTIONS



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 Bidders' technical proposal.

2. PARTNERS

Although it is not a requirement, the Bidder may propose partnering with: Federal, Provincial, regional, local government organizations, NGO entities, as well as foreign user 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.

3. SECTION I: TECHNICAL BID

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

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

3.1. Title/Project Identification Page

This page should clearly state:

- a) The Bidder's name and address:
- b) Contact Person (communications coordinates);
- c) The title of the project (the use of acronyms in the title is discouraged, unless they are described);
- d) The RFP Title: Feasibility Studies for the Development of Space-Based Automatic Identification System (S-AIS) Applications;
- e) The challenge(s) addressed in the proposal (Section 2.1 of annex A SOW);
- f) A short extract from Executive Summary (not to exceed seven lines) of the bid.

3.2. Executive Summary

The Executive Summary of Section I should 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 in length (8.5" x 11") and should highlight the following elements:

- a) Project objectives and the challenge(s) addressed in the proposal;
- b) Project partners and any user organizations that will be involved (if applicable);
- c) A description of the application concept;
- d) The expected results.

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.



3.4. Technical Section

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 also read the evaluation descriptions and benchmark definitions in annex D of this RFP to become familiar with the details against which the proposals will be evaluated, and to ensure that these details are fully addressed in Technical Bid.

3.4.1. Understanding the Technology and Its Use (Evaluation Criterion 1)

This section of the proposal should demonstrate the Bidder's knowledge and understanding of both the relevant technologies and their use for the proposed application concept. In particular, the Bidder must display a thorough understanding of both the S-AIS systems and any other technologies that form part of the concept, including Earth Observation imagery, for the purposes of this study. Furthermore, it will be important for the Bidder to demonstrate a strong understanding of the applications for which the concept will be used.

3.4.2. Methodology (Evaluation Criterion 2)

This section of the proposal should include the methodology for the development (and demonstration with an example of the expected outcome) of the proposed application concept for a particular challenge(s). In addition, the Bidder will provide a summary as to whether the proposed concept is a major enhancement to an existing method, system, product and/or service, or whether it is an entirely new concept involving a method, system, product and/or service. The Bidder should also include any data that may be required for the concept demonstration.

Data Plan

A small amount of S-AIS data and RADARSAT-2 imagery may be made available free of charge for concept demonstrations. However, other types of EO imagery may also be proposed, but the cost for any of these additional image types must be included in the Bidder's financial proposal. If data is to be used in the project, the Bidder should provide a summary of the data request by data type and amount.

3.4.3. Bidder's Experience (Evaluation Criterion 3)

This section of the proposal should include the following technical and management experience summaries:

- Identification of the technical team members with a brief summary of their individual capabilities and experience, emphasizing activities related to the proposed concept. This must be supported by their resumes in an annex.
- Identification of the management team members with a brief description of their individual capabilities and experience in managing projects of a similar nature. This must be supported by their resumes in an annex.
- An overview of the company, including subcontractors, with its capabilities, products and services, including the following elements:
 - o The nature and structure of the Bidder's organization;
 - The level of Canadian ownership;
 - The location, size and general description of the facility;
 - The number and composition of staff;
 - The principal product or services and field of endeavor;
 - o The annual business volume and general nature of the Bidder's client base;
 - The location(s) where the work for the proposed project will be performed.
- A summary of experience in conducting and managing projects of a related nature. A maximum
 of three (3) relevant project summaries may be presented. The Bidder is asked to use a Previous
 Project Summary Form as shown in Table C-1 to provide basic information for each of the
 relevant projects.



TABLE C-1 PREVIOUS PROJECT SUMMARY FORM						
Project Title:						
Client Organization:	Point of Contact (POC):	POC Phone Number:				
Contract Value: Start Date: End Date:						
Project Personnel and Roles:						
Project Description (including relevance to this RFP):						

3.4.4. Management Plan (Evaluation Criterion 4)

This section of the proposal must include details related to the following topics:

- Identification of all of the team members with their roles and responsibilities. This must include all partners or subcontractors that will be involved in the study.
- A project organization chart of the overall project showing the relationships between all of the study participants.
- A detailed Work Breakdown Structure with key tasks and milestones.
- Individual Work Package summaries.
- A Responsibility Assignment Matrix (RAM) that shows the level of effort for each team member that has been assigned to each work package.
- A Data Plan (if relevant)
- A summary of the major milestones and deliverables.
- A schedule in the form of a Gantt chart.
- A description of project control approach.
- Separate summaries of potential technical and managerial risks and mitigation strategies.

3.4.5. Expected Results and Benefits to the User Community (Evaluation Criterion 5)

Since this is a feasibility study, it can be assumed at this time that the proposed concept will be successful. As such, the expected results must then be described in as much detail as possible, along with the anticipated specific benefits to the S-AIS user community.

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;
- d) List of Contacts: The list of contacts shall be in a format suitable for distribution and shall include all of the Bidder's points-of-contact involved in the proposal development and/or during the contract, including the contact details as identified below in Table C-2.
- e) Any other annex deemed appropriate by the Bidder.



TABLE C-2 LIST OF CONTACTS						
Role	Name	Telephone	Email	Fax		
Project Manager						
Contract Authority						
Claims Officer						



ANNEX D

POINT RATED TECHNICAL CRITERIA AND BENCHMARK STATEMENTS



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 EOADP will select proposals as determined by the selection criteria contained in this solicitation document.

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 at least achieve the total minimum score requirements for the Criteria combined (60/100) as indicated in Table D-1.

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 below, 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 * 3.125 (Weighting factor) = 18.75 points (score)

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



TABLE D-1								
TECHNICAL CRITERIA AND ASSOCIATED RATINGS								
	Overall maximum points for	Maximum	Weighting factors (b)		Benchmark definition corresponding to point rating (1 to 8 points)			
Criteria	corresponding criterion (a*b)	points for evaluation (a)		Minimum points (pass mark)	Level A	Level B	Level C	Level D
Understanding the Technology and Its Use	20	8	2.5	N/A	1 or 2	3 or 4	5 or 6	7 or 8
2. Methodology	25	8	3.125	N/A	1 or 2	3 or 4	5 or 6	7 or 8
3. Bidder's Experience	20	8	2.5	N/A	1 or 2	3 or 4	5 or 6	7 or 8
4. Management Plan	20	8	2.5	N/A	1 or 2	3 or 4	5 or 6	7 or 8
5. Expected Results and Benefits to the User Community	15	8	1.875	N/A	1 or 2	3 or 4	5 or 6	7 or 8
Total Points	100							
Pass Mark				60				



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.

Criterion 1: Understanding the Technology and Its Use

This criterion assesses the degree to which the proposal demonstrates an understanding of the technologies and their use for the proposed application concept.

- A) The proposal demonstrates a very limited level of understanding of both the technology and its use.
- B) The proposal demonstrates a general understanding of the technology and its use, or shows a detailed understanding of either the technology or its use.
- C) The proposal shows a good understanding of both the technology and its use.
- D) The proposal contains a detailed description and understanding of both the technology and its use.

Criterion 2: Methodology

This criterion evaluates the effectiveness of the methodology for the development (and demonstration with an example of the expected outcome) of the proposed application concept for a particular challenge(s). The methodology:

- A) Is poorly described and its effectiveness in developing an application concept for the identified challenge(s) is not substantiated.
- B) Is described. However, there are gaps in the methodology and its effectiveness in developing an application concept for the identified challenge(s) is only partially substantiated.
- C) Is well described. However, its effectiveness in developing an application concept for the identified challenge(s) is not fully substantiated.
- D) Is clearly described and its effectiveness in developing an application concept for the identified challenge(s) is thoroughly substantiated.

Criterion 3: Bidder's Experience

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

- A) The proposal demonstrates little or no experience by the Bidder and its team members 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 may be missing.
- B) The proposal describes a Bidder and its team members with 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) The proposal demonstrates a Bidder and its team members with high levels of experience in conducting and managing projects of a similar nature. The proposal includes project summaries.
- D) The proposal shows a Bidder and its team members with extensive experience in conducting and managing projects directly related to the technologies and applications for this solicitation. The proposal includes relevant project summaries and related material.



Criterion 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, Deliverables and Schedule, and a Managerial Risk Analysis.

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 with the major items addressed, 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.

Criterion 5: Expected Results and Benefits to the User Community

This criterion assesses the summary of expected results from the eventual implementation of the proposed application concept and the potential benefits to the user community, assuming that the concept will be successful.

- A) Very few expected results and benefits to the user community have been described in the proposal. The descriptions that have been included are too general in nature.
- B) The proposal includes brief descriptions of the expected results and benefits to the user community.
- C) The proposal contains a good description of the expected results and includes a few benefits to the user community.
- D) The proposal describes a full set of expected results and includes a link to a series of well-defined benefits to the user community.



ANNEX E

INTEGRITY FORM

To be included with certifications (Section III: Certifications):



Dénomination com	pplète de l'entreprise / Complete Legal Name of Company				
	Adresse de l'entreprise/Company's address				
N	EA de l'entreprise/Company's PBN number				
Nı	ıméro de la transaction/ Transaction number				
Lis	ste de pré-qualification/Pre-Qualification List				
X7.1	and de la Anongo Ation (Φ) /Thomso Ation V. L. (Φ)				
	eur de la transaction (\$) /Transaction Value (\$) 00.00\$ (taxes incluses)/ OVER \$25,000.00 (including taxes)				
1 LOS DE 23,00	volvo (taxes incluses)/ O VER \$25,000.00 (including taxes)				
	OUI / YES NON / NO				
	I NOIV/ NO				
Membres du con	seil d'administration (Utilisez le format - Prénom Nom)				
	of Directors (Use format - first name last name)				
	la liste en pièce-jointe/Or put the list as an attachment				
1. Membre / Director					
2. Membre / Director					
3. Membre / Director					
4. Membre / Director					
5. Membre / Director					
6. Membre / Director					
7. Membre / Director					
8. Membre / Director					
9. Membre / Director					
10. Membre / Director					
Autres Membres/ Other members:					
Commentaires / Comments:					



ANNEX "F" - PERFORMANCE EVALUATION REP	ORT					
Upon fulfillment of a contract, this q	uestionnaire must be completed by the					
responsible project authority	Contract complete					
Name of contractor:	Contract completion date:					
Name of project authority	Branch:					
Contract no.:	Project name:					
Supplier						
	10 à 9 = 6 à 5 = 2 à 1 = Excellent Satisfactory Unsatisfactory					
Rating scale:	Excellent Satisfactory Unsatisfactory					
Racing Scare.	8 à 7 = Very 4 à 3 = Poor Good					
1) Did the supplier provide consultants with the education, accreditation and experience indicated in the contract?	10 9 8 7 6 5 4 3 2 1 Comments:					
2) Please rate the overall quality of	10 9 8 7 6 5 4 3 2 1					
the services provided by this supplier.	Comments:					
3) Please rate the responsiveness of	10 9 8 7 6 5 4 3 2 1					
the supplier with regard to	Comments:					
information requests or problems that may have arisen in the course of the contract, and the supplier's ability to meet deadlines.						
4) Was the work performed in	10 9 8 7 6 5 4 3 2 1					
accordance with the requirements specified in the statement of work?	Comments:					
5) Please rate the quality of	10 9 8 7 6 5 4 3 2 1					
communication between the department and the supplier.	Comments:					
6) Were all administrative documents received in accordance with the	10 9 8 7 6 5 4 3 2 1					
requirements of the contract?	Comments:					
Administrative documents can include but are not limited to: • Invoices • Progress reports • Reports on use or business volume • Meeting agendas and minutes						
 Documentation and quality of work 						
mak-1 //0	Excellent: 54 et 60 Poor: 18 à 29					
Total /60	Very Good: 42 à 53 Unsatisfactory: 18 or less					
Satisfactory: 30 à 41						
Project Authority	Contract Agent:					
Signatures Bloc - Evalua	tion Poor or Unsatisfactory					
Technical Expert	Supply Manager:					