



**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**

Public Health Agency of Canada / Agence de la santé publique du Canada

Attn: Sami Nouh

Email: sami.nouh@canada.ca

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

Proposal To:

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

Proposition à:

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

Instructions : See Herein

Instructions: Voir aux présentes

Issuing Office – Bureau de distribution

Public Health Agency of Canada / Agence de la santé publique du Canada
200, Eglantine Driveway
Tunney's Pasture
Ottawa Ontario K1A 0K9

Title – Sujet	
Artificial Intelligence (AI) pilot project for surveillance of suicide-related behaviours using social media	
Solicitation No. – N° de l'invitation	Date
1000203413	27-August-2018
Solicitation Closes at – L'invitation prend fin à	Time Zone Fuseau horaire
1:00PM on/le – September 17, 2018	EST
F.O.B. - F.A.B.	
Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à :	
Name: Sami Nouh	
Email: sami.nouh@canada.ca	
Telephone – téléphone : 613-941-2102	
Destination – of Goods, Services, and Construction: Destination – des biens, services et construction :	
See Herein – Voir ici	
Delivery required - Livraison exigée	
See Herein – Voir ici	
Vendor/firm Name and address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Facsimile No. – N° de télécopieur :	
Telephone No. – N° de téléphone :	
Name and title of person authorized to sign on behalf of Vendor/firm	
Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur	
(type or print)/ (taper ou écrire en caractères d'imprimerie)	
Signature	Date

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PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement

1.2 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex A.

1.3 Debriefings

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

1.4 Trade Agreements

This requirement is excluded from the provisions of the World Trade Organization (WTO-WTO) Agreement on Government Procurement, the North American Free Trade Agreement (NAFTA), the Comprehensive Economic and Trade Agreement between Canada and the European Union (CETA) and the Canadian Free Trade Agreement (CFTA).

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](#) (2018-05-22) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2.2 Submission of Bids

Bids must be submitted only to the email address specified below by the date and time indicated on page 1 of the bid solicitation:

sami.nouh@canada.ca

Due to the nature of the bid solicitation, bids transmitted by facsimile 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: 2012-2](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

Work Force Adjustment Directive

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

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;

- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

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

2.4 Enquiries - Bid Solicitation

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

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

2.5 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.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with below:

The bid must be gathered per section and each file must be separated as follows:

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

Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with Annex B Financial Submission.

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

4.1.1.1 Mandatory Technical Criteria

Mandatory Criteria

The bid must meet the mandatory technical criteria specified below. The Bidder must provide the necessary documentation to support compliance with this requirement where indicated.

Bids which fail to meet the mandatory technical criteria will be declared non-responsive. Each mandatory technical criterion should be addressed separately.

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your technical proposal which address (es) the requirement in the criteria.				
	Criteria	Page #	Yes	No
M1	<p>The Bidder MUST provide a company profile and résumé demonstrating the Bidder's domain of expertise, in addition to their knowledge and experience in the application of artificial intelligence (AI) technology services to the organization and synthesis of unstructured data.</p> <p>In order to demonstrate this experience, the Bidder MUST provide two (2) written project summaries having taken place during the past five (5) years. Within each project summary provided, the Bidder MUST indicate (a-f):</p> <ul style="list-style-type: none"> a. a brief description of the type and scope of services provided, methodology used and results; b. a brief description of the role the Bidder played in providing services (was the Bidder the Prime or a sub-Contractor on the project); c. the dates/duration of the project; d. the \$ value of the project (to the Bidder); e. the extent to which these services were provided on-time, on-budget and in accordance with the established project objectives; and f. the name, address, telephone number and e-mail address of the client reference to whom the Bidder reported. The contact information may be used to verify the information provided. 			
M2	<p>At least one (1) of the two (2) submitted project summaries MUST demonstrate experience in defining and obtaining information to inform decision making for government organizations.</p>			

4.1.1.2 Point Rated Technical Criteria

Point Rated Technical Criteria

Bids which meet all the mandatory technical criteria will be evaluated and scored as specified in the tables inserted below.

Each point rated technical criterion should be addressed separately.

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your technical proposal which address the requirement in the criteria.			
	Criteria	Page #	Score
R1	<p>Privacy</p> <p>Bidders must provide a detailed statement demonstrating the team’s expertise in identifying and mitigating potential privacy risks for similar projects, including:</p> <ul style="list-style-type: none"> ○ # years of experience in privacy management ○ # of projects containing a privacy management component <p>Points Allocation</p> <ul style="list-style-type: none"> • 2 points for every year of experience, up to a maximum of 10 points awarded • 2 points for every project, up to a maximum of 10 points awarded <p>Up to 10 points will be awarded for each element sufficiently confirmed, to a maximum 20 points.</p>		/20

R2	<p>Project Workplan</p> <p>The Bidder must provide a description of their proposed workplan to meet the requirements of the Statement of Work and a clear description of how the project will be effectively managed.</p> <p>For a proposal to receive higher marks, it must elaborate on the strategy and describe in detail the various components of the project, including: defining objectives, data source identification and acquisition, processes to obtain, store clean and refresh data, model building and deployment into production, timelines, roles and responsibilities and level of effort.</p> <p>Points Allocation: 0 to 10 Does not meet the requirement 10+ to 20 Adequate project plan, partially meets the requirements of the SOW 20+ to 30 Detailed project plan, adequately meets the requirements of the SOW 30+ to 40 Exceeds the requirement of the SOW, detailed project plan</p>		/40
R3	<p>Team Experience & Competencies</p> <p>The Bidder must provide a summary report describing the proposed project team including:</p> <ul style="list-style-type: none"> • Description of proposed personnel and functions they will perform; • Explanation of why the proposed personnel are well suited to work on the project referring to their qualifications, certifications, education, and experience. <p>Expertise required and used to allocate points: 10 points = Where a minimum of 3 years of experience in AI is demonstrated</p> <p>10 points = Where a minimum of 3 years of experience with digital, online and social media analytics is demonstrated</p> <p>5 points = Proof of post-secondary degree or diploma in a related field (e.g. data science, mathematics, computer science)</p> <p>5 points = Proof of social media training and certification</p>		/30

R4	<p>The bidder should demonstrate through a written submission, a detailed plan in order to demonstrate statistically sound and rigorous methodology, as well as implementation feasibility. Bidders must provide details confirming they have the following functional capabilities:</p> <ul style="list-style-type: none"> • documentation of the development of the algorithm proposed for this project • access to datasets that can be used for the analysis if suicide-related behaviours (including self-harm, ideation, planning and attempts) along with associated risk and protective factors • capability for instant, up-to-the-minute or "real time" analysis • capacity to perform historical searches and analysis back a minimum of 30 days in addition to historical analysis • ability to apply country and language parameters to search results • ability to graphically illustrate demographics, geographies and trends • digital tracking of issues based on specific key words which can be customized to accommodate patterns by sex, age group, ethnicity and geographic region • ability to target key influencers found in blog commentary and social conversations • ability to illustrate and analyze tone/emotion (positive, neutral or negative) • ability to adapt pilot project to a sustainable ongoing monitoring system <p>Points Allocation: Up to 5 points will be awarded for each element sufficiently confirmed to a maximum 50</p>		/50
Total points:			/140

4.1.2 Financial Evaluation

The maximum funding available for the initial contract period of the Contract resulting from the bid solicitation is **\$150,000.00** (Applicable Taxes extra). Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

4.2 Basis of Selection (A0036T)

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation;
 - b. meet all mandatory technical evaluation criteria.
2. 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 budget available for this requirement.

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 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.

5.2 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 provided 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 procurement 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.

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](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

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

PART 6 - RESULTING CONTRACT CLAUSES

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

6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

6.2 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex "A".

6.3 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.

6.3.1 General Conditions

[2010B](#) (2018-06-21), General Conditions - Professional Services (Medium Complexity) apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from date of Contract to March 31, 2020 inclusive

6.4.3 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 (1) periods 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 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.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Sami Nouh
Title: Senior Procurement and Contracting Officer
Chief Financial Officer Branch
Directorate: Material and Assets Management Division
Telephone: 613-941-2102
E-mail address: sami.nouh@canada.ca

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

6.5.2 Project Authority (to be inserted at contract award)

The Project Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
Address: _____

Telephone: _____
Facsimile: _____
E-mail address: _____

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

6.5.3 Contractor's Representative

Name: _____
Title: _____
Organization: _____
Address: _____

Telephone: _____
Facsimile: _____
E-mail address: _____

6.6 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: 2012-2](#) of the Treasury Board Secretariat of Canada.

6.7 Payment

6.7.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm unit price(s) as specified below for a cost of \$ _____ (*insert the amount 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.

#	Deliverables	DELIVERABLES/ MILESTONES BY CONTRACTOR	PHAC ACTIVITIES	Payment	Due Date
1	Project Initiation	<ul style="list-style-type: none"> - A Draft report outlining the Contractors privacy management approach. - Draft analytical framework. - Meet with PHAC to discuss overall work, deliverables and objectives and timelines. 	<ul style="list-style-type: none"> -PHAC, including Privacy Management Division, to review the privacy management approach -Provide overview of issue and work needed, discuss and clarify any issues. 	<p>\$</p> <p>*insert at contract award*</p>	January 2, 2019
2	Draft Work Plan	<ul style="list-style-type: none"> - Develop a draft work plan, including timelines. - Revise the draft work plan based on any PHAC feedback. 	<ul style="list-style-type: none"> -PHAC to review the work plan and provide Contractor with feedback. 	<p>\$</p> <p>*insert at contract award*</p>	<p>February 4, 2019</p> <p>Draft work plan to be finalized by (including incorporating PHAC feedback, as and if necessary).</p>
3	Program Build	<ul style="list-style-type: none"> - Work with PHAC to develop AI program based on the draft analytical framework and define key word and term search exclusion and inclusion criteria, including suicide-related words and phrases (e.g. self-injury, ideation, plans attempts, self-harm, suicide), protective and risk factors, and context. - Design and build a preliminary suicide surveillance tool using developed AI program applied to social media platform(s) in Canada to (1) detect trends and patterns of suicide-related behaviours (including ideation, planning, and attempts) and (2) public opinion and discourse on 	<ul style="list-style-type: none"> -PHAC to work with Contractor to develop a draft analyticalframework and identify exclusion and inclusion criteria for keywords and terms included in the project. -PHAC will provide additional feedback, as and if necessary. 	<p>\$</p> <p>*insert at contract award*</p>	March 31, 2019

		the topic of suicide.			
4	Surveillance	- Conduct surveillance for a period of three (3) months.	-Work with Contractor on draft surveillance tool, as and if necessary.	\$ *insert at contract award*	June 30, 2019 (Complete surveillance from by)
5	Draft Baseline Report	- Produce a draft report outlining initial findings from first 3 months of the surveillance pilot.	- PHAC to review initial draft report and provide feedback. - PHAC will have the opportunity to probe the findings and work with the Contractor to further refine key word and term search criteria over the course of up to two (2) more iterative draft reports, if necessary.	\$ *insert at contract award*	July 31, 2019. Draft baseline report PHAC feedback due by August 19, 2019.
6	Continued Surveillance	- [If applicable] Address PHAC's feedback and suggested revisions, and make necessary changes to the projects' methodology and the AI technology. - Continue the surveillance for a period of three (3) more months.	-Work with Contractor on surveillance tool and provide feedback, as and if necessary.	\$ *insert at contract award*	-[If applicable] Address PHAC feedback by Sept 16, 2019. -Continue surveillance from Sept 1 – November 30, 2019.
7	Draft Final Report	- Produce a draft final report summarizing findings to date. - Meet with PHAC to present the draft final report as a proof of concept and discuss any issues.	- Review draft final report with initial surveillance data to determine if the proof of concept demonstrates potential for future surveillance and provide feedback, as and if necessary. - Meet with the Contractor to discuss the draft final report and any issues.	\$ *insert at contract award*	December 15, 2019

8	Draft Reporting Tool	- Develop a draft reporting tool that can produce monthly reports of the data generated from the pilot suicide surveillance system that uses the AI technology and methodology.	- Evaluate the draft reporting tool, and provide feedback as and if necessary.	\$ *insert at contract award*	December 2, 2019 Submit draft reporting tool to PHAC. - PHAC evaluation to be done by March 31, 2020.
Total				\$ *insert at contract award*	March 31, 2020

6.7.2 Method of Payment

SACC Manual Clause H3010C (2016-01-28) Milestone Payments - Not subject to holdback

6.8 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

Each invoice must be supported by:

- a. a copy of the release document and any other documents as specified in the Contract.
2. Invoices must be distributed as follows:
 - a. The original must be forwarded to the following address for certification and payment.
hc.p2p.east.invoices-factures.est.sc@canada.ca

6.9 Certifications and Additional Information

6.9.1 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.

6.10 Applicable Laws

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

6.11 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 general conditions 2010B (2018-06-21), General Conditions - Professional Services (Medium Complexity) ;
- (c) Annex A, Statement of Work;
- (d) the Contractor's bid dated _____

ANNEX A - STATEMENT OF WORK

Artificial Intelligence (AI) pilot project for surveillance of suicide-related behaviours using social media

1. Title

Artificial Intelligence (AI) pilot project for surveillance of suicide-related behaviours using social media.

2. Scope

2.1. Introduction

The Public Health Agency of Canada (PHAC) seeks the professional services of a Contractor with an established expertise in using AI to accurately assess public opinion on a given topic through analysis of online social media. The Contractor will be required to apply this experience to produce estimates of public discourse on the topic of suicide and suicide-related behaviours through online social media.

2.2. Objectives of the Requirement

The specific objectives of the contract are:

- a) To establish the feasibility of using AI technology to survey public social media sites as a valid and effective measurement tool for monitoring the burden and scope of suicide-related behaviours in Canada.
- b) To provide PHAC with information on trends, as well as risk and protective factors associated with suicide-related behaviours among various population groups (not including individual level data), that will complement other suicide-related surveillance data sources in Canada going forward.

This should result in the following outputs:

- i. The Contractor should provide a draft report of the means or measures put in place to protect privacy and to address potential privacy concerns (e.g., re-identification of individuals). All mined data is to be taken from **social media** where each user has agreed to allow open access to their accounts and data. The mined data that is collected from online sites will contain no personal or identifiable information. Mining of the data must be done in compliance with each site's terms and conditions and efforts to protect the privacy of individuals must be clearly demonstrated by the Contractor (e.g., data anonymization). This project is to be non-intrusive and should not contain direct interactions with social media users.
- ii. The Contractor will provide a draft analytical framework outlining their data generation technique(s) by use of sound and rigorous artificial intelligence (AI) data science methods (including algorithm transparency¹), along with a comprehensive picture of the Contractor's capability to conduct sound and rigorous statistical analyses of retrieved data.
- iii. The Contractor will produce draft reports containing trends and patterns of suicide-related behaviours (including self-harm, ideation, planning, and attempts) on social media platforms in Canada. The draft reports should be anonymous (so the risk of identification of individuals is low or very low) and identify associated risk and protective factors, by sex, age group, ethnicity and geographic region, in a timely manner. Additional factors may be included.

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- iv. The Contractor will produce draft reports containing trends and patterns monitoring public opinion and discourse on the topic of suicide to understand societal level discussions.

- v. If outputs 1 through 4 result in an applied AI methodology which is validated by PHAC and produces meaningful information deemed useful for PHAC's suicide surveillance purposes, the Contractor will then develop a draft reporting tool that can produce monthly reports of high-level, non-identifiable data summaries from the pilot suicide surveillance system that uses the AI technology and methodology, allowing for future monitoring of suicide-related behaviours on social media platforms. PHAC reserves the right to modify the scope of work and value of the option years based on the initial year results.

The results of this contract will be used to determine whether AI is a useful and valid tool to supplement PHAC's existing suicide surveillance program with an additional source of information.

2.3. Background and Specific Scope of the Document

Suicide is the second leading cause of death for Canadians between the ages of 10 and 19 years of age and has been increasing among female children and youth in recent years.¹ In order to prevent suicide, we must first understand the patterns and characteristics of the continuum of suicide-related behaviors. Currently, PHAC reports on overall patterns and trends of suicide using vital statistics and provides estimates of suicide attempts for Canadians using hospitalization data. Yet to develop effective prevention programs, it is essential that we begin developing a deeper understanding of suicide-related behaviours, which occur further upstream, and in a more timely manner – to understand how to intervene earlier. Currently data on suicide mortality and hospitalizations can be delayed between 2-5 years, and only captures individuals who present for medical care.

3. Requirements

3.1. Tasks, Activities, Deliverables and Milestones

TASKS/ ACTIVITIES	DELIVERABLES/ MILESTONES BY CONTRACTOR	PHAC ACTIVITIES	TENTATIVE SCHEDULE
Project Initiation	<ul style="list-style-type: none"> - A Draft report outlining the Contractors privacy management approach. - Draft analytical framework. - Meet with PHAC to discuss overall work, deliverables and objectives and timelines. 	<ul style="list-style-type: none"> -PHAC, including Privacy Management Division, to review the privacy management approach -Provide overview of issue and work needed, discuss and clarify any issues. 	Due January 2, 2019

Draft Work Plan	<ul style="list-style-type: none"> - Develop a draft work plan, including timelines. - Revise the draft work plan based on any PHAC feedback. 	<ul style="list-style-type: none"> - PHAC to review the work plan and provide Contractor with feedback. 	<ul style="list-style-type: none"> - Draft work plan to be finalized by February 4, 2019 (including incorporating PHAC feedback, as and if necessary).
Program Build	<ul style="list-style-type: none"> - Work with PHAC to develop AI program based on the draft analytical framework and define key word and term search exclusion and inclusion criteria, including suicide-related words and phrases (e.g. self-injury, ideation, plans attempts, self-harm, suicide), protective and risk factors, and context. - Design and build a preliminary suicide surveillance tool using developed AI program applied to social media platform(s) in Canada to (1) detect trends and patterns of suicide-related behaviours (including ideation, planning, and attempts) and (2) public opinion and discourse on the topic of suicide. 	<ul style="list-style-type: none"> - PHAC to work with Contractor to develop a draft analytical framework and identify exclusion and inclusion criteria for keywords and terms included in the project. - PHAC will provide additional feedback, as and if necessary. 	<ul style="list-style-type: none"> - Due March 31, 2019
Surveillance	<ul style="list-style-type: none"> - Conduct surveillance for a period of three (3) months. 	<ul style="list-style-type: none"> - Work with Contractor on draft surveillance tool, as and if necessary. 	<ul style="list-style-type: none"> - Complete surveillance by June 30, 2019.
Draft Baseline Report	<ul style="list-style-type: none"> - Produce a draft report outlining initial findings from first 3 months of the surveillance pilot. 	<ul style="list-style-type: none"> - PHAC to review initial draft report and provide feedback. - PHAC will have the opportunity to probe the findings and work with the Contractor to further refine key word and term search criteria over the course of up to two (2) more iterative draft reports, if necessary. 	<ul style="list-style-type: none"> - Draft baseline report due by July 31, 2019.

Continued Surveillance	<ul style="list-style-type: none"> - [If applicable] Address PHAC's feedback and suggested revisions, and make necessary changes to the projects' methodology and the AI technology. - Continue the surveillance for a period of three (3) more months. 	<ul style="list-style-type: none"> -Work with Contractor on surveillance tool and provide feedback, as and if necessary. 	<ul style="list-style-type: none"> -[If applicable]Address PHAC feedback by August 31 -Continue surveillance from Sept 1 – November 30, 2019.
Draft Final Report	<ul style="list-style-type: none"> - Produce a draft final report summarizing findings to date. - Meet with PHAC to present the draft final report as a proof of concept and discuss any issues. 	<ul style="list-style-type: none"> -Review draft final report with initial surveillance data to determine if the proof of concept demonstrates potential for future surveillance and provide feedback, as and if necessary. -Meet with the Contractor to discuss the draft final report and any issues. 	<ul style="list-style-type: none"> -Submit draft final report to PHAC by December 15, 2019.
Draft Reporting Tool	<ul style="list-style-type: none"> - Develop a draft reporting tool that can produce monthly reports of the data generated from the pilot suicide surveillance system that uses the AI technology and methodology. 	<ul style="list-style-type: none"> -Evaluate the draft reporting tool, and provide feedback as and if necessary. 	<ul style="list-style-type: none"> -Submit draft reporting tool to PHAC by December 15, 2019. -PHAC evaluation to be done by March 31, 2020.

3.2. Reporting Requirements

The Contractor shall submit to the Project Authority as in Table 3.1 deliverables above.

3.3. Project Management Control Procedures

The individual identified in the proposal as the Project Authority shall provide feedback as required by the Contractor throughout the process.

4. ADDITIONAL INFORMATION

4.1. Canada's Obligations

The Project Authority will be responsible for overall project management, including:

- Ensuring availability of staff with whom the Contractor may need to consult;
- Provide other assistance or support as deemed necessary by PHAC;
- Provide comments on draft reports within ten (10) working days.

4.2. Contractor's Obligations

The Contractor will be required to conduct the work and meet the obligations described in this statement of work. The Contractor shall inform the Project Authority of any exceptional and/or unforeseen events that have an impact on project activities or outcomes. In such an event, the Contractor will work in close collaboration with the Project Authority to develop an appropriate and satisfying solution. In addition, the Contractor will be expected to:

- Perform the work using the equipment, software, and tools of the Contractor;
- Attend meetings with PHAC as required;
- Communicate with the Project Authority as needed; and
- Ensure the timely delivery of all deliverables, as specified under the terms and conditions of this Contract.

4.3. Location of Work, Work site and Delivery Point

All personnel assigned to any Contract must be ready to work in close and frequent contact with the departmental representatives in the National Capital Region. The work will be performed at the Contractor's place of business.

4.4. Language of Work

The work, final document and any other deliverables shall be submitted in English.

ANNEX B FINANCIAL SUBMISSION

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

1.0 Milestones

The schedule of milestones for which payments will be made in accordance with the Contract is as follows. These amounts do not include GST/HST. Total financial bid for the initial contract period cannot equal greater than **\$150,000.00** (before taxes), if so the bid will be deemed unresponsive.

#	Deliverables	DELIVERABLES/ MILESTONES BY CONTRACTOR	PHAC ACTIVITIES	Financial Bid	Due Date
1	Project Initiation	<ul style="list-style-type: none"> - A Draft report outlining the Contractors privacy management approach. - Draft analytical framework. - Meet with PHAC to discuss overall work, deliverables and objectives and timelines. 	<ul style="list-style-type: none"> -PHAC, including Privacy Management Division, to review the privacy management approach -Provide overview of issue and work needed, discuss and clarify any issues. 	\$	January 2, 2019
2	Draft Work Plan	<ul style="list-style-type: none"> - Develop a draft work plan, including timelines. - Revise the draft work plan based on any PHAC feedback. 	<ul style="list-style-type: none"> -PHAC to review the work plan and provide Contractor with feedback. 	\$	February 4, 2019
3	Program Build	<ul style="list-style-type: none"> - Work with PHAC to develop AI program based on the draft analytical framework and define key word and term search exclusion and inclusion criteria, including suicide-related words and phrases (e.g. self-injury, ideation, plans attempts, self-harm, suicide), protective and risk factors, and context. - Design and build a preliminary suicide surveillance tool using developed AI program applied to social media platform(s) in Canada to (1) detect trends and patterns of suicide-related behaviours (including ideation, planning, and attempts) and (2) public opinion and discourse on the topic of suicide. 	<ul style="list-style-type: none"> -PHAC to work with Contractor to develop a draft analyticalframework and identify exclusion and inclusion criteria for keywords and terms included in the project. -PHAC will provide additional feedback, as and if necessary. 	\$	March 31, 2019

4	Surveillance	<ul style="list-style-type: none"> - Conduct surveillance for a period of three (3) months. 	<ul style="list-style-type: none"> -Work with Contractor on draft surveillance tool, as and if necessary. 	\$	June 30, 2019
5	Draft Baseline Report	<ul style="list-style-type: none"> - Produce a draft report outlining initial findings from first 3 months of the surveillance pilot. 	<ul style="list-style-type: none"> -PHAC to review initial draft report and provide feedback. -PHAC will have the opportunity to probe the findings and work with the Contractor to further refine key word and term search criteria over the course of up to two (2) more iterative draft reports, if necessary. 	\$	<p>July 31, 2019.</p> <p>PHAC feedback due by August 19, 2019.</p>
6	Continued Surveillance	<ul style="list-style-type: none"> - [If applicable] Address PHAC's feedback and suggested revisions, and make necessary changes to the projects' methodology and the AI technology. - Continue the surveillance for a period of three (3) more months. 	<ul style="list-style-type: none"> -Work with Contractor on surveillance tool and provide feedback, as and if necessary. 	\$	<ul style="list-style-type: none"> -[If applicable] Address PHAC feedback by Sept 16, 2019. -Continue surveillance from Sept 1 – November 30, 2019.
7	Draft Final Report	<ul style="list-style-type: none"> - Produce a draft final report summarizing findings to date. - Meet with PHAC to present the draft final report as a proof of concept and discuss any issues. 	<ul style="list-style-type: none"> -Review draft final report with initial surveillance data to determine if the proof of concept demonstrates potential for future surveillance and provide feedback, as and if necessary. -Meet with the Contractor to discuss the draft final report and any issues. 	\$	December 15, 2019
8	Draft Reporting Tool	<ul style="list-style-type: none"> - Develop a draft reporting tool that can produce monthly reports of the data generated from the pilot suicide surveillance system that uses the AI technology and methodology. 	<ul style="list-style-type: none"> -Evaluate the draft reporting tool, and provide feedback as and if necessary. 	\$	<p>December 2, 2019</p> <p>- PHAC evaluation to be done by March 31, 2020.</p>
(1) Total				\$	March 31, 2020

2.0 Option Periods

Based on PHAC's evaluation of the pilot project and the draft reporting tool (see above), the Contractor may be requested to implement the draft reporting tool to provide PHAC with monthly reports on the findings from the suicide surveillance system that uses the AI technology and methodology. Input the amount each monthly report would cost.

Option Period #1

DELIVERABLE	DELIVERABLE	PHAC ACTIVITIES	COST (PER MONTH)	OPTION PERIOD START AND END DATE
Monthly Reporting (Draft Reporting Tool)	Produce monthly data reports from pilot suicide surveillance system that uses the AI technology and methodology.	- Work with Contractor on surveillance tool and provide feedback, as and if necessary. -	\$	April 1, 2020 – March 31 2021
Total (x12 months)			\$	

Option Period #2

DELIVERABLE	DELIVERABLE	PHAC ACTIVITIES	COST (PER MONTH)	OPTION PERIOD START AND END DATE
Monthly Reporting (Draft Reporting Tool)	Produce monthly data reports from pilot suicide surveillance system that uses the AI technology and methodology.	- Work with Contractor on surveillance tool and provide feedback, as and if necessary. -	\$	April 1, 2021 – March 31 2022
Total (x12 months)			\$	

Option Period #3

DELIVERABLE	DELIVERABLE	PHAC ACTIVITIES	COST (PER MONTH)	OPTION PERIOD START AND END DATE
Monthly Reporting (Draft Reporting Tool)	Produce monthly data reports from pilot suicide surveillance system that uses the AI technology and methodology.	- Work with Contractor on surveillance tool and provide feedback, as and if necessary. -	\$	April 1, 2022 – March 31 2023
Total (x12 months)			\$	