



Advance Contract Award Notice

1.0 Introduction

The Canadian Nuclear Safety Commission (CNSC) has a requirement to assess the current understandings and perceptions of the Adverse Outcome Pathway (AOP) framework in the field of radiation sciences. The purpose of this advance contract award notice (ACAN) is to signal the CNSC's intention to award a contract for these services to:

Dr. Murray Rudd, Ph.D.
6173 Highway 2, Southamptton, Nova Scotia B4A 3Y6
902-877-8987
murrayrudd@gmail.com

Before awarding a contract, however, the CNSC would like to provide other suppliers with the opportunity to demonstrate that they are capable of satisfying the requirements set out in this ACAN, by submitting a statement of capabilities within the posting period for this ACAN, which is 15 calendar days.

If, during the posting period, other potential suppliers submit a statement of capabilities that meets the requirements set out in this ACAN, the CNSC may proceed to a full tendering process via the Government Electronic Tendering Service or by inviting bids directly from suppliers.

If no other supplier submits, on or before the closing date, a statement of capabilities meeting the requirements set out in the ACAN, a contract will be awarded to the above-noted supplier.

2.0 Background

The CNSC regulates the use of nuclear energy and materials to protect the 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.

Recently, the chemical risk assessment community completed an AOP focused horizon scan. Horizon scanning is a method of systematically searching for and identifying emerging trends, opportunities, and limitations that might impact the future directions of a defined subject. The goal of the work conducted by the chemical community was to obtain global input, modernize risk assessment, and facilitate science-based regulatory decision-making for chemicals. Expert ranking was used to prioritize the categories, where four broad themes emerged that could help inform and guide future AOP research and regulatory initiatives.

Given the similarities between the chemical and radiation fields, the broad themes in the chemical AOP horizon scan can inform the development of radiation AOPs.



The CNSC has a requirement to develop a radiation-AOP-focused survey. To complete this work, the CNSC requires an expert to develop, test and finalize the survey questions. The contractor will develop the survey instrument, implement the survey, conduct the data analysis, and provide a presentation and final report of the findings. The work will involve the following:

The contractor must complete the following tasks:

- a. provide to the Technical Authority a work plan prior to the kick-off meeting
- b. participate in the kick-off meeting
- c. obtain the survey software
- d. solicit candidate questions from across the radiation risk community
- e. develop and finalize the AOP related survey questions
 - i. approximately 20-25 total questions, with a maximum of 40 questions
 - ii. peer review the survey questions by select individuals, to be determined at later date.
- f. submit the survey questions to the Technical Authority for approval
- g. construct an appropriate survey sample: Determine the sample frame, sample strategy, and survey sample considering representativeness of survey sample such as demographics, expertise, and affiliations
- h. develop the survey instrument: Design an appropriate survey instrument and approach to address questions and meet project objectives
- i. launch the survey with an appropriate software with measures to obtain an appropriate response rate
- j. conduct the data analysis
- k. present the findings
- l. submit the final report to CNSC Technical authority

The proposed contract is for a period of 1 year, from award of Contract to the submission of the final report.

The estimated value of the contract, including the option period, is **\$77,000 CAD**. Applicable taxes are extra.

3.0 Minimum Mandatory Requirements

Any interested supplier must demonstrate by way of a statement of capabilities that it meets the following requirements:

M1: Experience in developing and conducting horizon-style scans on the topic of Adverse Outcome Pathways (AOPs), demonstrated through previous publication(s) in the scientific literature.

M2: Significant experience, in developing and conducting global horizon scanning and research as demonstrated through 20 or more previous publications and/or conference, workshop, or seminar presentation.



M3: Knowledge of Adverse Outcome Pathways (AOPs) as demonstrated through previous publication(s) in the scientific literature, and/or conference, workshop or seminar presentations.

M4: Significant experience in developing survey questions and using survey software to assist in data analyses, as demonstrated through a minimum of 20 publications in scientific journals.

M5: Significant experience writing and disseminating scientific information demonstrated through a minimum of 20 publications in scientific journals, bulletins, and book chapters.

M6: Significant experience presenting scientific results to technical audience demonstrated through a minimum of 20 conference, workshop, or seminar presentations.

M7: Significant experience (over 15 years) as a full, assistant, or adjunct professor in the field of environmental sciences (or equivalent, including other scientific disciplines or economics).

4.0 Justification for the Pre-selected Supplier”

The pre-selected supplier meets all of the minimum mandatory requirements and is an expert in the area of interest.

The pre-selected supplier possess’ significant expertise and skills in developing horizon-style scans. In addition, the pre-selected supplier possess’ significant knowledge about Adverse Outcome Pathways (AOPs), the topic of the horizon scan.

The AOP initiative has gained momentum in the chemical and ecological fields, with significant investment in the development of AOPs to address mammalian and environmental toxicology for regulatory applications. The pre-selected supplier has previously conducted a horizon scan for the chemical field regarding AOPs. He is qualified in achieving not only the projects goals, but also facilitating the collaborating between the chemical and ecological fields.

The pre-selected supplier is the only supplier known to have the required experience and expertise to carry out this work. This work is similar to earlier work conducted by the pre-selected supplier in the chemical toxicology field. It is important that this radiation focused AOP be consistent with the approach taken by the chemical community. Together these two fields will improve the confidence in the findings of these respective works. By applying a consistent methodology to these two fields, AOPs can greatly improve regulatory decision-making, particularly with regards to co-exposure scenarios.

5.0 Intellectual Property



Ownership of any foreground intellectual property arising out of the proposed contract will vest in the contractor.

6.0 Statement of Capabilities

Suppliers who consider themselves fully qualified and available to meet the specified requirements may submit a statement of capabilities in writing to the contracting authority identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

The closing date and time for accepting statements of capabilities is April 1, 2021; 14:00 EST

7.0 Contact Information

Inquiries and statements of capabilities are to be directed in writing to:

Luc Bonhomme
Contracting Specialist
280 Slater Street
P.O. Box 1046, Station B
Ottawa ON K1P 5S9
Canada

Telephone: 613-293-0419

Email: cnscc.solicitation-demandedesoumission.ccsn@canada.ca

8.0 Policy Information

Government Contracts Regulations (GCRs) section 6: “Notwithstanding section 5, a contracting authority may enter into a contract without soliciting bids where... (d) only one person is capable of performing the contract.”