

1.0 Introduction

The Canadian Nuclear Safety Commission (CNSC) has a requirement to facilitate training sessions for the International Atomic Energy Agency (IAEA) inspectors on the VXI Integrated Fuel Monitor (VIFM) systems currently implemented in CANDU reactors in Canada and around the world. The purpose of this advance contract award notice (ACAN) is to signal the CNSC's intention to award a contract for these services to:

Eton Systems 15 Pinepoint Drive Nepean, Ontario K2H 6B1

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

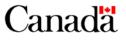
The mandate of the Canadian Nuclear Safety Commission (CNSC) is to regulate the use of nuclear energy and materials to protect the health, safety and security of Canadians and the environment; and to implement Canada's international commitments on the peaceful use of nuclear energy. Pursuant to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Government of Canada has entered into a Comprehensive Safeguards Agreement and Additional Protocol (hereafter, the safeguards agreements) with the International Atomic Energy Agency (IAEA). The objective of the Canada/IAEA safeguards agreements is for the IAEA to provide annual assurance to Canada and to the international community that all declared nuclear material is in peaceful, non-explosive uses and that there is no indication of undeclared material or activities. In the IAEA safeguards system, the CNSC is the State Regulatory Authority that implements these safeguards agreements on behalf of the Government of Canada.

The Canadian Safeguards Support Program (CSSP) is one mechanism used by the CNSC to fulfill its mandate on the peaceful uses of nuclear energy pursuant to the NPT. The CSSP provides support for the implementation of Canada's safeguards obligations and provides resources and assistance to the IAEA in order to ensure the successful application of safeguards in Canada and the peaceful use of Canadian-exported nuclear material, technology, and equipment.

The VXI Integrated Fuel Monitor (VIFM) system was developed by the CNSC through the CSSP and consists of a series of radiation monitoring devices that support safeguards applications in CANDU reactors. As a part of the commitment to the IAEA, which has deployed these systems around the world,

Page 1 of 6

CNSC File No. 87055-15-0124





the CSSP provides training on their use. Besides monitoring fuelling operations, VIFM equipment is also being used to monitor spent fuel transfers to dry storage. The course material will be presented at the VIFM training courses that will be delivered in 2016 and 2017.

3.0 <u>Objectives</u>

The objective of this CSSP task is for the Contractor to facilitate training sessions for IAEA inspectors on the VIFM systems currently implemented in CANDU reactors in Canada and around the world. Following the training sessions, the IAEA participants should be sufficiently trained to use the VIFM safeguards equipment installed at CANDU facilities.

4.0 <u>Scope of Work</u>

To meet this objective, the Contractor shall, in consultation with VIFM training stakeholders, update and further refine existing course material on VIFM systems installed at CANDU reactors. The Contractor shall deliver training courses to the IAEA, as required, in 2016 and 2017.

5.0 <u>Tasks to be Performed</u>

Preceding each VIFM training course offered in Vienna, Austria, inspectors participate in a two-day CANDU training course. To support the delivery of the VIFM training course, the Contractor shall be knowledgeable about CANDU reactors and shall schedule a minimum of two additional days in Vienna, prior to each VIFM training course, to familiarize himself with the most current CANDU course agenda and material. A portion of these two additional days shall also be used for set-up and to ensure that all of the VIFM training course demonstrations and exercises function as required at the training facility in Vienna. The Contractor shall deliver, in English, each VIFM training course over three days.

The Contractor shall conduct the following tasks through consultation with VIFM training stakeholders:

- Update existing course schedule and outline.
- Update existing VIFM training material.
- Review current CANDU course agenda and material.
- Set-up for VIFM training course and test functionality of demonstrations, data sets and exercises at training facility in Vienna.
- Present updated VIFM training course in Vienna.
- Provide, on return from Vienna:
 - o Trip report including recommendations for improvements to future training courses, and
 - o Electronic copy of updated VIFM training material.

6.0 <u>Deliverables</u>

6.1 Start-up meeting.

Date: No less than eight weeks prior to course delivery.

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Page 2 of 6

CNSC File No. 87055-15-0124





Location: Via telephone/videoconference.

Purpose:

To discuss and clarify the proposed approach, work plan and schedule to ensure achievement of the contract objectives.

6.2 Updated course schedule and outline describing in detail topics to be covered in each module.

Due Date: Six weeks prior to course delivery.

Copies: One electronic copy via email to the Project Authority.

Format and style requirements:

The Contractor to consult with IAEA training officer to determine the training session format, including but not limited to the overall daily schedule, lecture duration, lab tour, training material content and hands-on exercise format.

6.3 Progress meetings.

Dates: Progress meetings to occur every two weeks after start-up meeting, unless otherwise agreed.

Location(s): Via telephone/videoconference.

Purpose:

To assess the degree to which the agreed project objectives are being achieved as planned and thus to facilitate timely adjustments (if necessary) to ensure the project success.

6.4 Updated workshop material.

Due Date: Four weeks prior to course delivery.

Copies: One electronic copy via email/CD to the Project Authority.

Format and style requirements:

The Contractor, IAEA and the Project Authority will agree upon its contents and format prior to its initial drafting. Contractor to consult (via teleconference or videoconference) with IAEA to make sure training material is up to date. The material will include, but is not limited to presentation decks (MS PowerPoint format), course manuals (electronic in MS Word), and handouts (electronic in MS Word).

6.5 Final workshop (including CANDU course review, VIFM training course set-up,

Page 3 of 6

CNSC File No. 87055-15-0124





Canadian Nuclear Commission canadienne Safety Commission de sûreté nucléaire

Advance Contract Award Notice 87055-15-0124

functionality testing and course delivery).

Dates: 2016 – date(s) to be determined 2017 – date(s) to be determined

Location: Vienna, Austria.

Purpose:

The Contractor to schedule two additional days in Vienna, prior to each VIFM course, to review current CANDU course agenda and material. During these additional two days, in consultation with IAEA training officer, the Contractor to set-up for VIFM training course and review functionality of demonstrations, data sets and exercises. Contractor to deliver three day course(s) in 2016 and 2017 as required.

6.6 Draft final report.

Due Date: Two weeks after final workshop delivery.

Copies: One electronic copy via email to the Project Authority.

Format and style requirements:

As specified in the final report.

0./ Final report and final course material.	6.7	Final report and final course	material.
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- Due Date: Four weeks after workshop delivery.
- Copies: One electronic copy of the final report and final course material via CD to the Project Authority.

Format & style requirements:

The Contractor to provide a final report documenting the course, including but not limited to successes, difficulties encountered, and recommendations. Contractor to solicit IAEA input on report and submit to CNSC for review and approval. Upon review and acceptance of report by the CNSC, the Contractor is to provide an electronic copy of final report and final course material (including presentation decks, data, examples, course handouts, etc.) via CD.

Electronic copies must be provided in a format readable by Microsoft Word with minor formatting changes. Any electronic files that cannot be read or require major formatting changes when opened are not acceptable and may be returned to the Contractor for correction. The CNSC reserves the right, at its own discretion, to have the final report printed under CNSC cover, and to distribute it publicly. Translation of the abstract into French or English, CNSC report covers and the publication number will be provided by the CNSC.





7.0 <u>Contract Value</u>

The estimated value of the contract is \$100,000.00 CAD over three fiscal years. Applicable taxes are extra.

8.0 <u>Minimum Mandatory Requirements</u>

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

- Minimum of 15 years' experience in the application and configuration of the various VIFM system components used in CANDU reactors
- Minimum 25 years' experience designing and delivering training material for a technical audience, including experience training an international audience
- Significant knowledge and understanding of CANDU reactor operation specifically as it relates to fuel transfers
- Undergraduate degree in the field of science or engineering or a related discipline

9.0 Justification for the Pre-selected Supplier

Eton Systems, the company that designed the original VIFM system training material, possesses advanced knowledge of the various VIFM components used in CANDU reactors including the spent fuel bundle counter, core discharge monitor, yes/no monitor, underwater bundle counter, mobile unit for neutron detection, silo entry gamma monitor and data acquisition/analysis software. The company also possesses expertise on the various component configurations utilized at CANDU reactors both within and outside Canada. Additionally, Eton Systems has extensive experience updating the associated training material as next generation components and software have been deployed, including updating the practical exercises that comprise data from the various components. Finally, the selected company has significant experience delivering VIFM training to IAEA inspectors who will utilize the associated equipment in the field in support of safeguards implementation. In summary, Eton Systems has been deemed the only supplier with the requisite background and combination of knowledge and experience necessary to fulfil the requirements of this contract.

10.0 Intellectual Property

Canada intends to retain ownership of all intellectual property arising out of the proposed contract on the basis that the main purpose of the contract is to produce a training program that will be used for the current training course and as the basis for all future training courses.

11.0 <u>Statement of Capabilities</u>

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 September 16, 2015 at 2:00 p.m. EDT.

12.0 Contact Information

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

Christian Tremblay Contracting Officer (consultant) 280 Slater Street P.O. Box 1046, Station B Ottawa ON K1P 5S9 Canada

Telephone:613-996-6724Fax:613-995-5086Email:christian.tremblay@cnsc-ccsn.gc.ca

13.0 Policy Information

Government Contracts Regulations: section 6(d): "only one person is capable of performing the contract."

Subject to the North American Free Trade Agreement 1016(2)(b) and the Agreement on Internal Trade (AIT) – (Article 506.12 b)

b. where there is an absence of competition for technical reasons and the goods or services can be supplied only by a particular supplier and no alternative or substitute exists.

Any information provided in response to the proposed ACAN may change the above.

