



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

solicitation-demandedesoumission@cnsccsn.gc.ca

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

Proposal To: Canadian Nuclear Safety Commission

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 aux: Commission canadienne de sûreté nucléaire

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

**Vendor/Firm Name and address
Raison sociale et adresse du fournisseur/de l'entrepreneur**

Issuing Office – Bureau de distribution

Canadian Nuclear Safety Commission – Commission canadienne de sûreté nucléaire

Title – Sujet	
Review of the Canadian Nuclear Safety Commission's Regulatory Framework for Readiness to Regulate Artificial Intelligence	
Solicitation No. – N° de l'invitation	Date
5000062132	January 4, 2022
Client Reference No. – N° référence du client	
5000062132	
Solicitation Closes – L'invitation prend fin	Time Zone - Fuseau horaire
February 14, 2022 at 11:00 a.m.	Eastern Standard Time (EST)
Address Inquiries to : - Adresser toutes questions à:	
Daniel Tilsley Contracting Specialist Canadian Nuclear Safety Commission solicitation-demandedesoumission@cnsccsn.gc.ca	
Destination of Services: Destination des services :	
Canadian Nuclear Safety Commission 280 Slater Street Ottawa, ON K1P 5S9	

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



Table of Contents

PART 1, GENERAL INFORMATION	4
1.1 Introduction.....	4
1.2 Summary	4
1.3 Debriefings	5
PART 2, BIDDER INSTRUCTIONS	6
2.1 Standard Instructions, Clauses and Conditions	6
2.2 Submission of Bids.....	7
2.3 Inquiries - Bid Solicitation.....	7
2.4 Applicable Laws.....	7
2.5 Improvement of Requirement During Solicitation Period	7
2.6 Bid Challenge and Recourse Mechanisms	8
PART 3, BID PREPARATION INSTRUCTIONS.....	9
3.1 Bid Preparation Instructions.....	9
PART 4, EVALUATION PROCEDURES AND BASIS OF SELECTION	10
4.1 Evaluation Procedures	10
4.2 Basis of Selection – Highest Combined Rating of Technical Merit and Price	10
ATTACHMENT 1 TO PART 4, TECHNICAL CRITERIA.....	12
PART 5, CERTIFICATIONS AND ADDITIONAL INFORMATION	18
5.1 Certifications Required with the Bid	18
5.2 Certifications Precedent to Contract Award and Additional Information.....	18
PART 6, RESULTING CONTRACT CLAUSES	21
6.1 Statement of Work	21
6.2 Standard Clauses and Conditions	21
6.3 Security Requirements	22
6.4 Term of Contract.....	22
6.5 Authorities.....	22
6.6 Proactive Disclosure of Contracts with Former Public Servants.....	22
6.7 Payment.....	23



6.8 Invoicing Instructions 23

6.9 Certifications and Additional Information 23

6.10 Applicable Laws 24

6.11 Priority of Documents 24

6.12 Dispute Resolution 24

ANNEX A, STATEMENT OF WORK 25

ANNEX B, BASIS OF PAYMENT 31



It is understood that the procurement of services for the Canadian Nuclear Safety Commission (CNSC) falls under the provisions of the *Nuclear Safety and Control Act, S.C. 1997, c. 9*.

PART 1, GENERAL INFORMATION

1.1 Introduction

The bid solicitation is divided into six parts plus attachment 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; and
- Part 6 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Technical Criteria are included as an attachment.

The Annexes include the Statement of Work and the Basis of Payment.

1.2 Summary

The Canadian Nuclear Safety Commission (CNSC) seeks to establish a contract for the review of its Regulatory Framework for Readiness to Regulate Artificial Intelligence, as defined in Annex A, Statement of Work.

There is no security requirement associated with the requirement.

The requirement is subject to the provisions of the Canada-Honduras Free Trade Agreement, Canada-United Kingdom Trade Continuity Agreement, World Trade Organization - Agreement on Government Procurement, Canada-Chile Free Trade Agreement, Canada-Peru Free Trade Agreement, Canada-Colombia Free Trade Agreement, Canada-Panama Free Trade Agreement, Comprehensive and Progressive Agreement for Trans-Pacific Partnership, Canadian Free Trade Agreement, Canada-Ukraine Free Trade Agreement, Canada-Korea Free Trade Agreement, and Comprehensive Economic Free Trade Agreement if it is in force.

The resulting contract will not include deliveries of services and goods within locations within Yukon, Northwest Territories, Nunavut, Quebec, or Labrador that are subject to Comprehensive Land Claims Agreements (CLCAs). Any requirements for deliveries of services and goods within locations within Yukon, Northwest Territories, Nunavut, Quebec, or Labrador that are subject to CLCAs will have to be treated as a separate procurement not forming part of the bid solicitation.



1.3 Debriefings

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



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>) 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 (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation. The following changes are made:

- a) Replace references to “Canada” and “Public Works and Government Services Canada” (or “PWGSC”) with “Canadian Nuclear Safety Commission” (CNSC).

- b) Amend subsection 4 of section 5, Submission of Bids, as follows:

Delete: 60 days

Insert: 180 days

- c) Delete subsection 1a and 1b of section 12, Rejection of Bid, and replace with:

12.1.a. Bidders are advised that the CNSC reserves the right to consider, as part of its evaluation, any unsatisfactory performance in a previous or current project performed by the bidder, proposed subcontractor or individual proposed resource either on contract or under previous CNSC employment.

12.1.b. Additionally, bidders shall take note that once awarded, the performance of the contractor during and upon completion of the work shall be evaluated by the CNSC. The evaluation may include all or some of the following criteria: quality of deliverables, timeliness of completion of the work, project management, contract management, and cost. Should the contractor's performance be considered unsatisfactory, the contractor may be declared ineligible for future CNSC contracts.

- d) Amend section 18, Conflict of Interest – Unfair Advantage, as follows:

18.4 The CNSC reserves the right to review real, potential or apparent conflict(s) of interest. Bidders must disclose any of their activities related to the subject of the statement of work that are licensed by the CNSC. Bidders are also required to disclose any involvement in previous, current or planned work undertaken for a CNSC licensee that is or may be related to the subject of the statement of work. Such activities or work are not in themselves grounds for rejection; however, proposals to review previous work contributed by the bidder on behalf of a CNSC licensee, and proposals to make recommendations affecting the CNSC licensing decisions in which the bidder has a financial or non financial interest may be rejected.



- 18.5 Bidders must address in detail, in their submitted bids, any real, potential or apparent conflict(s) of interest they may encounter while performing the work, and must substantiate which measures they are taking to prevent the conflict(s). If in doubt about a particular situation, bidders may contact the Contracting Authority before bid closing. The CNSC reserves the right to reject any bids in which a real, potential or apparent conflict of interest exists.

2.2 Submission of Bids

Bids must be submitted only to the Canadian Nuclear Safety Commission by the date, time and location indicated below:

Date: February 14, 2022

Time: 11:00 a.m. Eastern Standard Time (EST)

Location: solicitation-demandedesoumission@cnsccsn.gc.ca

Due to the nature of this solicitation, bids submitted by facsimile or physical mail (courier, Canada Post, etc.) will not be accepted. Only bids submitted by electronic mail (email) will be accepted.

2.3 Inquiries - Bid Solicitation

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

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

2.4 Applicable Laws

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

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

2.5 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given



consideration provided they are submitted to the Contracting Authority at least thirty (30) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

2.6 Bid Challenge and Recourse Mechanisms

Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.

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:

- a) Office of the Procurement Ombudsman (OPO); and
- b) Canadian International Trade Tribunal (CITT)

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 CNSC requests that the Bidder submit its bid by electronic mail (email). The CNSC's email system has a limit of fifteen (15) MB per individual email.

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

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

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

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

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

- use letter size dimensions;
- use a numbering system that corresponds to the bid solicitation;
- include a table of contents at the beginning of every section; and
- submitted in Portable Document Format (.pdf) or Microsoft Word 97/2000 (.doc).

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

Bidders must submit a firm all inclusive price per deliverable for the work detailed in Annex A, Statement of Work.

Bidders must submit their financial bid in accordance with Part 4, Evaluation Procedures and Section 6.7. Payment of Part 6, Resulting Contract Clauses.

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

Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria:

a) Technical Evaluation

Point Rated Technical Criteria: Refer to Attachment 1 to Part 4, Technical Criteria. Bids which fail to obtain the required minimum number of points specified will be declared non-responsive. Each point rated technical criterion should be addressed separately.

b) Financial Evaluation

- i. Bidders should complete the pricing schedule found at Annex B, Basis of Payment, and include it in its financial bid once completed. At a minimum, the Bidder must respond to the pricing schedule by including in its financial bid the quoted all-inclusive firm price per deliverable (in Cdn \$) for each of the requirements identified.
- ii. The Bidders financial proposal will be the sum of all-inclusive firm price deliverables (task 1 + task 2 + task 3 = total bid price).
- iii. The price of the financial bid will be evaluated in Canadian dollars, with Applicable taxes excluded and Customs duties included.

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

4.2 Basis of Selection – Highest Combined Rating of Technical Merit and Price

- a) To be declared responsive, a bid must:
 - i. comply with all the requirements of the bid solicitation; and
 - ii. obtain the required minimum of 56 points overall for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 80 points.
- b) Bids not meeting i. and ii. will be declared non-responsive.
- c) The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 60% for the technical merit and 40% for the price.
- d) 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 60%.
- e) To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 40%.
- f) For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.



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

Example: Basis of Selection - Highest Combined Rating Technical Merit (60%) and Price (40%)

		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	$115/135 \times 60 = 51.11$	$89/135 \times 60 = 39.56$	$92/135 \times 60 = 40.89$
	Pricing Score	$45/55 \times 40 = 32.73$	$45/50 \times 40 = 36.00$	$45/45 \times 40 = 40.00$
Combined Rating		83.84	75.56	80.89
Overall Rating		1st	3rd	2nd



ATTACHMENT 1 TO PART 4, TECHNICAL CRITERIA

Point-Rated Criteria	Scoring	Bidder's Substantiating Information	Bid Preparation Instructions
<p>R1. Approach to Work</p> <p>Bidders should propose an approach for conducting the Work outlined in Annex A, Statement of Work.</p>	<p><u>Fifteen (15) Points Maximum</u></p> <p>Zero (0) Points: Elements have not been addressed.</p> <p>Five (5) Points: Some elements addressed but not enough information is provided to assess the soundness of the approach.</p> <p>Ten (10) Points: Some elements addressed and enough information is provided to assess the soundness of the approach.</p> <p>Fifteen (15) Points: All elements have been addressed and the approach is in depth, comprehensive and sound.</p>		<p>The following elements should be included in the Bidder's response:</p> <ol style="list-style-type: none">1. Approach that will be used and why it was chosen;2. How data or information collected will be analyzed; and3. Any research limitations, constraints or assumptions.



<p>R2. Proposed Work Plan</p> <p>Bidders should demonstrate their understanding of the tasks and deliverables outlined in Annex A, Statement of Work by providing a work plan.</p>	<p><u>Ten (10) Points Maximum</u></p> <p>1. Schedule</p> <p>Zero (0) Points: Project schedule is not provided or the details provided are irrelevant to meet the requirements of the statement of work.</p> <p>Two (2) Point: Project schedule is provided with some of the elements required and meets the requirements of the statement of work.</p> <p>Four (4) Points: Project schedule is provided with all of the elements required and meets the requirements of the statement of work.</p> <p>2. Resources</p> <p>Zero (0) Points: Resource allocation is not provided or is irrelevant to meet the requirements of the statement of work.</p> <p>One (1) Point: Resource allocation is provided with some of the elements required and meets the requirements of the statement of work.</p> <p>Three (3) Points: Resource allocation is provided with all of the elements required and meets the requirements of the statement of work.</p> <p>3. Risks</p> <p>Zero (0) Points:</p>		<p>The following elements should be included in the Bidder's response:</p> <ol style="list-style-type: none">1. Project schedule, including key milestones, for each task and deliverable outlined in Annex A, Statement of Work. The project schedule should include the associated start and end dates for each task and deliverable, and dependency of each tasks and deliverable where applicable;2. For each task and deliverable, the name(s) of the individual and their role on the project team. This should include an overall team structure breakdown with a reporting structure;3. Any risks that could impact the work schedule and how they would be mitigated.
---	--	--	--



	<p>Risks are not provided or are irrelevant to the requirements of the statement of work.</p> <p>One (1) Point: Risks are provided and include some of the elements required, and are relevant to the requirements of the statement of work.</p> <p>Three (3) Points: Risks are provided and include all of the elements required, and are relevant to the requirements of the statement of work.</p>		
<p>R3. Project Team</p> <p>Bidders should demonstrate that resources allocated to the proposed project team each have a minimum of one (1) year of experience on the subject of artificial intelligence (A.I.).</p>	<p><u>Five (5) Points Maximum</u></p> <p>Zero (0) Points: Less than fifty percent (25%) of the proposed resources have experience.</p> <p>Three (3) Points: At least seventy-five percent (50%) of the proposed resources have experience.</p> <p>Five (5) Points: At least seventy-five percent (75%) of the proposed resources have experience.</p>		<p>To score points, the Bidder should include in their response the name and resume of the resources allocated to the proposed project team.</p>
<p>R4. Artificial Intelligence Experience</p> <p>The Bidder should demonstrate that one (1) resource from the proposed project team has experience and technical skill (e.g. researching and writing</p>	<p><u>Thirty (30) Points Maximum</u></p> <p>Zero (0) Points: No experience</p> <p>Ten (10) Points: Less than 5 years</p> <p>Twenty (20) Points: 5 years to less than 10 years</p>		<p>For each referenced project, the Bidder must include the following information in their response:</p> <ul style="list-style-type: none"> • Client Organization Name for which the work was performed; • Project Description identifying the overall purpose or intended outcome(s) of the project;



<p>reports) conducting literature reviews in Artificial Intelligence (A.I.) or related areas such as, but not limited to, machine learning and decision support</p>	<p>Thirty (30) Points: 10 years or more</p>		<ul style="list-style-type: none"> • Duration of Time proposed resource Worked on Project (start and end date); • The role or overall responsibility of the proposed resource on the project; and • Detailed information that describes, explains, or illustrates through examples the specific work and tasks performed by the proposed resource, specific to the identified project that clearly demonstrates how the resource meets and complies with the required experience identified in the criterion. High level or generic tasks or simply repeating the statement contained in the bid solicitation without supporting detail is not sufficient and does not demonstrate compliance.
<p>R5. Regulatory Framework Experience</p> <p>The Bidder should demonstrate that one (1) resource from the project team has experience providing advice to regulatory bodies, including identifying realistic challenges (e.g. advice to a nuclear regulator).</p>	<p><u>Thirty (30) Points Maximum</u></p> <p>Zero (0) Points: No experience</p> <p>Ten (10) Points: Less than 5 years</p> <p>Twenty (20) Points: 5 years to less than 10 years</p> <p>Thirty (30) Points: 10 years or more</p>		<p>For each referenced project, the Bidder must include the following information in their response:</p> <ul style="list-style-type: none"> • Client Organization Name for which the work was performed; • Project Description identifying the overall purpose or intended outcome(s) of the project; • Duration of Time proposed resource Worked on Project (start and end date); • The role or overall responsibility of the proposed resource on the project; and • Detailed information that describes, explains, or illustrates through examples the specific work and tasks performed by the proposed resource, specific to the identified project that clearly demonstrates how the resource meets and complies with the required experience



			identified in the criterion. High level or generic tasks or simply repeating the statement contained in the bid solicitation without supporting detail is not sufficient and does not demonstrate compliance.
R6. Nuclear Experience The Bidder should demonstrate that one (1) resource from the project team has experience in nuclear (e.g. research projects or fields of work).	<u>Ten (10) Points Maximum</u> Zero (0) Points: No experience Three (3) Points: Less than 2 years Seven (7) Points: 2 years to less than 5 years Ten (10) Points: 5 years or more		1. For each referenced project, the Bidder must include the following information in their response: <ul style="list-style-type: none">• Client Organization Name for which the work was performed;• Project Description identifying the overall purpose or intended outcome(s) of the project;• Duration of Time proposed resource Worked on Project (start and end date);• The role or overall responsibility of the proposed resource on the project; and• Detailed information that describes, explains, or illustrates through examples the specific work and tasks performed by the proposed resource, specific to the identified project that clearly demonstrates how the resource meets and complies with the required experience identified in the criterion. High level or generic tasks or simply repeating the statement contained in the bid solicitation without supporting detail is not



			<p>sufficient and does not demonstrate compliance.</p> <p>AND/OR</p> <p>2. For each referenced field of work, the Bidder must include the following information in their response:</p> <ul style="list-style-type: none">• Client Organization Name for which the work was performed;• Description of work, identifying the general tasks;• Duration of Time worked (start and end date);• The role or overall responsibility of the work.
--	--	--	---

Total Available Points	Minimum Pass Mark (80%)
100 Points	80 Points

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 website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

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

5.2.1 Integrity Provisions – Required Documentation

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



5.2.3 Status and Availability of Resources

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

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

5.2.4 Education and Experience

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

5.2.5 Former Public Servant - Competitive Bid

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.



PART 6, RESULTING CONTRACT CLAUSES

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

It is understood that the procurement of services for the Canadian Nuclear Safety Commission (CNSC) falls under the provisions of the *Nuclear Safety and Control Act, S.C. 1997, c. 9*.

6.1 Statement of Work

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

6.2 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>) issued by Public Works and Government Services Canada.

Wherever “Public Works and Government Services Canada” or “Canada” appears in any of the standard clauses or the general or supplemental general conditions, replace with “Canadian Nuclear Safety Commission” (or “CNSC”).

6.2.1 General Conditions

2035 (2020-05-28), General Conditions - Higher Complexity - Services, apply to and form part of the Contract. The following change is made:

- a) Replace section 27 with the following:
 - i. The contractor acknowledges that individuals who are subject to the provisions of the Conflict of Interest Act (S.C. 2006, c. 9, s. 2) the Conflict of Interest Code for Members of the House of Commons, the Values and Ethics Code for the Public Sector, the Treasury Board Policy on Conflict of Interest and Post- Employment, the CNSC Values and Ethics Code, the CNSC Conflict of Interest and Post-Employment Policy, the CNSC Directive on Reporting and Managing Financial Conflicts of Interest and/or all other codes of conduct applicable within specific federal organizations cannot derive any direct benefit resulting from the contract.
 - ii. Contractors, subcontractors, or any of their respective employees working full-time on CNSC premises must comply with the Values and Ethics Code for the Public Sector, the Treasury Board Policy on Conflict of Interest and Post-Employment, the CNSC Values and Ethics Code, the CNSC Conflict of Interest and Post-Employment Policy and the CNSC Directive on Reporting and Managing Financial Conflicts of Interest.
 - iii. Post-employment procedures apply to individuals who have left the public sector.
 - iv. The CNSC Values and Ethics Code, CNSC Conflict of Interest and Post-Employment Policy and the CNSC Directive on Reporting and Managing Financial Conflicts of Interest can be found at <http://www.nuclearsafety.gc.ca/eng/about-us/values-and-ethics/index.cfm>



6.3 Security Requirements

There is no security requirement applicable to the Contract.

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from _____ to _____ *To be inserted at Contract award* inclusive.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

To be inserted at Contract award

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

The Project Authority for the Contract is:

To be inserted at Contract award

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

The Contractor's Representative for the Contract is:

To be inserted at Contract award

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: 2019-01 of the Treasury Board Secretariat of Canada.



6.7 Payment

6.7.1 Basis of Payment - Firm Price

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm all inclusive price per deliverable, as specified in Annex B for a total cost of \$ *To be inserted at Contract award* Canadian dollars. Customs duties are included and Applicable Taxes are extra.

6.7.2 Multiple Payments

Canada will pay the Contractor upon completion and delivery of deliverables 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.

6.7.3 T1204 - Direct Request by Customer Department

Pursuant to paragraph 221 (1)(d) of the Income Tax Act, R.S. 1985, c. 1 (5th Supp.), payments made by departments and agencies to contractors under applicable services contracts (including contracts involving a mix of goods and services) must be reported on a T1204 Government Service Contract Payments slip.

To enable departments and agencies to comply with this requirement, the Contractor must provide Canada, upon request, its business number or Social Insurance Number, as applicable. (These requests may take the form of a general call-letter to contractors, in writing or by telephone).

6.7.4 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using Direct Deposit.

6.8 Invoicing Instructions

- a) Invoices can be emailed to finance@cnsccsn.gc.ca.
- b) The Contractor shall include the contract number and appropriate Applicable Taxes registration number on all invoices pertaining to the contract.
- c) The last and final invoice under the contract shall be clearly marked “final invoice”.

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) 2035 (2020-05-28), General Conditions - Higher Complexity - Services;
- c) Annex A, Statement of Work;
- d) Annex B, Basis of Payment;
- e) the Contractor's bid dated *To be inserted at Contract award*.

6.12 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

1.0 TITLE

Review of the Canadian Nuclear Safety Commission's Regulatory Framework for Readiness to Regulate Artificial Intelligence

2.0 OBJECTIVE OF THE CONTRACT

The Canadian Nuclear Safety Commission (CNSC) requires the services of external professionals (such as academia and industry consultants with demonstrated expertise in artificial intelligence) for a review of the CNSC's regulatory framework (i.e., *Nuclear Safety and Control Act*, Regulations and REGDOCs) readiness for artificial intelligence.

The objective of this review is to provide an environmental scan of the how regulators are addressing AI in their regulatory frameworks, as well as assessment and compliance verification strategies for the use of AI in their regulated activities. Further, this review will provide the CNSC and other federal regulatory bodies with relevant information on the types of AI and the means of adoption globally within the regulatory community.

Additionally, the review is intended to assist the CNSC identify the best course of action regarding requirements around the implementation of AI in the nuclear industry as well as providing insight to the CNSC as to the nature of resources required to do so.

3.0 BACKGROUND

The CNSC is a Federal Government Agency that regulates the nuclear industry in Canada. By virtue of the *Nuclear Safety and Control Act*, the CNSC regulates the use of nuclear energy and materials to protect health, safety, security and the environment; to implement Canada's international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical and regulatory information to the public.

The CNSC engagement with the nuclear industry has revealed a desire to incorporate AI into their activities. There is particular interest from vendors and potential licensees of small modular reactors (SMR). CNSC staff have engaged with other nuclear regulators, other government departments, nuclear, non-nuclear industries and academia in an effort to understand the elements required for a safety case involving the use of AI in the nuclear activities. There is concern that the industry's desire to implement AI may precede the CNSC's ability to articulate and assess the requirements of its use.

While the nuclear industry has historically been hesitant to implement emerging technologies, developers of SMRs and licensees operating existing nuclear facilities are seeking to incorporate AI into their operations. For example, regarding maintenance scheduling, industry is exploring the use of predictive maintenance, whereby parts are serviced or replaced when the predictive model based on AI programming, data and sensors, predicts it is needed, as opposed to solely on a scheduled basis. While this process has the promise of significant savings for industry, its regulatory acceptability is not clear given the current level of regulatory knowledge of AI.

This review will guide the CNSC in determining how to incorporate requirements and guidance regarding the use of AI into the Canadian nuclear regulatory framework, and how to approach acquiring any required expertise to assess AI in the context of regulated activities. Additionally, as industry seeks to adopt AI, regulators, including the CNSC, are actively seeking opportunities to streamline their regulatory activities by also adopting AI into their internal processes, and the outputs of this proposal will support these objectives.



4.0 SCOPE OF WORK

Third-party literature study and evaluation of:

- the information required to demonstrate the suitability of the use of Artificial Intelligence (AI) to meet regulatory requirements in licensed nuclear activities;
- the potential challenges for effective regulatory oversight of applications of AI to regulated activities; and
- the use of AI by regulators, domestic and international.

The summation of the project will be the development and submission of recommendations to incorporate the consideration into the CNSC’s regulatory framework as well as in the CNSC’s inspection, verification and compliance regime. .

5.0 TASKS

The Contractor must complete the following tasks:

Task Number	Description of the Work
Task #1	1.1 Gather definitions of Artificial Intelligence (AI) currently in use by other regulators and benchmark against AI definition provided by Treasury Board; 1.2 Gather definitions of associated concepts such as machine learning, automation, explainability, etc.; 1.3 Provide relevant examples of potential applications regarding the nuclear industry; and 1.4 Provide information to address common myths related to AI.
Task #2	2.1 Review existing regulatory documentation and literature: 2.2 How are other regulators implementing AI, domestic and global, and identify relevant Codes and Standards with descriptions of possible use in regulating nuclear activities; 2.3 Identify and assess the types and means of AI being addressed by domestic and international regulatory bodies to identify any relevant regulatory requirements; 2.4 Consider the commonalities and differences between existing simulator and emulator technologies and potential applications of AI technologies; 2.5 Develop list of regulators, domestic and international that the contractor will use for benchmarking purposes and contacting as needed; and 2.6 Review CNSC operational practices to determine potential implementations of AI.



Task #3	<p>3.1 Share results with CNSC staff through a presentation of summary material as well a written summary report, including recommendations for potential actions that can be shared with other government departments</p> <p>3.2 Present potential approaches and the elements considered by the contractor in the assessment</p> <p>3.3 Present any available information on approaches and elements considered by Nuclear industry applicants/ licensees in the use of AI</p> <p>3.4 Discuss the potential challenges regarding oversight of licensee use of AI technology</p> <p>3.5 Provide recommendation on expertise needed in an organization in developing or retaining the capability to understand, specify, oversee and accept contractors' work undertaken on its behalf which incorporates AI</p> <p>3.6 Share results with CNSC and make recommendations for potential actions that can be shared with other government departments</p>
---------	---

6.0 DELIVERABLES AND ASSOCIATED SCHEDULE

The Contractor must submit the following Deliverables according to the schedule below:

Deliverable	Date	Delivery Location	Description
Kick off Meeting	No later than two (2) weeks after contract award	Tele/Videoconference via Microsoft Teams	To clarify the proposed approach, work plan and schedule to ensure achievement of the objectives. The Contractor shall outline the path forward with the above purpose in mind. This meeting will also identify where supporting documentation is needed.
Create Project Schedule	No later than two (2) week after Kick off Meeting.	Electronic Delivery	To outline the project plan, with tasks and deliverables, and timelines that will promote clear communication to help ensure the effective and timely delivery of each project component.



Progress Meetings	Weekly/Bi-weekly	Tele/Videoconference via Microsoft Teams	<p>To assess the degree to which the agreed project objectives are being achieved as planned and to facilitate timely adjustments (if necessary) to ensure the project success.</p> <p>Progress meetings will be followed by email correspondence summarizing the current status of the project activities and agreements made during the progress meetings.</p>
Task #1	Within thirty (30) days of awarding contract	Electronic Delivery	<ol style="list-style-type: none">1. Project plan including Gantt chart and resolution process if issues are identified2. Working definition of AI as it pertains to Canadian nuclear activities3. Identification of potential AI applications in the Canadian Nuclear Industry and community of Canadian regulators
Task #2	Within sixty (60) days of awarding contract	Electronic Delivery	<ol style="list-style-type: none">1. List of regulators, domestic and international that the contractor will use for benchmarking2. Report on how other regulators (domestic and global) are using AI in the conduct of their regulatory activities3. Report on regulatory requirements that currently exist for the use of AI including tables of relevant codes and standards and a description of their application4. Report on potential uses of AI within CNSC operational practices



Presentation	Within seventy-five (75) days of awarding contract	Tele/Videoconference via Microsoft Teams	Presentation and Communication Materials on Final Report
Task #3	Within ninety (90) days of awarding contract	Electronic Delivery	Delivery of final report to the CNSC including all items listed in task 1 and 2.

7.0 FORMAT OF DELIVERABLES

The Contractor must provide all deliverables in the following formats:

- electronically;
- using font Times New Roman 12 points;
- using Microsoft Office 2016 or later and have editing accessibility;

Any electronic files that cannot be read or require major formatting changes when opened are considered unacceptable and will be returned to the Contractor for correction at their expense.

The CNSC reserves the right, at its own discretion, to have the final report printed under CNSC cover, and to distribute it publicly. CNSC publication number(s) will be provided by the CNSC.

8.0 GOVERNMENT FURNISHED EQUIPMENT

It is not the responsibility of the CNSC to provide a cellular phone, home office equipment, internet or other peripherals to Contractors.

9.0 APPLICABLE DOCUMENTS

- Directive on Automated Decision-Making
<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32592>
- Responsible use of artificial intelligence (AI)
<https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai.html>

10.0 LANGUAGE OF WORK

The work must be conducted in English. All deliverables must be submitted in English. The CNSC will be responsible for the translation of the deliverables if required. The Contractor's resource(s) may be required to interact with and provide updates to senior management including directors, executives, directors general and vice-presidents. The Contractor's resource(s) must conduct themselves in a professional manner for interaction with members of senior management.

The Contractor's resource(s) must be able to communicate in English as follows:

Spoken



Able to use the language fluently and accurately on all levels normally pertinent to professional needs. Language usage and ability to function are fully successful. Can tailor language to audience and discuss in depth highly abstract or unfamiliar topics. Able to speak with a great deal of fluency, grammatical accuracy, complex vocabulary and in an idiomatic fashion.

Reading

Able to read fluently and accurately all styles and forms of the language in any subject as well as those pertinent to professional needs. Can follow unpredictable turns of thought readily in editorial, conjectural, and literary texts, as well as in materials in own special field, including official documents and correspondence.

Writing

Able to write the language precisely and accurately in a variety of prose pertinent to professional needs. Errors of grammar, syntax, punctuation and vocabulary are rare. Writing is consistently and explicitly organized with appropriate connectors and discourse devices (ellipsis, parallelisms, subordinates).

11.0 TRAVEL REQUIREMENTS

Travel is not anticipated. Travel and living expenses will not be reimbursed under the Contract.

12.0 LOCATION OF WORK

The work must be completed at the Contactor's premises. Consultation with team members, stakeholders, and subject matter experts, presentations, and any other meetings will be held by tele/videoconference via Microsoft Teams.



ANNEX B, BASIS OF PAYMENT

In consideration of the contractor satisfactorily completing all of its obligations under the contract, the contractor will be paid a firm all inclusive price in accordance with the following deliverables. FOB destination, Customs duties are included and Applicable Taxes are extra.

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

1.0 Professional Fees

Deliverable	Firm Price
Task #1	\$ <i>To be inserted at Contract award</i>
Task #2	\$ <i>To be inserted at Contract award</i>
Task #3	\$ <i>To be inserted at Contract award</i>
Total (Sum of Task #1, #2 and #3)	\$ <i>To be inserted at Contract award</i>

2.0 Limitation of Price

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.

3.0 Travel and Living Expenses

- a) Travel and living expenses will not be reimbursed under the Contract.
- b) Canada will not accept any travel and living expenses incurred by the Contractor as a consequence of any relocation required to satisfy the terms of the Contract.
- c) All travel within the National Capital Region will be at the Contractor's expense.