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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.

By signing its bid, the bidder confirms that they have read the entire bid solicitation including the documents incorporated by reference into the bid solicitation and certifies that:

1. The Bidder considers itself and its proposed resources able to meet all the mandatory requirements described in the bid solicitation;
2. This bid is valid for the period requested in the bid solicitation;
3. All the information provided in the bid is complete, true and accurate; and
4. If the Bidder is awarded a contract, it will accept all the terms and conditions set out in the resulting contract clauses included in the bid solicitation.



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, Financial and Other Requirements: includes specific requirements that must be addressed by Bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work, the Basis of Payment and Task Authorization Form.

The Appendixes include Appendix “1” – Evaluation Criteria and Appendix “2” – Financial Bid Presentation.

1.2 Summary

- 1.2.1 By means of the RFP, Natural Resources Canada (NRCan) is seeking proposals from bidders in response to this requirement “Geospatial Web Harvester Development and Operations.” This work will advance filtering methodologies to increase the relevancy of geospatial web service catalogue content, broaden endpoint services, and develop a catalogue harvesting framework that can serve as a procedural guideline for future SDI implementations both in Canada and internationally.

NRCan is looking to award up to two (2) Contracts under Stream 1 and up to three (3) Contracts under Stream 2.

Stream 1 – Provide access to an operational (subscription-based) Commercial Off The Shelf (COTS) geospatial Web services/API harvester¹ automated solution and deliver weekly catalogues to NRCan and partners (e.g. federal departments, standards bodies (e.g. Open Geospatial Consortium OGC), International Organization for Standardization (ISO), International Hydrographic Organization (IHO), World Meteorological Organization (WMO), World Wide Web Consortium (W3C), United Nations Global Geospatial Information Management (UN-GGIM)), and project partners (Arctic Council working groups, Arctic SDI communities, Arctic Data Committee, Canadian Consortium for Arctic Data Interoperability (CCADI)) for publication. Stream 1

¹ Web harvesting is defined in the section *Statement of Work – Glossary of the RFP*.



Contractor(s) will work with NRCan project authority (taskings) to implement harvester refinement solutions proposed by Stream 2 Contractor(s).

Stream 2 – Refine existing methodologies and explore new solutions for automatically harvesting, cataloguing, validating, filtering, and publishing geospatial Web services/APIs. Methodologies will be shared with Stream 1 Contractor(s) to implement.

- 1.2.2 This bid solicitation is to establish a contract (with task authorizations) for the delivery of the requirement detailed in the bid solicitation to the Identified Users across Canada, excluding locations within Yukon, Northwest Territories, Nunavut, Quebec, and Labrador that are subject to Comprehensive Land Claims Agreements (CLCAs). Any requirement for deliveries within CLCAs areas within Yukon, Northwest Territories, Nunavut, Quebec, or Labrador will have to be treated as a separate procurement, outside the resulting contract.
- 1.2.3 The Federal Contractors Program (FCP) for employment equity applies to this procurement; refer to Part 5 – Certifications and Additional Information, Part 7 - Resulting Contract Clauses and the annex titled Federal Contractors Program for Employment Equity - Certification.
- 1.2.4 This bid solicitation allows bidders to use the CPC Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within fifteen (15) working days from receipt of the results of the bid solicitation process. The debriefing 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 [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-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 the bid solicitation and accept the clauses and conditions of the resulting contract.

The [2003](#) (2023-06-08) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

- **In the complete text content (except Section 1 and 3)**
Delete: "Public Works and Government Services Canada" and "PWGSC"
Insert: "Natural Resources Canada." and "NRCan"

- **At 02 Procurement Business Number:**
Delete: "Suppliers are required to"
Insert: "It is suggested that suppliers"

- **At 08 Transmission by facsimile or by Canada Post Corporation's (CPC) Connect service, article 1:**
Delete: in its entirety

- **At 08 Transmission by facsimile or by Canada Post Corporation's (CPC) Connect service, article 2a:**
Delete: : The only acceptable email address to use with CPC Connect for responses to bid solicitations issued by PWGSC headquarters is: [tps-gc.pareceptiondessaoumissions-apbidReceiving.pwgsc@tps-gc-pwgsc.gc.ca](mailto:tpsgc.pareceptiondessaoumissions-apbidReceiving.pwgsc@tps-gc-pwgsc.gc.ca). or, if applicable, the email address identified in the bid solicitation.
Insert: The only acceptable email address to use with CPC Connect for responses to bid solicitation issued by NRCan is: procurement-approvisionnement@NRCan-RNCan.gc.ca

- **At 08, Transmission by facsimile or by Canada Post Corporation's (CPC) Connect service, article 2b:**
Delete: "six business days"
Insert: "five business days"

- **At 20, Further information, article 2b:**
Delete: in its entirety

Subsection 5.4 of [2003](#), Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 180 business days



2.2 Submission of Bids

Bidders must submit all proposals using the Canada Post Canada (CPC) Connect service. 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.

Bids must be submitted no later than the date and time indicated on page 1 of the bid solicitation.

Only bids submitted using CPC Connect service will be accepted.

At least five (5) business days before the bid solicitation closing date, it is necessary for the Bidder to send an email requesting to open CPC Connect conversation to the following address:

procurement-provisionnement@NRCan-RNCan.gc.ca

Note 1: Bids will not be accepted if e-mailed directly to this address. This e-mail address is to be used to open CPC Connect conversation, as detailed in the Standard Instructions [2003 \(article 08, paragraph 2\)](#), or to send bids through CPC Connect message if the bidder is using its own licensing agreement for CPC Connect.

Note 2: Send as early as possible in order to ensure a response, Requests to open a CPC Connect conversation received after that time may not be answered.

IMPORTANT: It is requested that you write the bid solicitation number in "Subject" of the email:

NRCan-5000072834B - Geospatial Web Harvester Development and Operations

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

The onus is on the Bidder to ensure that the bid is submitted correctly using CPC Connect service. Not complying with the 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.

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

2.3 Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts 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 [Financial Administration Act](#), R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

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

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

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

Former Public Servant in Receipt of a Pension

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

If so, the Bidder must provide the following information, for all FPSs 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: 2019-01](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

Work Force Adjustment Directive

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



If so, the Bidder must provide the following information:

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

2.4 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than **five (5)** business days before the bid closing date. Enquiries received after that time may not be answered.

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

2.5 Applicable Laws

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

2.6 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least five (5) business days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.



2.7 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 *Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts*

1. Where the main purpose of the Crown Procurement Contract, or the deliverables contracted for, is:
 - To generate knowledge and information for public dissemination.

2.8 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
 - Office of the Procurement Ombudsman (OPO)
 - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.



PART 3 – BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

- The Bidder must submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. The CPC Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

Canada requests that the Bidder submits its bid in separately saved documents as follows:

- Section I: Technical Bid
- Section II: Financial Bid
- Section III: Certifications
- Section IV: Additional Information

If the Bidder is simultaneously providing copies of its bid using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy provided through CPC Connect service, the wording of the electronic copy provided through CPC Connect service will have priority over the wording of the other copies.

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

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573) (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). To assist Canada in reaching its objectives, bidders should:

- 1) Include all environmental certification(s) relevant to your organization (e.g., ISO 14001, Leadership in Energy and Environmental Design (LEED), Carbon Disclosure Project, etc.)
- 2) Include all environmental certification(s) or Environmental Product Declaration(s) (EPD) specific to your product/service (e.g., Forest Stewardship Council (FSC), ENERGYSTAR, etc.)

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 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

3.1.1 Bidders must submit their financial bid in accordance with the Financial Bid Presentation Sheet (in Appendix "2").

3.1.2 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

4.1.2.1 Mandatory Financial Criteria

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

4.2 Basis of Selection

4.2.1 Highest Rated Within A Budget – Stream 1 only

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation; and
 - b. meet all mandatory criteria

In the event of a tie from the Basis of Selection, the Bidder scoring the highest against Point-Rated (R6) will be recommended for Contract award.

Bids not meeting (a) or (b) will be declared non responsive. The responsive bid with the highest number of points will be recommended for award of a contract, provided that the total evaluated price does not exceed the maximum funding available for this requirement.

4.2.2 Highest Combined Rating of Technical Merit and Price – Stream 2 only

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation; and
 - b. meet all mandatory technical evaluation criteria

The rating is performed on a scale of 69 points.

In the event of a tie from the Basis of Selection, the Bidder scoring the highest against Point-Rated (R4) will be recommended for Contract award.



2. Bids not meeting (a) or (b) 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 70/30 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 Technical Score		115/135	89/135	92/135
Bid Evaluated Price		\$55,000.00	\$50,000.00	\$45,000.00
Calculations	Technical Merit Score	$115/135 \times 70 = 59.63$	$89/135 \times 70 = 46.15$	$92/135 \times 70 = 47.70$
	Pricing Score	$45/55 \times 30 = 24.55$	$45/50 \times 30 = 27$	$45/45 \times 30 = 30$
Combined Rating		84.18	73.15	77.70
Overall Rating		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, all bidders must provide with their bid, **if applicable**, the Integrity declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.1.2 Additional Certifications Required with the Bid

5.1.2.1 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 which Aboriginal persons have at least 51 percent ownership and control,

OR

- b. A joint venture consisting of two or more Aboriginal businesses or an Aboriginal business and a non-Aboriginal business(es), provided that the Aboriginal business(es) has at least 51 percent ownership and control of the joint venture.

When an Aboriginal business has six or more full-time employees at the date of submitting the bid, at least thirty-three percent of them must be Aboriginal persons, and this ratio must be maintained throughout the duration of the contract.



The supplier must certify in its submitted bid that it is an Aboriginal business or a joint venture constituted as described above.

- Our Company is NOT an Aboriginal Firm
- Our Company is an Aboriginal Firm, as identified above.

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 [Ineligibility and Suspension Policy \(http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html\)](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html), the Bidder must provide the required documentation, as applicable, to be given further consideration 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/Board of Directors:

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 [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.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex [titled Federal Contractors Program for Employment Equity - Certification](#), before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

5.2.3 Additional Certifications Precedent to Contract Award

5.2.3.1 Status and Availability of Resources

SACC Manual clause [A3005T](#) (2010-08-16) Status and Availability of Resources

5.2.3.2 Education and Experience

SACC Manual clause [A3010T](#) (2010-08-16) Education and Experience



5.2.3.3 Former Public servant

<p>Former Public Servants</p> <p>See the Article in Part 2 of the bid solicitation entitled Former Public Servant for a definition of "Former Public Servant".</p>	<p>Is the Bidder a FPS in receipt of a pension as defined in the bid solicitation?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, provide the information required by the Article in Part 2 entitled "Former Public Servant"</p>
	<p>Is the Bidder a FPS who received a lump sum payment under the terms of the Work Force Adjustment Directive?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, provide the information required by the Article in Part 2 entitled "Former Public Servant"</p>

SIGNATURE for CERTIFICATION

The Contractor certifies having read and understood the information included in the present document and acknowledges receipt.

Name

Date

Signature of Authorized Representative



PART 6 – SECURITY, FINANCIAL AND OTHER REQUIREMENTS

6.1 Security Requirements

There are no security requirements associated with this procurement.



PART 7 - RESULTING CONTRACT CLAUSES

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

7.1 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex "A" and the Contractor's technical bid entitled _____, dated _____. (*to be completed at contract award*)

7.1.1 Task Authorization

The Work or a portion of the Work to be performed under the Contract will be on an "as and when requested basis" using a Task Authorization (TA). The Work described in the TA must be in accordance with the scope of the Contract.

7.1.1.1 Task Authorization Process

The Work or a portion of the Work to be performed under the Contract will be on an "as and when requested basis" using a Task Authorization (TA). The Work described in the TA must be in accordance with the scope of the Contract.

1. The Project Authority will provide the Contractor with a description of the task using the "Task Authorization" form specified in Annex "C".
2. The Task Authorization (TA) will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The TA will also include the applicable basis(bases) and methods of payment as specified in the Contract.
3. The Contractor must provide the Project Authority within **seven (7)** calendar days of its receipt, the proposed total estimated cost for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract.
4. The Contractor must not commence work until a TA authorized by the **Contracting Authority** has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been received will be done at the Contractor's own risk.

7.1.1.2 Task Authorization Limit

The Project Authority may authorize individual task authorizations up to a limit of **\$0.00**, Applicable Taxes included, inclusive of any revisions.

Any task authorization to be issued in excess of that limit must be authorized by the Contracting Authority before issuance.



7.1.1.3 Minimum Work Guarantee - All the Work - Task Authorizations (Stream 2 only)

1. In this clause,

"**Maximum Contract Value**" means the amount specified in the "Limitation of Expenditure" clause set out in the Contract; and

"**Minimum Contract Value**" means 5% of the Maximum Contract Value;

2. Canada's obligation under the Contract is to request Work in the amount of the Minimum Contract Value or, at Canada's option, to pay the Contractor at the end of the Contract in accordance with paragraph 3. In consideration of such obligation, the Contractor agrees to stand in readiness throughout the Contract period to perform the Work described in the Contract. Canada's maximum liability for work performed under the Contract must not exceed the Maximum Contract Value, unless an increase is authorized in writing by the Contracting Authority.
3. In the event that Canada does not request work in the amount of the Minimum Contract Value during the period of the Contract, Canada must pay the Contractor the difference between the Minimum Contract Value and the total cost of the Work requested.
4. Canada will have no obligation to the Contractor under this clause if Canada terminates the Contract in whole or in part for default.

7.1.1.4 Periodic Usage Reports - Contracts with Task Authorizations

The Contractor must compile and maintain records on its provision of services to the federal government under authorized Task Authorizations issued under the Contract.

The Contractor must provide this data in accordance with the reporting requirements detailed below or in Annex "C". If some data is not available, the reason must be indicated. If services are not provided during a given period, the Contractor must still provide a "nil" report.

The data must be submitted on a quarterly basis to the Contracting Authority.

The quarterly periods are defined as follows:

1st quarter: April 1 to June 30;

2nd quarter: July 1 to September 30;

3rd quarter: October 1 to December 31; and

4th quarter: January 1 to March 31.

The data must be submitted to the Contracting Authority no later than **fifteen (15)** calendar days after the end of the reporting period.

Reporting Requirement- Details



A detailed and current record of all authorized tasks must be kept for each contract with a task authorization process. This record must contain:

For each authorized task:

- i. the authorized task number or task revision number(s);
- ii. a title or a brief description of each authorized task;
- iii. the total estimated cost specified in the authorized Task Authorization (TA) of each task, exclusive of Applicable Taxes;
- iv. the total amount, exclusive of Applicable Taxes, expended to date against each authorized task;
- v. the start and completion date for each authorized task; and
- vi. the active status of each authorized task, as applicable.

For all authorized tasks:

- i. the amount (exclusive of Applicable Taxes) specified in the contract (as last amended, as applicable) as Canada's total liability to the contractor for all authorized TAs; and
- ii. the total amount, exclusive of Applicable Taxes, expended to date against all authorized TAs.

7.2 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (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

2010B (2022-12-01), General Conditions - Medium Complexity – Professional Services, apply to and form part of the Contract. [If 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 (2022-12-01), Canada to Own Intellectual Property Rights in Foreground Information apply to and form part of the Contract

7.3 Security Requirements

7.3.1 There is no security requirement applicable to the Contract.



7.4 Term of Contract

7.4.1 Period of the Contract

The period of the Contract is from date the Contract is awarded for a total period of one (1) year (*date to be inserted at Contract award*).

7.4.2 Option to Extend the Contract

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to three (3) additional one-year period(s) under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor at least five (5) calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

7.5 Authorities

7.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: **Raymond Thai**
Title: Procurement Specialist
Organization: Natural Resources Canada
Address: 580 Booth Street, Ottawa, ON K1A 0E4
Telephone: 343-543-7427
E-mail address: raymond.thai@NRCan-RNCan.gc.ca

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

7.5.2 Project Authority

The Project Authority for the Contract is:

Name: _____ (*to be filled out at contract award*)
Title: _____
Organization: _____
Address: _____
Telephone: ____ - ____ - ____
E-mail address: _____

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority; however, the Project Authority



has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

7.5.3 Contractor's Representative

Name: _____ (to be filled out at contract award)

Title: _____

Organization: _____

Address: _____

Telephone: ____ - ____ - _____

E-mail address: _____

7.6 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 [Public Service Superannuation Act](#) (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 [Contracting Policy Notice: 2019-01](#) of the Treasury Board Secretariat of Canada.

7.7 Payment

7.7.1 Basis of Payment - Firm Price – Stream 1

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price, as specified in Annex "B" for a cost of \$ _____ (to be provided at contract award). Customs duties are included and Applicable 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.

7.7.1.1 Additional Work under Task Authorization Process – Stream 1

Basis of Payment - see Section 7.7.2

7.7.2 Basis of Payment - Firm Unit Price(s) or Firm Lot Price - Task Authorizations – Stream 2 and Stream 1 (if applicable)

In consideration of the Contractor satisfactorily completing all of its obligations under the authorized Task Authorization (TA), the Contractor will be paid the firm unit price(s), in Annex "B", as specified in the authorized TA. Customs duties are included and Applicable Taxes are extra.

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



7.7.2.1 Limitation of Expenditure - Cumulative Total of all Task Authorizations – Stream 2 and Stream 1 (if applicable)

1. Canada's total liability to the Contractor under the Contract for all authorized Task Authorizations (TAs), inclusive of any revisions, must not exceed the sum of \$ _____ *(to be provided at contract award)*. Customs duties are included and Applicable Taxes are extra.
2. No increase in the total liability of Canada will be authorized or paid to the Contractor unless an increase has been approved, in writing, by the Contracting Authority.
3. 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 sum is inadequate for the completion of the Work required in all authorized TAs, inclusive of any revisions, whichever comes first.
4. 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.

7.7.3 Method of Payment

Single Payment – Stream 1 only

Canada will pay the Contractor upon completion and delivery of the Work in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all such documents have been verified by Canada;
- c. the Work delivered has been accepted by Canada.

Monthly Payment – Stream 2 and Stream 1 (if applicable)

Canada will pay the Contractor on a monthly basis for work performed during the month covered by the invoice in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all such documents have been verified by Canada;
- c. the Work performed has been accepted by Canada.



7.8 Invoicing Instructions

Invoices shall be submitted using **the following method:**

E-mail:

Invoicing-Facturation@nrcan-rncan.gc.ca

Note: Attach "PDF" file. No other formats will be accepted

Invoices and all documents relating to a contract must be submitted on the Contractor's own form and shall bear the Contract number: _____ (to be filled out at contract award) and the Task Authorization number.

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

7.9 Certifications and Additional Information

7.9.1 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.

7.9.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

7.10 Applicable Laws

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

7.11 Priority of Documents

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

- (a) the Articles of Agreement;



- (b) the supplemental general conditions **4007** (2022-12-01) - Canada to Own Intellectual Property Rights in Foreground Information);
- (c) the general conditions **2010B** (2022-12-01), Medium Complexity – Professional Services;
- (d) Annex A, Statement of Work;
- (e) Annex B, Basis of Payment;
- (f) the signed Task Authorizations (including all of its annexes, if any) (*Stream 1 (if applicable) and Stream 2*);
- (g) the Contractor's bid dated _____, (*to be provided at the time of contract award*)

7.12 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)

7.13 Insurance - No Specific Requirement

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.

7.14 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "[Dispute Resolution](#)".



ANNEX “A” – STATEMENT OF WORK

1. TITLE

Geospatial Web Services Harvester Development and Operations

2. GLOSSARY

Geospatial service endpoint: An ‘endpoint’ is the URL of a service, for example an Application Programming Interface (API) call, an Open Geospatial Consortium – Web Mapping Service (OGC-WMS) ‘GetCapabilities’ request or a geospatial catalogue access point.

Geospatial Web services: Self-contained, self-describing, modular applications that can be published, located and invoked across the Web. Web services perform functions that can be anything from simple requests to complicated business processes. Once a Web service is deployed, other applications, and other Web services, can discover and invoke the deployed service². The scope is geospatial (geomatics) Web services, i.e. Web services that contain or process spatial data originating from geographic information systems, earth observation or other data that have records explicitly encoded with space and time fields.

Web harvesting: Web harvesting is defined as the end-to-end process of automatic, periodic, discovery of geospatial Web services to catalogue structured service level and/or data level metadata. The categorization of information captured in the catalogue is performed with automated regional and thematic filters, typically using Machine Learning or Artificial Intelligence techniques.

3. BACKGROUND

Natural Resources Canada (NRCan) leads the development of Spatial Data Infrastructures (SDI) through geospatial innovation and standards development. The Canadian Geospatial Data Infrastructure³ (CGDI) represents Canada’s national SDI. Collaboration among national and international partners is key to the development of successful SDI implementations. Canada, via NRCan, participates in SDI activities in the Arctic allowing access to interoperable data and tools supporting monitoring and decision making.

Access to open, standards-based geospatial tools and data are foundational facets of successful SDI implementation. Data catalogues provide access to valuable geospatial content; however, they have traditionally been labour intensive to create and maintain. NRCan works closely with its partners to facilitate access to geospatial data via standards-based Web services through the development of evergreen catalogues. The concept of evergreen catalogues ensures that content (data and services) are current through automatic and regularly scheduled updates.

Standards make Web services FAIR (Findable, Accessible, Interoperable and Reusable). NRCan’s GeoConnections Program has introduced the concept of [FAIR+](#), an extension to the traditional principles which fosters geospatial innovation through automation and accessibility of data and tools to ALL users (including those with visual challenges and users in remote communities with limited bandwidth). Through standardized processes, Web service catalogues facilitate accessibility of geospatial data and tools. The

² Definition derived from the Arctic SDI Glossary of Terms (Appendix 3 in the [Spatial Data Infrastructure Manual for the Arctic](#)).



production and archiving of weekly catalogues provide an opportunity to monitor the collective endorsement of standards in the geospatial community over time.

One of NRCan's requirements is the ability to derive evergreen catalogues from Web harvester solutions that represent user-defined thematic (e.g. metadata filters for flooding) and geographic extent criteria (e.g. geographic regions of Canada or the international Arctic).

Web harvesting is defined as the end-to-end process of automatic, periodic, discovery of geospatial Web services to catalogue structured service level and/or data level metadata. The categorization of information captured in the catalogue is performed with automated regional and thematic filters, typically using Machine Learning or Artificial Intelligence techniques (see the section *Statement of Work – Glossary* of the RFP). The resulting catalogue shall be published weekly and will have API interface(s) so others can harvest data from the catalogue. The operational process is fully automated with no human input required.

List of Web services that are in scope:

- OGC compliant services instances: OGC-compliant service types (Web Coverage Service, Web Feature Service, Web Map Context, Web Map Service, Web Map Tile Service, Sensor Observation Service, Web Processing Service, Temporal Service(s), and/or GeoPackage).
- ESRI services instances: ESRI ArcGIS REST service types, which could include Image, Feature, Map, and/or Metadata ([link](#))
- OGC APIs as listed at <https://ogcapi.ogc.org/>.
- Earth Observation (EO) data management standards (Spatio Temporal Asset Catalogue (STAC)).
- Schema.org - A collaborative, community activity with a mission to create, maintain, and promote schemas for structured data on the internet.
- Other discoverable APIs and spatial Web services including organizational standards; and (International Organization for Standardization (ISO), International Hydrographic Organization (IHO), World Meteorological Organization (WMO)).

Dependence on the quality of Web service metadata records represents the biggest challenge to the successful creation of these catalogues. Metadata records that are incomplete or misrepresent the geographic boundary or thematic content of a Web service inhibit the creation of robust catalogues that meet user needs. NRCan endeavours to advance filtering and validation processes to increase user confidence in catalogue content. Additionally, there is a need to evolve metadata quality by exploiting service/Application Programming Interface (API) and/or data-level metadata to automatically update metadata records based on information derived from source content.

To date, NRCan has contributed to the development and operationalization of evergreen geospatial Web services catalogues for Canada and the Arctic. These catalogues act as brokers providing a database of information to describe available services to the user. They are founded on machine learning automation to exploit service-level metadata to identify services that are relevant to the geographic boundaries of Canada and the Arctic.

4. OBJECTIVES

This work will advance automated discovery and filtering methodologies to increase the relevancy of geospatial Web service catalogue content, broaden endpoint services, and develop a catalogue harvesting⁴

⁴ Web harvesting is defined in the section *Statement of Work – Glossary* of the RFP.



framework that can serve as a procedural guideline for future SDI implementations both in Canada and internationally.

5. INTENT

There are two (2) streams to NRCan's work in this domain that best support national and regional SDI implementations: (1) Automated discovery and monitoring of geospatial Web services and (2) Refinement of geospatial Web services/APIs harvester automated solutions. These streams ensure access to operational harvester solutions and the creation of evergreen catalogues for inclusion in established SDIs while supporting parallel harvester refinement processes.

Detailed description of the two (2) streams:

Stream 1 is the operations of the weekly Web harvester process and catalogue updates. Stream 2 is research and development of next generation automated Web harvesting techniques. Results from Stream 2 will inform Stream 1 towards iterative operational deployments.

Stream 1 – Provide access to an operational (subscription-based) Commercial Off The Shelf (COTS) geospatial Web services/API harvester⁵ automated solution and deliver weekly catalogues to NRCan and partners (e.g. federal departments, standards bodies (e.g. Open Geospatial Consortium OGC), International Organization for Standardization (ISO), International Hydrographic Organization (IHO), World Meteorological Organization (WMO), World Wide Web Consortium (W3C), United Nations Global Geospatial Information Management (UN-GGIM)), and project partners (Arctic Council working groups, Arctic SDI communities, Arctic Data Committee, Canadian Consortium for Arctic Data Interoperability (CCADI)) for publication. Stream 1 Contractor(s) will work with NRCan project authority (taskings) to implement harvester refinement solutions proposed by Stream 2 Contractor(s).

Stream 2 – Refine existing methodologies and explore new solutions for automatically harvesting, cataloguing, validating, filtering, and publishing geospatial Web services/APIs. Methodologies will be shared with Stream 1 Contractor(s) to implement.

6. STREAM 1 PROJECT REQUIREMENTS - Discovery and Monitoring of Geospatial Web Services

6.1. Automatic harvesting of geospatial Web services/APIs endpoints:

The Contractor(s) **MUST** provide an existing and operational Commercial Off The Shelf (COTS) geospatial Web service/API harvesting solution.

6.1.1. The Contractor(s) Web service/API harvesting solution **MUST** identify endpoints⁶ to as many relevant geospatial services, service types and APIs as possible, including (but not limited to):

- 6.1.1.1 OGC-compliant service types (Web Coverage Service, Web Feature Service, Web Map Context, Web Map Service, Web Map Tile Service, Sensor Observation Service, Web Processing Service, Geopackage);
- 6.1.1.2 GIS service instances (e.g. ArcGIS REST services);
- 6.1.1.3 OGC APIs as listed at <https://ogcapi.ogc.org/>;
- 6.1.1.4 Earth Observation (EO) data management standards (e.g. Spatio Temporal Asset Catalogue (STAC));

⁵ Web harvesting is defined in the section *Statement of Work – Glossary* of the RFP.

⁶ Endpoint is defined in the section *Statement of Work – Glossary* of the RFP.



- 6.1.1.5 Schema.org - A collaborative, community activity with a mission to create, maintain, and promote schemas for structured data on the internet;
- 6.1.1.6 Discoverable APIs and spatial Web services including organizational standards (e.g ISO, IHO);
- 6.1.1.7 Other discoverable APIs and Web services and future standards as they evolve.

6.2. Functionality for the Contractor(s) Web service/API harvesting solution

6.2.1. The Contractor(s) Web service/API harvesting solution **MUST**:

- 6.2.1.1. Support multilingual content;
- 6.2.1.2. Flag services that are deemed unavailable for a measure of time (e.g. one week). **If requested**, the Contractor(s) **MUST** perform health and relevancy checks on services available for inclusion in the derived catalogues; and
- 6.2.1.3. Include a method to derive catalogues from the Contractor(s) that are regularly updated. Current examples include the [CGDI resource centre catalogue](#) and [Arctic SDI Metadata Catalogue](#).

6.2.2. The Contractor(s) Web service/API harvesting solution **MUST** support the implementation of software enhancements to:

- 6.2.2.1. Implement a ranking system to identify relevant data and their services. Examples include geographic extent, thematic interests, versioning, projection, service availability, etc.
- 6.2.2.2. Implement solutions that could stem from Stream 2 (see requirements in section 5).

6.2.3. The Contractor(s) **MUST** ensure that automated harvester⁷ solutions employed to monitor the presence of geospatial APIs and Web services **are not** identified as a denial-of-service attack by the host organization and the frequency of the monitoring process **does not** result in the disruption of host services. If the COTS solution implemented by the Contractor(s) results in real or perceived denial of service attacks, the Contractor(s) **MUST** implement mechanisms to mitigate those impacts.

6.3. Communications and Outreach

6.3.1. Create reports, presentations, and papers

- 6.3.1.1. The Contractor(s) **MUST** provide a report and presentation detailing the activities completed. Annual end of year (April 1 - March 31st) reporting will also provide detail of the activities completed, challenges encountered, and planned upcoming activities; and
- 6.3.1.2. The Contractor(s) **MUST** document methodology developed under this contract(s) and open-source development of the harvester for sharing in a public repository (e.g. GitHub) and/or refereed journals. This shall include future development of QGIS extensions.

6.3.2. Contractor(s) hosted virtual workshops for consultations, training, or awareness

⁷ Web harvesting is defined in the section *Statement of Work – Glossary of the RFP*.



6.3.2.1. The contractor **MUST** initiate consultations with geospatial partners (e.g. private, academic and government) and international standards bodies (e.g. OGC, W3C, ISO) to develop user requirements for methodology refinement, to validate the standards included in the harvesting process, and initiate training model workshops.

6.3.3. Contractor(s) communication

6.3.3.1. The Contractor(s) **MUST** regularly perform outreach and communications with NRCan's partners (e.g. federal departments, standards bodies, and project partners (Arctic Council working groups and Arctic SDI communities) in regards to project activities;

6.3.3.2. The Contractor(s) **MUST** communicate and collaborate with subject matter experts and standards body domain working groups (e.g. OGC Quality of Service and Experience Domain Working Group) will ensure this project influences and contributes to open standards development;

7. STREAM 2 PROJECT REQUIREMENTS – Geospatial Web services/API harvester refinement

Specific requirements shall be outlined within individual task authorizations submitted to the Contractor(s) throughout the duration of the contract(s). Below, NRCan outlines the nature of the requirements that may appear within a given Task Authorization (TA), but are not limited to.

7.1. Automatic harvesting of geomatics portals/Websites:

The Contractor(s) **MUST** develop a design plan to connect to geomatics portals, which house structured metadata using known standards (e.g. Catalogue Service for the Web (CSW)). Examples of these Websites or portals include the [Federal Geospatial Platform \(FGP\)](#), [National Forest Information System \(NFIS\)](#), [Arctic SDI](#), [Arctic Council Conservation of Arctic Flora and Fauna \(CAFF\)](#). This will be one method to harvest portals/Websites into evergreen catalogues based on user-defined thematic (e.g. metadata filters for flooding) and geographic extent criteria (e.g. geographic regions of Canada or the international Arctic). This design plan will be presented to the NRCan project team for approval.

7.1.1. The Contractor(s) **MUST** ensure that an automated ~~Web harvester~~⁸ ~~crawler~~ solution employed to monitor the presence of geospatial portals/Websites is not identified as a denial-of-service attack by the host organization and the frequency of the monitoring process does not result in the disruption of host services. If the solution implemented by the Contractor(s) results in real or perceived denial of service attack, the Contractor(s) **MUST** implement mechanisms to mitigate those impacts.

7.2. Enhanced validation of data from geospatial Web services/APIs

Example solutions to enhance data and service relevancy may employ machine learning, other components of artificial intelligence, or other methods to ascertain data confidence and validate the representation of these services (see requirement 4.1.1.) with respect to specifications outlined by

⁸ Web harvesting is defined in the section *Statement of Work – Glossary of the RFP*.



NRCan. A rating system will be used to present the user an assessment of the level of confidence that the geospatial Web service/API is representative of NRCan's specifications.

- 7.2.1. The Contractor(s) **MUST** refine and evolve existing methodologies to identify and track geospatial Web service/API outlined in Stream 1 (see requirements in section 4);
- 7.2.2. The Contractor(s) **MUST** develop a reverse lookup methodology (see requirement 4.1.1) to validate data content (e.g. theme, geographic location) against service/API level metadata;
- 7.2.3. The Contractor(s) **MUST** propose solutions for tracking changes to geospatial Web services/APIs and underlying data over time; and
- 7.2.4. The Contractor(s) **MUST** provide periodic (schedule to be defined by NRCan) national/regional trend reports regarding the state and health of Web services for Canada and the international Arctic. (See requirement 6.3.2.).

7.3. Improvement of geospatial Web service metadata quality

A significant challenge to the implementation of geospatial Web services catalogues is the dependency on service-level metadata records that are often incomplete or not fully representative of the geographic location/ thematic representation of the layers represented.

- 7.3.1. The Contractor(s) **MUST** explore solutions to exploit Web service and/or data-level metadata to automatically update metadata records based on information derived from source content; and
- 7.3.2. The Contractor(s) **MUST** consult with the OGC community. It is expected that the Contractor(s) will foster the improvement of metadata quality through the initiation and participation in papers, publications, and Standards Development Organization (SDO) meetings (see requirement 6.3.1).

7.4. Develop APIs for the proposed cataloguing solution for users and providers of geospatial Web services.

Users should be able to parameterize API preferences to their needs. Data providers may be able to improve their metadata service submissions using catalog results. Examples include geographic extent, thematic interests, versioning, projection, and service availability.

- 7.4.1. The Contractor(s) **MUST** develop APIs that other geospatial portals may consume. The API can be parameterized via a variety of filters to populate other thematic and regional portals.
- 7.4.2. The Contractor(s) **MUST** explore the development of APIs for providers to publish services in bulk to the harvester. This may enhance existing CSW implementations.
- 7.4.3. A Task Authorization (TA) may be issued to use the methodologies and operations of the harvester to power OGC international pilots.

7.5. Integration of catalogue content in GIS applications

- 7.5.1. The Contractor(s) **MUST** develop an Open Source (shared and documented on GitHub or other repositories) Python plug-in for the discovery and loading of services (see requirement 4.1.1.)



into a QGIS project. The Contractor(s) **MUST** socialize this plug-in with the Open Source and geomatics communities (see requirement 6.1.2.); and

7.5.2. The Contractor(s) **MUST** explore the application of developer tools that quickly and easily publish geospatial API services (e.g. pygeoapi) (see requirement 4.1.1).

7.6. Communications and Outreach

7.6.1. Create reports, presentations, and papers

7.6.1.1. The Contractor(s) **MUST** complete each task authorization (TA) with a report and presentation detailing the activities completed. Annual end of year (April 1 - March 31st) reporting will also provide detail of the activities completed, challenges encountered, and planned upcoming activities; and

7.6.1.2. The Contractor(s) **MUST** document methodology developed under this contract(s) and open-source development of the harvester for sharing in a public repository (e.g. GitHub) and/or refereed journals. This shall include future development of QGIS extensions.

7.6.2. Contractor(s) hosted virtual workshops for consultations, training, or awareness

7.6.2.1. The Contractor(s) **MUST** initiate consultations with geospatial partners (e.g. private, academic and government) and international standards bodies (e.g. OGC, W3C, ISO) to develop user requirements for methodology refinement, to validate the standards included in the harvesting process, and initiate training model workshops.

7.6.3. Contractor(s) communication

7.6.3.1. The Contractor(s) **MUST** regularly perform outreach and communications with NRCan's partners (e.g. federal departments, standards bodies, and project partners (Arctic Council working groups and Arctic SDI communities) in regards to project activities;

7.6.3.2. The Contractor(s) **MUST** communicate and collaborate with subject matter experts and standards body domain working groups (e.g. OGC Quality of Service and Experience Domain Working Group) will ensure this project influences and contributes to open standards development;

8. Other terms and conditions of the SOW

8.1. Contractor(s) Obligations

The Contractor(s) **MUST** meet the following obligations. Additional obligations may be defined within task authorizations:

8.1.1. Respect NRCan requirements with regards to provided information, as needed;

8.1.2. Participate in videoconferences and/or teleconferences, as needed.

8.1.3. The Contractor(s) shall provide periodic (schedule to be defined by NRCan) trend reports on the state of Web services/APIs for Canada and the international Arctic.

8.1.4. The Contractor(s) **MUST** be a member of the OGC for the duration of the contract.



8.2. [Scientific Integrity Policy](#):

In satisfying the requirements of this agreement, the Recipient is encouraged to comply with the provisions and intent of the NRCan Scientific Integrity Policy (SIP) and to discharge its contractual obligations in support of research, science, or related activities in a manner consistent with all relevant NRCan SIP provisions. For more information on the Scientific Integrity Policy, please visit the NRCan Website at: <https://www.nrcan.gc.ca/scientific-integrity/21665#a20>

9. NRCan's Obligations

NRCan **MUST** meet the following obligations. :

- 9.1. Respond to proposals with any clarifications or changes with five (5) business days after submission by the Contractor(s);
- 9.2. Provide feedback on or indicate acceptance of project deliverables within a reasonable, predetermined period of time; and
- 9.3. Provide feedback on or indicate acceptance of project deliverables within a reasonable, predetermined period of time.

10. Location of Work and Delivery Point

Work will be completed at the Contractor(s) place of business. The Contractor(s) **MUST** be able to attend meetings with the Project Authority at NRCan using collaborative technologies such as Web conferencing or video conferencing. All reports and deliverables **MUST** be sent to the appropriate NRCan Project Authority as specified in the Task Authorization form.

11. Language of Work

All work will be conducted in English.



ANNEX "B" - BASIS OF PAYMENT

(Will be completed at contract award)



ANNEX "C" - TASK AUTHORIZATION FORM

TASK AUTHORIZATION				
Contractor:				
				Financial coding:
Contract number:				
Task number:				Date:
TA Request (for completion by Technical authority)				
1. Task Description of the Work required:				
2. Date	From:		To:	
3. Work location				
4. Travel Requirement	<input type="checkbox"/> Yes <input type="checkbox"/> No Specify:			
5. Others Conditions /Restraints	<input type="checkbox"/> Yes <input type="checkbox"/> No Specify:			
6. Basis of paiement :	Total estimate Cost (Firm Hourly Rate) <input type="checkbox"/> OR Firm Price (package) <input type="checkbox"/>			
7. Level of security clearance required for the contractor's personnel	<input type="checkbox"/> Reliability <input type="checkbox"/> Secret			
8. Linguistic need	<input type="checkbox"/> English and French <input type="checkbox"/> English <input type="checkbox"/> French The categories of personnel requiring bilingualism include:			
TA Proposal [For completion by Contractor]				
9. Cost breakdown for reference purposes				
Name + Level of Proposed resource	PWGSC Security File Number	Firm Per Hourly Rate	Estimated # of Hours	Total cost
Professional services - estimated cost	Total:			\$
				Taxes:
				\$
				Grand Total:
				\$



TA Approval		
10. Signing Authorities	Signature	Date
Name, Title and Signature of Individual Authorized to Sign on Behalf of Contractor: _____		
Name, Title and Signature of Individual Authorized to Sign on Behalf of the Identified User – Project Authority: _____		
Name, Title and Signature of the Contracting Authority _____		
11. Base de paiement et facturation		
<p>In Accordance with the article entitled “Basis of Payment” in the contract.</p> <p>Payment to be made based on receipt of detailed monthly invoices for services rendered, subject to full acceptance by the Project/Technical Authority. Total of payments not to exceed the TA value.</p> <p>Invoices shall be sent in accordance with the invoicing instructions included in the Terms and Conditions of the contract.</p>		



ATTACHMENT "1" TO PART 5 OF THE BID SOLICITATION

FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY – CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\) – Labour's](#) website.

Date: _____ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- A1. The Bidder certifies having no work force in Canada.
- A2. The Bidder certifies being a public sector employer.
- A3. The Bidder certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- A4. The Bidder certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- A5.1. The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.

OR

- A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity \(LAB1168\)](#) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- B1. The Bidder is not a Joint Venture.

OR

- B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)



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.

Note: Stream 1 and Stream 2 will be evaluated separately.

1. Technical Criteria

1.1 Mandatory Evaluation Criteria – Stream 1

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.

Stream 1 – Provide access to an operational (subscription-based) Commercial Off The Shelf (COTS) geospatial Web services/Application Programming Interface (API) harvester⁹ solution and deliver weekly catalogues to NRCan (and partners) for publication.

Item	Mandatory Requirement	Compliant (Yes/No)	Cross Reference to Proposal (Technical Document) Page #
M1	The Bidder’s technical bid* MUST not exceed seventy (70) letter or A4 sized pages, size 12 points, Times New Roman, with page numbers.		

⁹ Web harvesting is defined as the end-to-end process of automatic, periodic, discovery of geomatics Web services to catalogue structured service level and/or data level metadata. The categorization of information captured in the catalogue is performed with automated regional and thematic filters, typically using Machine Learning or Artificial Intelligence techniques (see section *Statement of Work – Glossary* of the RFP).



	<p>*This also includes CVs, the title page, table of contents, abstract, signature page and the examples of projects provided in response to the evaluation criteria.</p>		
M2	<p>The Bidder MUST offer Commercial Off The Shelf (COTS) subscription services capable* of automated delivery of evergreen catalogue(s) of Web services by harvesting** the Web to discover Web service endpoints, filter the results and present in a weekly catalogue.</p> <p>*Demonstrated by providing a list of the available COTS subscription services currently being offered to clients.</p> <p>** Web harvesting is defined as the end-to-end process of automatic, periodic, discovery of geospatial Web services to catalogue structured service level and/or data level metadata. The categorization of information captured in the catalogue is performed with automated regional and thematic filters, typically using Machine Learning or Artificial Intelligence techniques (see section <i>Statement of Work – Glossary</i> of the RFP).</p> <p>The resulting catalogue shall be published weekly and will have API interface(s) so others can harvest data from the catalogue. The operational process is fully automated with no human input required.</p>		
M3	<p>The Bidder’s Commercial Off The Shelf (COTS) subscription services solution* MUST include Geospatial Web services**.</p> <p>*Demonstrated by providing a description of the COTS services solution.</p> <p>**<u>Definition of Geomatics Web services</u>: Self-contained, self-describing, modular applications that can be published, located and invoked across the Web. Web services perform functions that can be anything from simple requests to complicated business processes. Once a Web service is deployed, other applications, and other Web services, can discover and invoke the deployed service¹⁰. The scope is geospatial Web services, i.e. Web services that contain or process spatial data originating</p>		

¹⁰ Definition derived from the Arctic SDI Glossary of Terms (Appendix 3 in the [Spatial Data Infrastructure Manual for the Arctic](#)).



	<p>from geographic information systems, earth observation or other data that have records explicitly encoded with space and time fields. A list of Web services is provided in the section <i>Statement of Work – Background</i> of the RFP.</p> <p>Mandatory Criterion (M3) can be evaluated against Point-Rated Criteria (R3 or R4).</p>		
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1.2 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 will be evaluated based on the following criteria:

Item	Point Rated Technical Criteria	Points breakdown	Max Points	Cross Reference to Proposal (Technical Document) Page #
R1	<p>The Bidder should be a member* of the Open Geospatial Consortium (OGC).</p> <p>*Demonstrated by providing a screenshot of the membership from the OGC portal.</p>	<p>5 points – Current member of the OGC</p> <p>0 Point – Not a member of the OGC.</p>	5	
R2	<p>The Bidder should provide a project summary (includes project description and duration) of a previously completed project that offered a plan for mitigating risks addressing the following components:</p> <ol style="list-style-type: none"> 1. Project management (scheduling tasking, deliverables, HR, and communications with project authority) 2. Risk management (risk mitigation plan – schedule, cost, HR, and user engagement) 	<p>10 points – project and risk management are addressed with evidence*.</p> <p>5 points – project or risk management is discussed.</p> <p>0 points – project and risk management are not addressed.</p> <p><i>Up to a maximum of ten (10) points will be awarded.</i></p> <p>*Evidence for project and risk management is provided by reference to selected example artifacts from past projects</p>	10	



		that are included in the submission.		
R3	<p>Further to Mandatory Technical (M3), the Bidder’s Commercial Off The Shelf (COTS) subscription services solution* should include the following OGC compliant services instances:</p> <ul style="list-style-type: none"> OGC-compliant service types (Web Coverage Service, Web Feature Service, Web Map Context, Web Map Service, Web Map Tile Service, Sensor Observation Service, Web Processing Service, Temporal Service(s), and/or GeoPackage); 	<p>5 points – Four (4) or more services identified with a COTS-based subscription services solution.</p> <p>3 points – Two (2) to three (3) services identified with the COTS-based subscription services solution.</p> <p>1 point – One (1) service identified with the COTS-based subscription services solution.</p> <p>0 point – No services identified.</p>	5	
R4	<p>Further to Mandatory Technical (M3), the Bidder’s Commercial Off The Shelf (COTS) subscription services solution* should include the following ESRI services instances:</p> <ul style="list-style-type: none"> ESRI ArcGIS REST service types, which could include Image, Feature, Map, and/or others (link). 	<p>3 points – Three (3) services identified with a COTS-based subscription service solution.</p> <p>2 points – Two (2) services identified a COTS-based subscription service solution.</p> <p>1 point – One (1) service identified with a COTS-based subscription service solution.</p> <p>0 point – No services identified.</p>	3	
R5	<p>The Bidder should have recent* experience** as a practitioner of OGC standards through either the development and/or operationalization of geomatics standards.</p> <p>*Within the last five (5) years from date of bid solicitation closing on page #1 of the RFP.</p> <p>**Demonstrated by providing a minimum of one (1) example that details participation in geomatics standards development and/or operationalization of geomatics standards.</p>	<p>5 points – Three (3) or more examples that detail participation in geomatics standards development or operationalization.</p> <p>3 points – One (1) to two (2) examples that detail participation in geomatics standards development or operationalization.</p>	5	



		0 point – No examples identified.		
R6	<p>The Bidder’s proposed COTS solution* should identify mechanisms to automatically harvest**, filter, and catalogue the following services:</p> <ol style="list-style-type: none"> 1. OGC APIs as listed at https://ogcapi.ogc.org/; 2. Earth Observation (EO) data management standards (Spatio Temporal Asset Catalogue (STAC)). 3. Schema.org - A collaborative, community activity with a mission to create, maintain, and promote schemas for structured data on the internet. 4. Other discoverable APIs and spatial Web services including organizational standards; and (International Organization for Standardization (ISO), International Hydrographic Organization (IHO), World Meteorological Organization (WMO). <p>*Demonstrated by providing a description of the COTS services solution.</p> <p>**Web harvesting is defined as the end-to-end process of automatic, periodic, discovery of geospatial Web services to catalogue structured service level and/or data level metadata. The categorization of information captured in the catalogue is performed with automated regional and thematic filters, typically using Machine Learning or Artificial Intelligence techniques (see section <i>Statement of Work – Glossary of the RFP</i>).</p> <p>The resulting catalogue shall be published weekly and will have API interface(s) so others can harvest data from the catalogue. The operational process is fully automated with no human input required.</p>	<p>10 points – Four (4) or more mechanisms to automatically harvest, filter, and catalogue Web services.</p> <p>6 points – One (1) to three (3) mechanisms to automatically harvest, filter, and catalogue Web services.</p> <p>0 point – No mechanisms identified.</p>	10	
R7		10 points – Provides with evidence* the methodology	10	



	<p>The Bidder’s proposal should suggest a methodology* to validate service status and flag less reliable or irrelevant services.</p>	<p>required to validate and flag less reliable or irrelevant services AND addresses additional methodology** element or elements.</p> <p>6 points – Provides with evidence* the methodology required to validate and flag less reliable or irrelevant services.</p> <p>0 point – Fails to provide the methodology required to validate and flag less reliable or irrelevant services.</p> <p>*Evidence includes specific examples of circumstances or activities from previous projects in the last five (5) years from date of bid solicitation closing on page #1 of the RFP.</p> <p>**Additional methodology element(s) may include service version, projections, content assessment, precise geographic area of interest.</p>		
R8	<p>The Bidder’s proposal should demonstrate recent* experience with the development of APIs, by providing a minimum of one (1) example of a detailed implementation of standardized Application Programming Interfaces (APIs) that they have developed.</p> <p>*Within the last five (5) years from date of bid solicitation closing on page #1 of the RFP.</p>	<p>A maximum of three (3) examples will be evaluated. Should Bidders provide more than three (3) examples, NRCan will evaluate based on the order presented in the technical proposal.</p> <p>5 points – Provide three (3) examples of developing and implementing APIs.</p> <p>4 Points – Provide two (2) examples of developing and implementing APIs.</p>	5	



		<p>3 points — One (1) example provided of developing and implementing APIs.</p> <p>0 points – Fails to provide any examples.</p>		
R9	<p>The Bidder’s proposal should demonstrate that the proposed resource has recent experience* organizing, delivering, and facilitating consultations and workshops with key stakeholders to gather requirements.</p> <p>The Bidder should provide evidence** that details experience* organizing, delivering, and facilitating consultations and workshops.</p> <p>*Within the last five (5) years from date of bid solicitation closing on page #1 of the RFP.</p> <p>** Evidence includes specific examples of circumstances or activities from previous projects in the last five (5) years from date of bid solicitation closing on page #1 of the RFP.</p>	<p>5 points – Demonstrates experience with evidence** in organizing, delivering, and facilitating consultations and workshops.</p> <p>0 point – Fails to demonstrate experience in organizing, delivering, and facilitating consultations and workshops.</p>	5	
R10	<p>The Bidder should provide a Communications Plan and an Engagement Plan, which includes the following items:</p> <ol style="list-style-type: none"> 1. Address internal communication (with the NRCan project team) and external communications (with stakeholders) as required during the project. 2. Address stakeholders (subject matter experts, standards development organizations) engaged during the project; 3. Address communication of the final deliverable(s). 	<p>Two (2) points per item to a maximum of six (6) points.</p> <p>One item – two (2) points</p> <p>Two items – four (4) points</p> <p>Three (3) items – six (6) points</p>	6	
R11	<p>The Bidders should demonstrate the following corporate activities they have implemented to</p>	<p>1 point - The bidder has fully described the activity and</p>	5	



	<p>promote anti-racism and diversity within their organisation:</p> <p>a. The bidder has internally published policies or commitments on anti-racism and inclusiveness</p> <p>b. The bidder has publicly available organisational commitments to a diverse workforce</p> <p>c. The bidder’s employees are mandated to take mandatory training on anti-racism</p> <p>d. The bidder’s employees are mandated to take unconscious bias training</p> <p>e. The bidder has developed internal staffing and/or recruitment strategies to increase representation of underrepresented groups in their workforce.</p> <p>The bidder should provide details of the following activities.</p> <p>For activities described in a. and b. (Policy and commitments), the bidder should provide copies of policy or commitment documents including their effective date.</p> <p>For activities described in c. and d. (training), the bidder should provide the name of the course and the service provider; if developed internally, a copy of the course outline.</p> <p>For activities described in e. (staffing), the bidder should provide copies of job posting, or other staffing/recruitment documents demonstrating compliance with the rated criteria.</p>	<p>provided supporting documents as evidence.</p> <p>0 point - The bidder does not provide information on activities or does not provide sufficient detail or supporting documents.</p> <p>**One (1) point will be awarded per corporate activity for a maximum of five (5) points.</p>		
		TOTAL	69	
		Minimum Points Required	45	



1.3 Mandatory Financial Criteria – Stream 1

1.3.1 Funding Limitation

The maximum funding available for the Contract resulting from the bid solicitation is **\$40,000.00 per contract period** (applicable taxes extra). Please note, the \$40,000.00 maximum funding limit only applies to the operational component of Stream 1 with vendor supplied Commercial Off The Shelf (COTS) subscription based on a Firm Price. This does not apply to the Limitation of Expenditure. Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

This maximum included a) the Price to perform the Work, b) any Travel and Living and c) Miscellaneous Expenses that may be required.

Any bids received in excess of this maximum funding will be automatically deemed non-responsive and will not be evaluated.



1.4 Mandatory Evaluation Criteria – Stream 2

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.

Stream 2 – Refine existing methodologies and explore new solutions for automatically harvesting, cataloguing, validating, filtering, and publishing geospatial Web services/APIs.

Item	Mandatory Requirement	Compliant (Yes/No)	Cross Reference to Proposal (Technical Document) Page #
M1	<p>The Bidder’s technical bid* MUST not exceed seventy (70) letter or A4 sized pages, size 12 points, Times New Roman, with page numbers.</p> <p>*This also includes CVs, the title page, table of contents, abstract, signature page and the examples of projects provided in response to the evaluation criteria.</p>		
M2	<p>The Bidder MUST has demonstrated experience researching automated Web harvesting* solutions for identifying Web services, APIs, and refining the cataloguing, filtering, and/or publishing of those services (see section <i>Statement of Work – Background</i> in the RFP).</p> <p>*Web harvesting is defined as the end-to-end process of automatic, periodic, discovery of geospatial Web services to catalogue structured service level and/or data level metadata. The categorization of information captured in the catalogue is performed with automated regional and thematic filters, typically using Machine Learning or Artificial Intelligence techniques (see section <i>Statement of Work – Glossary</i> of the RFP).</p> <p>The resulting catalogue shall be published weekly and will have API interface(s) so others can harvest data from the catalogue. The operational process is fully automated with no human input required.</p>		



1.5 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 will be evaluated based on the following criteria:

Item	Point Rated Technical Criteria	Points breakdown	Max Points	Cross Reference to Proposal (Technical Document) Page #
R1	<p>The Bidder should be a member* of the Open Geospatial Consortium (OGC).</p> <p>*Demonstrated by providing a screenshot of the membership from the OGC portal.</p>	<p>5 points – Current member of the OGC</p> <p>0 Points – No intent of membership.</p>	5	
R2	<p>The Bidder should provide a project(s) summary (includes project description and duration) of a previously completed project(s) that offered a plan for mitigating risks addressing the following components:</p> <ol style="list-style-type: none"> 1. Project management (scheduling tasking, deliverables, HR, communications with project authority) 2. Risk management (risk mitigation plan – schedule, cost, HR, user engagement) 	<p>10 points – project and risk management are addressed with evidence*.</p> <p>5 points – project or risk management is discussed.</p> <p>0 points – project and risk management are not addressed.</p> <p><i>Up to a maximum of ten (10) points will be awarded.</i></p> <p>*Evidence for project or risk management is provided by reference to selected example artifacts from past projects that are included in the submission, or other forms of corporate practice.</p>	10	



<p>R3</p>	<p>The Bidder should have recent* experience** as a practitioner of OGC standards through either the development and/or operationalization of geomatics standards.</p> <p>*Within the last five (5) years from date of bid solicitation closing on page #1 of the RFP.</p> <p>**Demonstrated by providing a minimum of one (1) example that detail participation in geomatics standards development and/or operationalization of geomatics standards.</p>	<p>5 points – Three (3) or more examples that detail participation in geomatics standards development or operationalization.</p> <p>3 points – One (1) to two (2) examples that detail participation in geomatics standards development or operationalization.</p> <p>0 point – No examples identified.</p>	<p>5</p>	
<p>R4</p>	<p>The Bidder’s proposal should outline a methodology* for the validation of Web service content by use of various automatic Web harvesting** and classification methods.</p> <p>*The methodology should contain the following:</p> <ul style="list-style-type: none"> • Develop and run routines to harvest distributed data from across the Internet and then classify it accordingly using various image analysis, AI, or other heuristic methods. <p>** Web harvesting is defined as the end-to-end process of automatic, periodic, discovery of geospatial Web services to catalogue structured service level and/or data level metadata. The categorization of information captured in the catalogue is performed with automated regional and thematic filters, typically using Machine Learning or Artificial Intelligence techniques (see section <i>Statement of Work – Glossary</i> of the RFP).</p>	<p>10 points – Bidder’s methodology on how to develop/run routines to harvest distributed data from across the Internet AND classify it accordingly using various image analysis, AI, or other heuristic methods, is provided.</p> <p>5 points – Bidder’s methodology on how to develop/run routines to harvest distributed data from across the Internet, is provided.</p> <p>0 points – Fails to demonstrate the required methodology.</p>	<p>10</p>	



	The resulting catalogue shall be published weekly and will have API interface(s) so others can harvest data from the catalogue. The operational process is fully automated with no human input required.			
R5	<p>The bidder’s proposal should demonstrate experience* with the configuring of APIs by providing a minimum of one (1) detailed implementation of standardized Application Programming Interfaces (APIs) that they have developed.</p> <p>*Within the last five (5) years from date of bid solicitation closing on page #1 of the RFP.</p>	<p>10 points – Provide three (3) or more examples that addresses the configuring and implementing APIs.</p> <p>5 points — One (1) to two (2) examples that addresses the configuring and implementing APIs</p> <p>0 points – Fails to provide any examples.</p>	10	
R6	<p>The Bidder’s proposal should demonstrate that the proposed resource(s) have the experience* organizing, delivering, and facilitating consultations and workshops with key stakeholders to gather requirements.</p> <p>The Bidder should provide evidence** that details experience* organizing, delivering, and facilitating consultations and workshops.</p> <p>*Within the last five (5) years from date of bid solicitation closing on page #1 of the RFP.</p> <p>** Evidence includes specific examples of circumstances or activities from previous projects in the last five (5) years from date of bid solicitation closing on page #1 of the RFP.</p>	<p>5 points – Demonstrates capacity with evidence** in organizing, delivering, and facilitating consultations and workshops.</p> <p>0 points – Fails to demonstrate capacity in organizing, delivering, and facilitating consultations and workshops.</p>	5	
R7			6	



	<p>The Bidder should provide a Communications Plan and an Engagement Plan, which includes the following items:</p> <ol style="list-style-type: none"> 1. Address internal communication (with the NRCan project team) and external communications (with stakeholders) as required during the project. 2. Address stakeholders (subject matter experts, standards development organizations) engaged during the project; 3. Address communication of the final deliverable(s). 	<p>Two (2) points per item to a maximum of six (6) points.</p> <p>One item – two (2) points</p> <p>Two items – four (4) points</p> <p>Three (3) items – six (6) points</p>		
R8	<p>The Bidders should demonstrate the following corporate activities they have implemented to promote anti-racism and diversity within their organisation:</p> <ol style="list-style-type: none"> a) The bidder has internally published policies or commitments on anti-racism and inclusiveness b) The bidder has publicly available organisational commitments to a diverse workforce c) The bidder’s employees are mandated to take mandatory training on anti-racism d) The bidder’s employees are mandated to take unconscious bias training e) The bidder has developed internal staffing and/or recruitment strategies to increase representation of underrepresented groups in their workforce. 	<p>1 point - The bidder has fully described the activity and provided supporting documents.</p> <p>0 point - The bidder does not provide information on activities or does not provide sufficient detail or supporting documents.</p>	5	



	<p>The bidder should provide details of the above activities.</p> <p>For activities described in a. and b. (Policy and commitments), the bidder should provide copies of policy or commitment documents including their effective date.</p> <p>For activities described in c. and d. (training), the bidder should provide the name of the course and the service provider; if developed internally, a copy of the course outline.</p> <p>For activities described in e. (staffing), the bidder should provide copies of job posting, or other staffing/recruitment documents demonstrating compliance with the rated criteria.</p>			
		TOTAL	56	
		Minimum Points Required	35	



APPENDIX “2” – FINANCIAL BID PRESENTATION SHEET

Note: Evaluations against **Stream 1** and **Stream 2** will be conducted **separately**.

Firm Price - Stream 1

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

Initial Period: Date of Contract Award for a duration of 1 year

Description	Firm Price (Applicable Taxes Excluded)
Subscription-based Commercial Off The Shelf (COTS) geospatial Web services/API harvester solution	\$ _____
A) Total Firm Price (Taxes Extra):	\$ _____

Option Period #1: duration of 1 year after from initial Contract expires

Description	Firm Price (Applicable Taxes Excluded)
Subscription-based Commercial Off The Shelf (COTS) geospatial Web services/API harvester solution	\$ _____
B) Total Firm Price (Taxes Extra):	\$ _____

Option Period #2: duration of 1 year after option period #1 expires

Description	Firm Price (Applicable Taxes Excluded)
Subscription-based Commercial Off The Shelf (COTS) geospatial Web services/API harvester solution	\$ _____
C) Total Firm Price (Taxes Extra):	\$ _____



Option Period #3: duration of 1 year after option period #2 expires

Description	Firm Price (Applicable Taxes Excluded)
Subscription-based Commercial Off The Shelf (COTS) geospatial Web services/API harvester solution	\$ _____
D) Total Firm Price (Taxes Extra):	\$ _____

Limitation of Expenditure – Firm Hourly Rate – Stream 1

The **all-inclusive** firm hourly rate for the completion of this project is in Canadian funds. Applicable taxes are excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

Initial Period: Date of Contract Award for a duration of 1 year

A	B	C	D (BxC)
Description	Firm Hourly Rate **	Number of Hours for Evaluation *	Total Costs (Applicable Taxes Excluded)
Implementation of harvester solution	\$ _____	250	\$ _____
Total			\$ _____

Option Period #1: duration of 1 year after initial Contract expires

A	B	C	D (BxC)
Description	Firm Hourly Rate **	Number of Hours for Evaluation *	Total Costs (Applicable Taxes Excluded)
Implementation of harvester solution	\$ _____	250	\$ _____
Total			\$ _____



Option Period #2: duration of 1 year after option period #1 expires

A	B	C	D (BxC)
Description	Firm Hourly Rate **	Number of Hours for Evaluation *	Total Costs (Applicable Taxes Excluded)
Implementation of harvester solution	\$	250	\$
Total			\$

Option Period #3: duration of 1 year after option period #2 expires

A	B	C	D (BxC)
Description	Firm Hourly Rate **	Number of Hours for Evaluation *	Total Costs (Applicable Taxes Excluded)
Implementation of harvester solution	\$	250	\$
Total			\$

* THE LEVEL OF EFFORT (QUANTITY OR NUMBER OF HOURS) PRESENTED HEREIN IS USED FOR EVALUATION PURPOSES ONLY AND IT IS NOT A COMMITMENT BY CANADA.

** FOR ANY ERRORS IN THE CALCULATION, THE *firm hourly rate* RATE SCHEDULE WILL BE UPHELD.

	E	F	
	Total Firm Price (subscription)	Total Limitation of Expenditure	Total (E + F)
A. Initial Contract Period	\$	\$	\$
B. Option Period 1	\$	\$	\$
C. Option Period 2	\$	\$	\$
D. Option Period 3	\$	\$	\$
Total Subject to Evaluation (Taxes extra)			\$



Limitation of Expenditure – Firm Hourly Rate – Stream 2

The **all-inclusive** firm hourly rate for the completion of this project is in Canadian funds. Applicable taxes are excluded.

Initial Period: Date of Contract Award for a duration of 1 year

A	B	C	D (BxC)
Description	Firm Hourly Rate **	Number of Hours for Evaluation *	Total Costs (Applicable Taxes Excluded)
Geospatial Web services/API harvester refinement	\$	500	\$
Total			\$

Option Period #1: duration of 1 year after initial Contract expires

A	B	C	D (BxC)
Description	Firm Hourly Rate **	Number of Hours for Evaluation *	Total Costs (Applicable Taxes Excluded)
Geospatial Web services/API harvester refinement	\$	500	\$
Total			\$

Option Period #2: duration of 1 year after option period #1 expires

A	B	C	D (BxC)
Description	Firm Hourly Rate **	Number of Hours for Evaluation *	Total Costs (Applicable Taxes Excluded)
Geospatial Web services/API harvester refinement	\$	500	\$
Total			\$

Option Period #3: duration of 1 year after option period #2 expires

A	B	C	D (BxC)
Description	Firm Hourly Rate **	Number of Hours for Evaluation *	Total Costs (Applicable Taxes Excluded)
Geospatial Web services/API harvester refinement	\$	500	\$
Total			\$



* THE LEVEL OF EFFORT (QUANTITY OR NUMBER OF HOURS) PRESENTED HEREIN IS USED FOR EVALUATION PURPOSES ONLY AND IT IS NOT A COMMITMENT BY CANADA.

** FOR ANY ERRORS IN THE CALCULATION, THE *firm hourly rate* RATE SCHEDULE WILL BE UPHELD.

A. Initial Contract Period	\$ _____
B. Option Period 1	\$ _____
C. Option Period 2	\$ _____
D. Option Period 3	\$ _____
Total Subject to Evaluation (Taxes extra)	\$ _____