

Return Bids to:

#### Retourner Les Soumissions à :

#### nrcan.ontariobid-soumissionontario.rncan@canada.ca

# Request for Proposal (RFP) Demande de proposition (DDP)

#### Proposal To: Natural Resources 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 à: Ressources Naturelles 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**

## Issuing Office - Bureau de distribution

Finance and Procurement Management Branch Natural Resources Canada 183 Longwood Road South Hamilton, ON L8P 0A5

Title – Sujet					
Assessment of Changes to Canadian Competitiveness in the Global					
Economy Stemming from Investments in High Accuracy, Real-time,					
GNSS Services					
Solicitation No. – No de l'invitation		Date			
NRCan-5000056331		December 21, 2020			
Requisition Reference No Nº de la de	emande				
162539					
Solicitation Closes – L'invitation prend	fin				
at – à 02:00 PM (Eastern Star	ndard Time (F	ST))			
on – le January 20, 2021	(2	,			
Address Enquiries to: - Adresse toutes	questions à:				
len.pizzi@canada.ca					
Telephone No. – No de telephone	Fax No. – No. o	le Fax			
(905) 645-0676	(905) 645-0	831			
Destination – of Goods and Services:					
Destination – des biens et services:					
Natural Resources Canada					
1 Challenger Drive					
Dartmouth, NS, B2Y 4A2					
Security – Sécurité					
There are no security requirem	nents associat	ed with this requirement.			
Vendor/Firm Name and Address					
Raison sociale et adresse du fournisseu	ur/de l'entrepren	eur			
Telephone No.:- No. de téléphone: Facsimile No.:- No. de télécopieur:					
Email – Courriel :  Name and Title of person authorized to sign on behalf of Vendor/Firm (type or print)					
Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie)					
Signature	Date				



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The Articles contained in this document are mandatory in their entirety, unless otherwise indicated. Acceptance of these Articles, in their entirety, as they appear in this document, is a Mandatory requirement of this RFP. Suppliers submitting a proposal containing statements implying that their proposal is conditional on modification of these clauses or containing terms and conditions that purport to supersede these clauses or derogate from them will be considered non-responsive.

Bidders with concerns regarding the provisions of the Bid Solicitation document (including the Resulting Contract Clauses) should raise such concerns in accordance with the Enquiries provision of this RFP.



# **PART 1 - GENERAL INFORMATION**

## 1.1 Introduction

The bid solicitation is divided into seven parts plus attachments and annexes, 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 and Additional Information: includes the certifications and additional information to be provided;
- Part 6 Security: 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 Annexes include the Statement of Work, the Basis of Payment, and any other annexes and attachments.

The Appendixes include the Evaluation Criteria and the Financial Proposal Form.

## 1.2 Summary

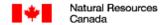
By means of the RFP, Natural Resources Canada (NRCan) is seeking proposals from bidders for....

The primary objective of this work is to inform the Government of Canada about how investments in high accuracy GNSS positioning infrastructure and services would impact Canadian competitiveness in key sectors of the global economy. The following sectors are of interest in this study:

- Forestry
- 2) Mining
- 3) Transport-Road
- 4) Transport-Marine (option)

# 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 15 working days from receipt of the results of the bid solicitation process. The debriefing will be done in writing, by email.



# **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 <u>Standard Acquisition Clauses and Conditions Manual</u> (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 the bid solicitation and accept the clauses and conditions of the resulting contract.

The <u>2003</u> (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation with the modifications to the text below. If there is a conflict between the provisions of 2003 and this document, this document prevails.

- In the complete text content (except Section 3) Delete: Public Works and Government Services Canada" and Insert: "Natural Resources Canada." Delete: "PWGSC" and Insert: "NRCan"
- Section 2: Delete: "Suppliers are required to" and Insert: "It is suggested that suppliers"
- Subsection 1 of Section 8: Delete entirely
- Under Subsection 2 of Section 20: Not applicable

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

Delete: 60 days Insert: 120 days

# 2.2 Submission of Bids

Bidders must submit all proposals electronically. Given the current constraints on NRCan's networks, the electronic mail system has a limit of 1GB per single message received and a limit of 20GB per conversation. Bidders are asked to contact the Contracting Authority to confirm receipt of their bid. NRCan encourages bidders to submit all bids earlier than the closing time in order to ensure sufficient time to be received in NRCan's server.

It is the Bidders responsibility to ensure that proposals are sent to the following e-mail address, by the time and date indicated on page 1 of this RFP document.

- Send proposals to this email address: <a href="mailto:nrcan@canada.ca">nrcan.ontariobid-soumissionontario.rncan@canada.ca</a>
  - The email address above is reserved for the submission of your proposal. No other communication should be sent to that address.
- Contact the Contracting Authority <a href="Len.Pizzi@Canada.ca">Len.Pizzi@Canada.ca</a> at 905-645-0676 by either telephone call or email for receipt of bid confirmation.



## **IMPORTANT**

It is requested that you write the following information in "Subject" of the e-mail:

Assessment of Changes to Canadian Competitiveness in the Global Economy Stemming from Investments in High Accuracy, Real-time, GNSS Services - NRCan-5000056331

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

NRCan will not assume responsibility for proposals directed to any other location.

The onus is on the Bidder to ensure that the proposal is submitted correctly to the above address. Not complying with the above instructions may result in NRCan's inability to ascertain reception date and/or to consider the bid prior to contract award. Therefore, NRCan reserves the right to reject any proposal not complying with these instructions.

# 2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) 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.

# 2.4 Applicable Laws

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

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

# 2.5 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 five (5) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.



# 2.6 Basis for Canada's Ownership of Intellectual Property

Natural Resources Canada has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, on the following reasons: as set out in the <u>Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts</u>

-Where the main purpose of the Crown Procurement Contract, or the deliverables contracted for, is:

o To generate knowledge and information for public dissemination.



# **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 Bid (1 electronic copy)

Section II: Financial Bid (1 electronic copy) in a separate file and document

Section III: Certifications (1 electronic copy)

Prices should appear in the financial bid only. No prices should be indicated in any other section of the bid.

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) format;
- (b) use a numbering system that corresponds to the bid solicitation.

# Section I: Technical Bid

In their technical 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 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 Financial Proposal Form in Appendix "2". The total amount of Applicable Taxes must be shown separately.

## **Exchange Rate Fluctuation**

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

#### Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.



# 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 financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### 4.1.1 Technical Evaluation

Mandatory and point rated technical evaluation criteria are included in Appendix "1" – Evaluation Criteria.

# 4.1.2 Financial Evaluation

Mandatory financial evaluation criteria are included in Appendix "1" – Evaluation Criteria.

#### 4.2 Basis of Selection

#### 4.2.1 Mandatory Technical and Financial Criteria

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical and Financial evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

# 4.2.1 Highest Combined Rating of Technical Merit and Price

- 1. To be declared responsive, a bid must:
  - a. comply with all the requirements of the bid solicitation; and
  - b. meet all mandatory criteria; and
  - c. obtain the required minimum of 83 points overall for the technical evaluation criteria which are subject to point rating.
    - The rating is performed on a scale of 120 points.
- 2. Bids not meeting (a) or (b) or (c) will be declared non-responsive.
- 3. The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 70 % for the technical merit and 30 % for the price.
- 4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 70 %.



- 5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 30 %.
- 6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
- 7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 60/40 ratio of technical merit and price, respectively. The total available points equal 135 and the lowest evaluated price is \$45,000 (45).

Basis of Selection - Highest Combined Rating Technical Merit (70%) and Price (30%)						
Bidder 1 Bidder 2 Bidder 3						
Overall Techr	nical Score	115/135	89/135	92/135		
Bid Evaluated	l Price	\$55,000.00	\$50,000.00	\$45,000.00		
Calculations	Technical Merit Score	115/135 x 70 = 59.63 89/135 x 70 = 46.15		92/135 x 70 = 47.70		
	Pricing Score	45/55 x 30 = 24.55	45/50 x 30 = 27	45/45 x 30 = 30		
Combined Rating		84.18	73.15	77.70		
Overall Rating	g	1st	3rd	2nd		



# PART 5 - CERTIFICATIONS AND ADDITIONAL INFORMATION

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

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a 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.

# 5.1 Certifications Required with the Bid

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

# 5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/1/2003/25#integrity-provisions), all bidders must provide with their bid, **if applicable**, the Integrity declaration form available on the Forms for the Integrity Regime website (http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html), to be given further consideration in the procurement process.

# 5.2 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.

#### 5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the <a href="Ineligibility and Suspension Policy">Ineligibility and Suspension Policy</a> (<a href="http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html">http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html</a>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

- 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 or, in the case of a private company, the
  owners of the company.
- 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 partnerships do not need to provide lists of names.			
	Name of Bidder:			
	OR			
	Name of each member of the joint venture:			
	Member 1:			
	Member 2:			
	Member 3:			
	Member 4:			

Identification of the administrators/owners:

SURNAME	NAME	TITLE

# 5.2.2 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 Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the <a href="Employment and Social Development Canada (ESDC)">Employment and Social Development Canada (ESDC)</a> - <a href="Labour's website">Labour's website</a>. (https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#).

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.

# 5.2.3 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.

# 5.2.4 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.

#### 5.2.5 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 awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

#### **Definitions**

For the purposes of this clause, "former public servant" is any former member of a department as defined in the <u>Financial Administration 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;
- 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.

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# Former Public Servant in Receipt of a Pension

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It co	, the Bidder must	nravida tha falla	awing intormati	an faral	I EDSc in ro	acaint at a	noncion	ac applicable.
11 50	. tile bludel illust	biovide the folk	JWINE IIII OIIII au	uli, lui ai	1 FF35 III I t	בנפוטנ טו מ	ı belisidii.	as applicable.
				- ,			1,	

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

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:
	<ul> <li>start date</li> <li>end date</li> <li>and number of weeks</li> </ul>

g.	number and amount (professional fees) cadjustment program.	of other contracts subject to the restrictions of a work force
	Professional fees	Amount
	<del></del>	
	ll contracts awarded during the lump sum pareceived a lump sum payment is \$5,000, incl	ayment period, the total amount of fees that may be paid to a FPS uding Applicable Taxes.
5.2.6	Aboriginal Designation	
Who	is eligible?	
a)	An Aboriginal business, which can be:	
	i) a band as defined by the Indian Act	
	ii) a sole proprietorship	
	iii) a limited company	
	iv) a co-operative	
	v) a partnership	
	vi) a not-for-profit organization	
in wh	ich Aboriginal persons have at least 51 perce	ent ownership and control,
OR		
ŀ	•	original businesses or an Aboriginal business and a non-Aboriginal siness(es) has at least 51 percent ownership and control of the
	percent of them must be Aboriginal person	time employees at the date of submitting the bid, at least thirty-s, and this ratio must be maintained throughout the duration of the
	idder must certify in its submitted bid that i ibed above.	t is an Aboriginal business or a joint venture constituted as
	ur Company is <u>NOT an Aboriginal Firm</u> , as ide ur Company is an Aboriginal Firm, as identifie	

		RFP # NRCan-5000056331
Signature	Date	<del></del>

# **PART 6 - SECURITY REQUIREMENTS**

#### **Security Requirements** 6.1

There are no security requirements associated with this requirement.



#### 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 OR Requirement

The Contractor must perform the V	Vork in accordance	with the Statemer	nt of Work at Anno	ex "A" and the
Contractor's technical bid entitled	, dated			

## 7.2 Standard Clauses and Conditions

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

#### 7.2.1 General Conditions

2035 (2020-05-28), General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

- As applicable, replace references to Public Works and Government Services Canada (PWGSC) with Natural Resources Canada (NRCan).

## 7.2.2 Supplemental General Conditions

The following clauses apply to and form part of this contract:

4007 (2010-08-16), Canada to Own Intellectual Property Rights in Foreground Information

# 7.3 Dispute Resolution

#### Mediation

If a dispute arising from this contract cannot be settled amicably through negotiation, then the parties agree in good faith to submit the dispute to mediation as administered by the Arbitration and Mediation Institute of Canada Inc. (AMIC). The parties acknowledge receipt of the rules of AMIC. The cost of mediation shall be borne equally by the parties.

#### **Arbitration**

If the parties cannot resolve the dispute through mediation within sixty (60) days, the parties agree to submit the dispute to arbitration pursuant to the Commercial Arbitration Act (Canada). The party requesting such arbitration shall do so by written notice to the other party/parties. The cost of the arbitration and fees of the arbitrator shall be borne equally by the parties. The arbitration shall take place in the city where the contractor carries on business before a single arbitrator to be chosen jointly by the parties. If the parties cannot agree on the choice of arbitrator within thirty (30) days of written notice to submit the dispute to arbitration, each party will choose a representative who will select the arbitrator.

The parties may determine the procedure to be followed by the arbitrator in conducting the proceedings, or may ask the arbitrator to do so. The arbitrator shall issue a written award within thirty (30) days of hearing the parties. The award may be entered in any court having jurisdiction and enforced as a judgment of that court.

Meaning of "Dispute"

The parties agree that the word "dispute" in this clause refers to a dispute of fact or of law, other than a dispute of public law.

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 <a href="mailto:boa.opo@boa.opo.gc.ca">boa.opo@boa.opo.gc.ca</a>.

# 7.4 Security Requirements

**7.4.1** There is no security requirement applicable to the Contract.

# 7.5 Term of Contract

# 7.5.1 Period of the Contract

The period of the Contract is from date of Contract to July 21, 2021 inclusive.

# 7.6 Comprehensive Land Claims Agreements (CLCAs)

The Contract is not subject to any Comprehensive Land Claims Agreements.

#### 7.7 Authorities

# 7.7.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Len Pizzi

Title: Senior Procurement Officer Organization: Natural Resources Canada

Address: 183 Longwood Road South, Hamilton, ON, L8P 0A5

Telephone: (905) 645-0676 E-mail address: <u>len.pizzi@canada.ca</u>

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.

7.7.2	Project Authority (to be provided at contract award)
The Pr	oject Authority for the Contract is:
Name:	
Title:	
Organi	zation:
Addres	
Teleph	one:
Facsim	ile:
E-mail	address:
under Contra author	oject Authority is the representative of the department or agency for whom the Work is being carried out the Contract and is responsible for all matters concerning the technical content of the Work under the ct. Technical matters may be discussed with the Project Authority; however, the Project Authority has no rity to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made that contract amendment issued by the Contracting Authority.
7.7.3	Contractor's Representative (to be provided at contract award)
Name:	
Title:	
Organi	zation:
Addres	SS:
Teleph	one:
Facsim	ile:
E-mail	address
7.8	Proactive Disclosure of Contracts with Former Public Servants
Supera	viding information on its status, with respect to being a former public servant in receipt of a <u>Public Service</u> annuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on mental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy
•	: 2012-2 of the Treasury Board Secretariat of Canada.
7.9	Payment
7.9.1	Basis of Payment – Firm Price, Firm Unit Price(S) or Firm Lot Price(s)
will be	sideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor paid a firm price, as specified in Annex "B" for a cost of \$ Customs duties are insert and able Taxes are extra.



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.

# 7.9.2 Method of Payment

#### **Milestone Payments**

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract if:

- a. an accurate and complete claim for payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

# 7.10 Invoicing Instructions

Invoices shall be submitted using one of the following methods:

E-mail:		
nrcan.invoiceimaging-servicedimageriedesfactures.rncan@canada.ca		
Note: Attach "PDF" file. No other formats will be accepted		
OR		
<u>Fax:</u>		
Local NCR region: <b>613-947-0987</b> Toll-free: <b>1-877-947-0987</b>		
Note: Use highest quality settings available.		

Please do <u>not</u> submit invoices using more than one method as this will not expedite payment.

Invoices and all documents relating to a contract must be submitted on the Contractor's own form and shall bear the Contract number: \_\_\_\_\_

Invoicing Instructions to suppliers: <a href="http://www.nrcan.gc.ca/procurement/3485">http://www.nrcan.gc.ca/procurement/3485</a>

# 7.11 Certifications and Additional Information

## 7.11.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of



the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

#### 7.12 **Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

#### 7.13 **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) the supplemental general conditions 4007 (2010-08-16) Canada to Own Intellectual Property Rights in Foreground Information;
- c) the general conditions 2035 (2020-05-28), General Conditions Higher Complexity Services;
- d) Annex A, Statement of Work;
- e) Annex B, Basis of Payment; and
- f) the Contractor's bid dated \_\_\_\_\_.

#### 7.14 Foreign Nationals (Canadian Contractor OR Foreign Contractor)

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

OR

SACC Manual clause A2001C (2006-06-16) Foreign Nationals (Foreign Contractor)

#### 7.15 **Insurance**

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

#### 7.16 **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**

#### 1.0 TITLE

Assessment of Changes to Canadian Competitiveness in the Global Economy Stemming from Investments in High Accuracy, Real-time, GNSS Services

#### 2.0BACKGROUND

#### 2.1 Context

Canadian Geodetic Survey (CGS) in the Surveyor General Branch of Natural Resources Canada holds the mandate of addressing Canada's highest positioning needs. The recent emergence of autonomous technologies including tractors, lawn mowers, ships, cars and transport trucks has created a new level of importance for high accuracy, positioning information in real-time. Such technologies are creating unprecedented levels of efficiencies in operations and consequently are creating competitive advantages for those leveraging the technologies.

The primary source of positioning capabilities worldwide are Global Navigation Satellite Systems (GNSS) such as GPS (United States) and GALILEO (Europe). These systems typically provide a standard level of positioning service with an accuracy of several metres. By augmenting the satellite constellations with additional ground infrastructure, centimetre level positioning accuracies can be achieved in real-time.

Not surprisingly, some nations have begun investing in GNSS infrastructure and services to support the implementation of emerging technologies and the competitive advantages that they bring. For example:

- Australia announced in May of 2018 that it would be investing \$224.9 million into Geoscience Australia, including an initiative to make 10 cm positioning available throughout the nation.
- <u>Japan</u> has also made investments to make its Centimetre Level Augmentation Service available across the nation at no charge. It is anticipated that the technology will be leveraged by surveying, construction, agriculture, autonomous vehicles and other applications.
- Germany has invested in 270 ground stations to enable centimetre level positioning capabilities across the country.
- <u>Europe</u>: The European Global Navigation Satellite Systems Agency will be broadcasting free positioning corrections to enable 20 cm positioning through their Galileo High Accuracy Service.

A number of economic studies have been conducted worldwide to quantify the economic benefits that can be realized through high accuracy, GNSS positioning services. Some of these are listed in Section 8.1. Recently, CGS also issued a contract for an economic study to quantify the incremental benefits possible in the mining, agriculture, forestry, construction and road transport sectors. An incremental focus was taken since in some parts of Canada, high accuracy, GNSS positioning services already exist.

Although the aforementioned economic studies indicate significant economic benefits (in the order of billions of dollars), it is not clear what a Canadian investment would do improve Canadian competitiveness in the global



economy. It is also important to know if inaction may stagnate Canadian growth. Through this work, it is desired to illustrate how key Canadian sectors will rank in terms of competitiveness a) if the status quo continues and b) if government is to accelerate the growth of high, accuracy, GNSS positioning services with the intention of providing all of Canada with open access to ±4 cm horizontal and ±10 cm vertical real-time positioning.

#### 2.2 Current Economic Situation

(references are listed in Section 7.1)

It is forecast that 8 billion devices will have GNSS embedded by 2020. Positioning intelligence is helping to address fundamental "Where?" questions required by artificial intelligence decision-making algorithms. Not surprisingly, highly precise and accurate position information is regarded a key enabler for the digital economy. The global geospatial market that caters to providing positioning knowledge (e.g., GNSS & Positioning, Spatial Analytics, Earth Observation, 3D Scanning) is forecast to hit \$439.2 billion by 2020, growing at a rate of 13.6% per year. The GNSS & Positioning component, with which we are concerned in this study, constitutes 60% of this market (Figure 1).

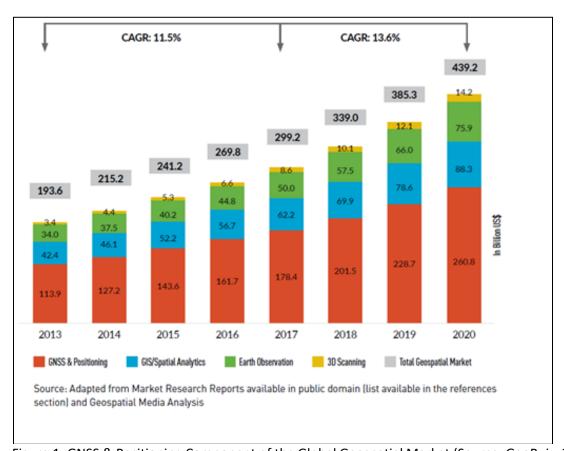


Figure 1: GNSS & Positioning Component of the Global Geospatial Market (Source: GeoBuiz, 2018)

# 2.3 Motivation

The initiatives of other nations mentioned in Section 2.1 have raised questions as to whether or not the Government of Canada Canadian should consider making similar investments into GNSS augmentation infrastructure that will



enable high accuracy, positioning services. It is clear in reviewing the documentation listed in Section 8.1 that tremendous economic opportunities exist. This work will help answer the critical question, "What would a Canadian investment in high accuracy, GNSS positioning services do to improve Canadian competitiveness in the global economy?"

#### 3.0 OBJECTIVES

The primary objective of this work is to inform the Government of Canada about how investments in high accuracy GNSS positioning infrastructure and services would impact Canadian competitiveness in key sectors of the global economy. The following sectors are of interest in this study:

- 1. Forestry
- 2. Mining
- 3. Transport-Road
- 4. Transport-Marine (option)

The sub-objectives of this work are:

- A. Provide a summary of the contributions of each sector to the Canadian economy and provide key sector statistics (size, growth rate, trends, percentage of GDP and other relevant information) to better understand investment opportunities.
- B. Perform a benchmark analysis on current state of a.) global competitiveness and b.) GNSS technology adoption so that future opportunities can be clearly defined.
- C. Engage stakeholders to quantify competitiveness opportunities and other considerations that may impact GNSS investments. This shall include *at least* five (5) stakeholders consultations for each sector with at least one from each of the following categories:
  - a. Agency or association with industry expertise (forestry example: Canadian Forestry Service, FP Innovations),
  - b. Large enterprise (greater than 250 employees) (forestry example: JD Irving Ltd, Canfor)
  - c. Provider of GNSS related technology to the sector (forestry example: PlusTech (TimberJack))
  - d. Academic expert (forestry example: Prof. Rien Visser)
- D. Quantify Canadian competitiveness gains that can be realized in the aforementioned sectors if all Canadians are provided access to ±4 cm horizontal and ±10 cm vertical, real-time positioning. The analysis should consider competitiveness factors (e.g., cost savings, increased productivity) that would not otherwise be realized without government investment. This shall be compared with the competitiveness of the following three (3) nations:
  - a. Australia
  - b. United States
  - c. China



- E. As a further economic benefit, quantify the potential impact on domestic firms which could supply and develop the technology needed to support competitiveness gains in the sectors of interest for this study.
- F. Summarize the sector findings so that a clear understanding is gained on the impacts of an investment in high accuracy, real-time, GNSS positioning.

## 4.0 SCOPE

This study will focus on quantifying the potential increase in Canadian competitiveness in key Canadian sectors by investing in high accuracy, GNSS positioning services. This study should attempt to take into account the competitiveness gains that would naturally happen by market forces without any investments by the Government of Canada.

# 5.0 DELIVERABLES, TASKS, MILESONES AND SCHEDULE

# 5.1 Reporting Requirements

A project kick off meeting will be held to review project requirements and address questions regarding deliverables. Project status meetings will be held weekly to address any issues that may arise. Deliverables will be discussed at the next project status meeting following a deliverable deadline.

- The proponent's project manager will be responsible for providing project status updates at each meeting.
   Updates shall include:
  - Progress since the last meeting
  - Risks or concerns
  - Near-term focus
- Project reporting tools should be used to provide clear indicators of timelines, progress, and milestones. Microsoft Project or similar software should be used to keep track of project progress.

## 5.2 Deliverables - Report

The report, at a minimum, should contain the following sections:

- i. <u>Background (1-2 pages)</u>: The following topics shall be addressed in the Background of the report.
  - a. Role of real-time positioning in the emergence of autonomous technologies
  - b. Emerging technologies
  - c. Global and Canadian Geospatial market size
  - d. Other national efforts to promote high accuracy, real-time GNSS positioning services
  - e. Other information deemed relevant
- ii. <u>Methodology for Competitiveness Analysis (1-2 pages)</u>: The methodology for assessing Canadian competitiveness shall be presented to illustrate that an accurate and objective analysis has been conducted. The methodology is critical for ensuring the validity of the results generated through this report. The proponent must demonstrate that results of this report are reliable and can be referred to as an authoritative



source of information.

When necessary, the proponent will engage with Canadian stakeholders to ensure that the Canadian analysis is accurate. Sourcing of relevant data to form sound conclusions should also be a key component of the methodology. Because the private sector has already made investments to enable high accuracy, GNSS positioning capabilities in parts of the country, it will be important to distinguish between competitiveness that would naturally happen under market forces and that which would be realized through Government of Canada investments.

Measures of economic benefits that could lead to increased competitiveness shall include but not be limited to:

- a. Productivity gains
- b. Cost reductions
- c. Avoided costs
- d. Value of time saved
- iii. <u>Sector Analyses (3-7 pages each)</u>: Sectors analyses shall be documented, meeting the aforementioned requirements. Proponents should provide costing options for conducting sector analyses on the three (3), four (4), and five (5) sectors mentioned.

## Important report deliverable notes:

- The report shall be provided in English.
- The report shall be no less than 25 pages.
- The report shall be made available to the general public.

#### 5.3 Deliverables - Presentation

A presentation shall be provided to promote the content of the report. In many cases, the presentation will be the only encounter that Government of Canada decision makers will have with the subject matter. A clear, concise and effective overview of the findings of this work is required in presentation form with original graphical work that will effectively portray key messages. The presentation shall be delivered as part of the final deliverables package.

#### <u>Important presentation deliverable notes:</u>

- The presentation shall be provided in English.
- The presentation shall be no less than 30 slides with original graphics
- The presentation shall be made available to the general public

# 5.4 Summary of Tasks, Deliverables and Schedule

Error! Reference source not found. summarizes the tasks, deliverables, and timeline for the project.

Date	Tasks/Activities	Deliverable
January 27, 2020	Project Kick-Off meeting	



March 10, 2021	Stakeholder engagement status	Presentation of key findings from	
	update presentation	stakeholders	
March 31, 2021	Provide first draft of a sector	A sector first draft	
June 16, 2021	Provide first draft of report	First Draft of report	
June 30, 2021	Provide first draft of slide deck	First draft of slide deck	
July 21, 2021	Final report, presentation and	Final draft of presentation and	
	close out presentation (MS	delivery	
	Teams, Zoom or other virtual		
	meeting)	Final draft of report	

# 5.5 Method and Source of Acceptance

All deliverables and services rendered under any contract are subject to inspection by the Project Authority. The Project Authority shall have the right to reject any deliverables that are not considered satisfactory, or require their correction before payment will be authorized.

## 6.0 OTHER TERMS AND CONDITIONS OF THE SOW

# 6.1 Contractor's Obligations

In addition to the obligations already outlined, the Contractor shall:

- i. keep all documents and proprietary information confidential;
- ii. return all materials belonging to NRCan upon completion of the Contract;
- iii. submit all written reports in PDF format;
- iv. attend meetings with stakeholders, if necessary;
- v. participate in teleconferences, as needed;
- vi. attend meeting at NRCan sites, if required; and/or,
- vii. maintain all documentation in a secure area.

# 6.2 NRCan's Obligations

To facilitate the contractor's work, NRCan shall:

- i. Provide access to relevant government and departmental policies and procedures, publications, reports, studies, etc. where needed.
- ii. Dedicate a staff member who will be available to coordinate activities with the contractor
- iii. Review draft reports and provide feedback in a timely manner
- iv. Provide other assistance or support as needed

## 6.4 Location of Work, Work Site and Delivery Point

The consultant will work from its own facilities. The consultant will be required to discuss the project with NRCan staff. Such meetings can be held by conference call or in person, as required. NRCan will not pay for any travel costs to meetings.



# 6.5 Language of Work

Written and oral communication between the consultant and NRCan staff will be in English.

# 7.0 REQUIRED RESOURCES OR TYPES OF ROLES TO BE PERFORMED

The following roles are to be included by the Contractor's resources. The project manager may be the same person as the economist or GNSS expert.

- i. <u>Senior Project Manager</u>: primary contact for NRCan's Project Authority. Responsible for overall execution of the contract (10+ years experience)
- ii. <u>Economist(s)</u>: responsible for performing the primary analysis for this contract (10+ years experience)
- iii. <u>GNSS expert</u>: responsible for providing perspective on current state of technology and future trends (10+ years experience)

#### 8.0 APPLICABLE DOCUMENTS AND GLOSSARY

# 8.1 Applicable Documents

Append any relevant background documents, drawings, specifications, samples or information which will be important to demonstrate what, how and when the work will need to be completed. Cross reference the documents back to the relevant Section(s) of the SOW in which they will apply (If not applicable, delete and renumber the following sub-section).

#### **Economic Studies:**

- i. Australia: The Value of Augmented GNSS in Australia ACIL Allen
- ii. United States: The Economic Value of GPS: Preliminary Assessment

## Value of GPS: Furthering the Analysis

- iii. Canada: Economic Impact Assessment of Positioning Infrastructure (provided as attachment)
- iv. GeoBuiz 2018
- v. GNSS Market Report

#### Other related material:

- vi. Geo++ Presentation on State Space Representation vs Observation Space Representation
- vii. NovAtel Introduction to GNSS
- viii. GNSS Princeton University

# 8.2 Relevant Terms, Acronyms and Glossaries

CGS: Canadian Geodetic Survey



Natural Resources

**GNSS**: Global Navigation Satellite System

**GoC**: Government of Canada

**GPS**: Global Positioning System

OSR: Observation Space Representation

PNT: Positioning, Navigation and Timing

PPP: Precise Point Positioning

RTK: Real-time Kinematic

SSR: State Space Representation

#### 8.3 **Augmented GNSS Concepts**

Global Navigation Satellite Systems (GNSS) (such as GPS) is the primary technology for providing real-time position information. In addition to position, GNSS also provides high accuracy navigation and timing information. Several nations have invested in GNSS constellations to enable position, navigation and timing (PNT) services. These include:

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- a. GPS (United States)
- b. GLONASS (Russia)
- c. GALILEO (European Union)
- d. BeiDou (China)
- e. NAVIC (India national focus)
- f. QZSS (Japan national focus)

These systems offer real-time position capabilities of a few metres in accuracy. Through modelling of GNSS error sources, positioning accuracy can be improved to sub-decimetre level accuracy.

GNSS error sources include:

- a. Satellite orbit information (ephemeris)
- b. Satellite clock errors
- c. Satellite signal biases
- d. Atmospheric errors (ionosphere and troposphere)

GNSS error sources can be modelled using ground based stations that actively measure observations from GNSS satellites using a GNSS receiver and antenna. Corrections can be calculated and broadcast to users via a communications satellite, internet or other telemetry option. The combination of ground stations, software, servers and other infrastructure used to enhance GNSS performance is referred to as GNSS augmentation infrastructure.

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GNSS observations consist of a precise carrier phase measurement enabling cm level positioning and a coarse code measurement enabling metre level positioning. The carrier phase measurement is modulated on the code measurement. Carrier phase observations require the number of cycles to be estimated between the satellite and the receiver since the receiver only tracks the last wavelength. Because of this extra estimation step, augmentation services intended for navigation (e.g., the Wide Area Augmentation Service – WAAS) typically rely upon the more robust code measurements and sacrifice achieving higher accuracy for increased reliability. Recent advances enabling instantaneous resolution of carrier phase ambiguity may indicate that carrier phase based services may eventually serve navigation applications like the guidance of autonomous vehicles.

A further classification of GNSS processing technologies is based upon whether or not error sources are derived as Observation Space Representations (OSR - typically derived using Differential GNSS positioning) or State Space Representations (SSR - used in Absolute GNSS positioning). For purposes of this study, benefits arising from both approaches can be considered since they both allow for sub 10 cm accuracy.

# **ANNEX "B" - BASIS OF PAYMENT**

(TO BE COMPLETED AT CONTRACT AWARD)



# **APPENDIX "1" - EVALUATION CRITERIA**

Bidders are advised to address these criteria in the following order and in sufficient depth in their proposals to enable a thorough assessment. NRCan's assessment will be based solely on the information contained within the proposal. NRCan may confirm information or seek clarification from bidders.

Bidders are advised that only listing experience without providing any supporting data to describe responsibilities, duties and relevance to the criteria will not be considered demonstrated for the purpose of this evaluation.

The Bidder should provide complete details as to where, when (month and year) and how (through which activities/ responsibilities) the stated qualifications/experience were obtained. Experience gained during formal education shall not be considered work experience. All criteria for work experience shall be obtained in a legitimate work environment as opposed to an educational setting. Co-op terms are considered work experience provided they are related to the required services.

Bidders are also advised that the month(s) of experience listed for a project whose time frame overlaps that of another referenced project will only be counted once. For example: project one time frame is July 2001 to December 2001; project two time frame is October 2001 to January 2002; the total months of experience for these two project references is seven (7) months.

## 1. Technical Criteria

#### 1.1 Mandatory Evaluation Criteria

The Mandatory Criteria listed below will be evaluated on a simple pass/fail basis. Proposals which fail to meet the mandatory criteria will be deemed non-responsive.

Criterion ID	Mandatory Criteria	Proposal Page #	Pass/Fail
M1	The Bidder <b>MUST</b> provide three (3) customer references for project summaries of work conducted in the past ten (10) years illustrating the Bidders's capacity to execute this project. The customer reference who must each confirm, when requested by Canada the information required by Mandatory Criterion M1 the facts identified in the Bidder's bid, as required by Mandatory Criterion M1.		
	Within each project summary (1 page maximum), bidders must indicate:		
	<ol> <li>the name of the client organization;</li> <li>a description of the scope of services provided;</li> <li>the dates and duration of the project;</li> <li>the dollar value of the project (to the Offeror);</li> <li>the name and role of each of the Offeror resources involved in the provision of media relations training services;</li> <li>the total Offeror level of effort for the duration of the project; and</li> <li>the name, address and telephone number of the client project authority to whom the Offeror reported.</li> </ol> NRCan may contact the named client project authorities to verify the accuracy and veracity of each of the Bidders cited Project Summaries.		
M2	Bidders <b>MUST</b> include curriculum vitae (CV) for each proposed resource named in their proposal. CVs shall clearly indicate how the experience requirements are met and shall include the following:		
	<ol> <li>A detailed description of the proposed resource's work experience (indicated in years/months)</li> <li>Educational and professional credentials</li> </ol>		

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# Evaluation of rated criteria

The criteria contained herein will be used by NRCan to evaluate each proposal that has met all of the mandatory criteria.

Proposals must achieve the stated minimum points required overall for the rated criteria to be assessed as responsive under the point rated technical criteria section; proposals not meeting the minimum required points will be deemed non-responsive.

Proposals will be evaluated based on the following criteria:

Criterion ID	Point Rated Technical Criteria	Minimum Points /Maximum Points	Proposal Page #
R1	Project Summaries	30	



	Each of the three (3) project summaries provided in response to Mandatory Requirement 1 will be evaluated for relevancy and applicability to NRCan's requirements  The Project Summaries will evaluated against the following factors:  Demonstration of experience as it pertains to NRCan's objectives as defined within the Statement of Work;  Large scale economic study (4 pts)  GeoSpatial market analysis (3 pts)		
	<ul> <li>Evidence that the described work was successful (e.g. on time, on budget, client satisfaction). (3 pts)</li> <li>Up to 10 points / project</li> </ul>		
R2	Resource Experience: Project Manager The proposed resource should demonstrate his/her experience in providing project management services.  2 points for each of the first 10 years of experience providing relevant project management services. 1 point for each additional year to a	30	
R3	maximum of 30 points  Resource Experience: Economist  The proposed resource should demonstrate his/her experience in providing national and international economic analysis across many sectors  2 points for each of the first 10 years of experience providing relevant project management services. 1 point for each additional year to a	30	
R4	maximum of 30 points  Resource Experience: GNSS Expert  The proposed resource should demonstrate his/her experience in providing in providing GNSS expertise  2 points for each of the first 10 years of experience providing relevant	30	
	project management services. 1 point for each additional year to a maximum of 30 points  Total points	120	



# **APPENDIX "2" - FINANCIAL PROPOSAL FORM**

# 1. Firm Price - Milestone Payments

Bidder tendered all-inclusive firm price to perform the work is in Canadian funds, applicable taxes excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

Milestone #	Description of Milestone	Firm Price (Applicable Taxes Excluded)
1	Provide first draft of a sector – 50% of overall contract value  March 31, 2021	\$
2	Final report – 50% of overall contract value July 21, 2021	\$
	Total Firm Price for Financial Proposal Evaluation:	\$