

National Research Co Council Canada re

RETURN BIDS TO: Title – Suiet Custom Extreme Ultraviolet (XUV) Spectrometer with an XUV CCD **RETOURNER LES** camera SOUMISSIONS À : Solicitation No. – N° de l'invitation Date August 23, 2023 NRC.BidReceiving-23-58084 ReceptiondesSoumissions.CNRC@nrc-cnrc.gc.ca Solicitation Closes – L'invitation Time Zone prend fin **Fuseau horaire** EDT 02:00 PM at – à on – le September 17, 2023 **REQUEST FOR PROPOSAL** DEMANDE DE PROPOSITIONS F.O.B. - F.A.B. Plant-Usine: Destination: Other-Autre: Proposal To: National Research Council Canada Address Inquiries to : - Adresser toutes questions à: We hereby offer to sell to His Majesty the King in Kacendra Dion right of Canada, in accordance with the terms and Email address – l'addresse courriel : conditions set out herein, referred to herein or attached hereto, the goods, services, and construction Kacendra.Dion@nrc-cnrc.gc.ca listed herein and on any attached sheets at the Destination - of Goods, Services, and Construction: price(s) set out thereof. Destination - des biens, services et construction : Proposition au : Conseil national de recherches Canada National Research Council Canada Nous offrons par la présente de vendre à Sa Majesté 100 Sussex Drive le Roi du chef du Canada, aux conditions énoncées Ottawa, Ontario ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction K1A 0R6 énumérés ici sur toute feuille ci-annexées, au(x) prix indiqué(s). **Instructions : See Herein** Instructions: Voir aux présentes **Comments - Commentaires** Vendor/firm Name and address Raison sociale et adresse du fournisseur/de l'entrepreneur 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 (type or print)-Nom et titre de la personne autorisée à signer au nom du fournisseur/de Issuing Office - Bureau de distribution l'entrepreneur (taper ou écrire en caractères d'imprimerie) National Research Council Canada Conseil national de recherches Canada Signature Date

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PART 1 - GENERAL INFORMATION

1.1 Security Requirements

- 1. Before award of a contract, the following conditions must be met:
 - (a) the Bidder must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites;

1.2 Statement of Requirement

To provide Custom Extreme Ultraviolet (XUV) Spectrometer with an XUV CCD camera in accordance with the detailed Statement of Requirement attached as 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.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

You are invited to submit one electronic Technical Proposal and one electronic Financial Proposal in two separate attachments to fulfil the following requirement forming part of this Request for Proposal. One attachment must be clearly marked 'Technical Proposal' and the other attachment must be marked 'Financial Proposal'. All financial information must be fully contained in the Financial Proposal, and only in the Financial Proposal. Vendors who provide financial information in the technical proposal will be disqualified. All proposals should include the front page of this RFP duly completed.

<u>2010A</u> (2022-12-01), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

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.

Proposals submitted must be valid for not less than sixty (60) calendar days from the closing date of the RFP.

2.1.1 It is the Bidder's responsibility to:

- (a) return a signed copy of the bid solicitation, duly completed, IN THE FORMAT REQUESTED;
- (b) direct its bid ONLY to the Bid Receiving address specified;
- (c) ensure that the Bidder's name, the bid solicitation reference number, and bid solicitation closing date and time are clearly visible;
- (d) provide a comprehensive and sufficiently detailed bid, including all requested pricing details, that will permit a complete evaluation in accordance with the criteria set out in the bid solicitation.

Timely and correct delivery of bids to the specified bid delivery address is the sole responsibility of the Bidder. The National Research Council Canada (NRC) will not assume or have transferred to it those responsibilities. All risks and consequences of incorrect delivery of bids are the responsibility of the Bidder.

2.1.2 Bids may be accepted in whole or in part. The lowest or any bid will not necessarily be accepted. In the case of error in the extension of prices, the unit price will govern. NRC may enter into contract without negotiation.

2.1.3 Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the terms and conditions of the resulting contract.

2.1.4 Bids will remain open for acceptance for a period of not less than sixty (60) days from the closing date of the bid solicitation, unless otherwise indicated by NRC in such bid solicitation.

2.1.5 While NRC may enter into contract without negotiation, Canada reserves the right to negotiate with bidders on any procurement.

2.1.6 Notwithstanding the bid validity period stipulated in this solicitation, Canada reserves the right to seek an extension from all responsive bidders, within a minimum of three (3) days prior to the end of such period. Bidders shall have the option to either accept or reject the extension.

2.1.7 If the extension referred to above is accepted, in writing, by all those who submitted responsive bids, then Canada shall continue immediately with the evaluation of the bids and its approval processes.

2.1.8 If the extension referred to above is not accepted, in writing, by all those who submitted responsive bids then Canada shall, at its sole discretion: either continue to evaluate the responsive bids of those who have accepted the extension and seek the necessary approvals; or cancel the solicitation; or cancel and reissue the solicitation.

2.2 Late Bids

All risks and consequences of incorrect delivery of electronic bids are the responsibility of the Bidder. The National Research Council Canada will not be responsible for late bids received at destination after the closing date and time, even if it was submitted before. Electronic bids received after the indicated closing time based on NRC servers' received time will be irrevocably rejected. Bidders are urged to send their proposal in sufficient time, in advance of the closing time to reduce any technical issues. The National Research Council Canada will not be held responsible for bids sent before closing time but received by the NRC servers after the closing time.

2.3 Submission of Bids

Technical and Financial Proposals must be <u>received</u> electronically no later than 14:00 EDT, **Solicitation Closing Date shown on front page**, to the following NRC email address:

NRC.BidReceiving-ReceptiondesSoumissions.CNRC@nrc-cnrc.gc.ca

The NRC has restrictions on incoming e-mail messages. **The maximum e-mail message size including all file attachments must not exceed 10MB.** Zip files or links to bid documents will not be accepted. Incoming e-mail messages exceeding the maximum file size and/or containing zip file attachments will be blocked from entering the NRC e-mail system. A bid transmitted by e-mail that gets blocked by the NRC e-mail system will be considered not received.

Proposals must not be sent directly to the Contracting Authority or the Project Authority.

National Research Conseil national de council Canada recherches Canada

All submitted proposals become the property NRC.

2.4 Enquiries - Bid Solicitation

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

Contracting Authority, Procurement Services National Research Council Canada Kacendra Dion - Kacendra.Dion@cnrc-nrc.gc.ca

For open public tender

To ensure the equality of information among Bidders, responses to general enquiries will be made available to all bidders unless such publications would reveal proprietary information. The bidder who initiates the question will not be identified. Technical questions that are considered proprietary by the bidder must be clearly identified. NRC will respond individually to the bidder if it considers the questions proprietary. If NRC does not consider the question proprietary, the bidder submitting it will be allowed to withdraw the question, or have the question and answer made available through the Open Bidding System (OBS) to all bidders.

Bidders who attempt to obtain information regarding any aspect of this RFP during the solicitation period through any NRC contacts other than the Contracting Authority identified herein, may be disqualified (for that reason alone).

It is the responsibility of the Bidder to obtain clarification of the requirement contained herein, if necessary, prior to submitting its proposal. The Bidder must have written confirmation from the Contracting Authority for any changes, alterations, etc., concerning this RFP.

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

2.5 Applicable Laws

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

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

2.6 Bid Challenge and Recourse Mechanisms

If you have any concerns relating to the procurement process, please refer to the <u>Recourse Mechanisms</u> page on the Buyandsell.gc.ca website. Please note that there are strict deadlines for filing complaints with the Canadian International Trade Tribunal (CITT) or the <u>Office of the Procurement Ombudsman (OPO)</u>. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.

Council Canada

https://buyandsell.gc.ca/for-businesses/selling-to-the-government-of-canada/bid-follow-up/bid-challengeand-recourse-mechanisms

https://opo-boa.gc.ca/plaintesurvol-complaintoverview-eng.html

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 **Bid Preparation Instructions**

Canada requests that the Bidder submits its bid in separate attachment sections (when applicable) as follows:

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

There shall be no payment by the National Research Council for costs incurred in the preparation and submission of proposals in response to this request. No payment shall be made for costs incurred for clarification(s) and/or demonstration(s) that may be required by NRC. The National Research Council reserves the right to reject any or all proposals submitted, or to accept any proposal in whole or in part without negotiation. A contract will not necessarily be issued as a result of this competition. NRC reserves the right to amend, cancel or reissue this requirement at any time.

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

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

Canada is committed to greening its supply chain. Environmentally preferable goods and services are those that have a lesser or reduced impact on the environment over the life cycle of the good or service. when compared with competing goods or services serving the same purpose. Environmental performance considerations include, among other things: the reduction of greenhouse gas emissions and air contaminants; improved energy and water efficiency; reduced waste and support reuse and recycling; the use of renewable resources; reduced hazardous waste; and reduced toxic and hazardous substances. In accordance with the Policy on Green Procurement (https://www.tbs-sct.gc.ca/pol/doceng.aspx?id=32573), for this solicitation:

- Bidders are encouraged to offer or suggest green solutions whenever possible. •
- Bidders are requested to provide all correspondence including (but not limited to) documents, reports and invoices in electronic format unless otherwise specified by the Contracting Authority or Project Authority, thereby reducing printed material.
- Bidders should recycle (shred) unneeded copies of non-classified/secure documents (taking into consideration the Security Requirements).
- Product components used in performing the services should be recyclable and/or reusable, whenever possible,
- Bidders are encouraged to offer goods and/or services certified to a reputable eco-label.

- Bidders should use equipment that has high energy efficiency or produces low air emissions.
- Bidders are encouraged to offer environmentally preferred products which supports a sustainable environment for nature and wildlife.
- Bidders are encouraged to offer environmentally preferred products which ensure the comfort and air quality of building occupants.

Bidders are encouraged to consult the following websites: https://www.tpsgc-pwgsc.gc.ca/app-acq/ae-gp/index-eng.html https://www.tpsgc-pwgsc.gc.ca/app-acq/ae-gp/rle-glr-eng.html

Section I: Technical Bid

In their technical bid, Bidders must explain and demonstrate how they meet the Mandatory Technical requirements at Annex B.

Data Validation Test Request

Canada may, in its discretion, request a Data Validation Test or additional information to verify that the technical bid package fully complies with the Statement of Requirement as described in Annex A and Mandatory requirements in Annex B. The Bidder will have the time period specified in writing by Canada to provide the necessary documentation. Failure to meet this deadline will result in the Bid being declared non-responsive

Bidders are and will remain solely responsible for the accuracy, consistency and completeness of their Bids and Canada does not undertake, by reason of this review, any obligations or responsibility for identifying any or all errors or omissions in Bids or in responses by a Bidder to any communication from Canada

Section II: Financial Bid

Bidders must submit their financial bid in accordance with Annex C Basis of Payment.

3.1.1 Electronic Payment of Invoices – Bid

Payments from the National Research Council Canada (NRC) are made by electronic payment. Direct deposit payments will be made in Canadian dollars and can only be deposited into Canadian bank accounts.

Only bank accounts outside of Canada are eligible to enroll as a Wire transfer payment method.

3.1.2 Exchange Rate Fluctuation

Bids will be evaluated in Canadian currency, therefore, for evaluation purposes, the exchange rate quoted by the Bank of Canada as being in effect on date of bid closing, shall be applied as the conversion factor for foreign currency. Prices quoted shall not be subject to, or conditional upon, fluctuations in commercial or other interest rates during either the evaluation or contract period.

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 Mandatory technical Evaluation Criteria and Financial Evaluation.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Mandatory Technical Evaluation

Bids will be assessed in accordance with the Annex B Mandatory Technical Evaluation Criteria. Failure to meet any of the mandatory criteria will render the bid non-responsive and it will be given no further consideration.

4.1.2 Financial Evaluation

The cost proposal must be a fixed price quotation and Delivered At Place, excluding taxes. The fixed price must include all the materials and services required to fulfil all aspects of the Statement of Requirement. Bidders should identify the currency on which the cost proposal is based.

4.2 Basis of Selection

Lowest evaluated price

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

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 <u>Forms for the Integrity Regime</u> 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 property agreement of the <u>Ineligibility and Suspension Policy</u> (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.

In addition to all other information required in the procurement process, the Bidder **must** provide the following:

- Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder or, in the case of a private company, the owners of the company.
- Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

SURNAME	GIVEN NAME(S)	TITLE			

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 The following security requirements (SRCL and related clauses) as described in Annex D apply and form part of the Contract.

6.2 Statement of Requirement

The Contractor must provide a Custom Extreme Ultraviolet (XUV) Spectrometer with an XUV CCD camera in accordance with the Requirement at Annex "A" and the Contractor's technical bid entitled _____, dated _____.

6.3 General Conditions

(2022-12-01), General Conditions - Goods (Medium Complexity), apply to and form part of 2010A 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 30, 2024 inclusive.

6.4.2 **Delivery Date**

All the deliverables must be received on or before March 30, 2024.

6.4.3 **Delivery Points**

Delivery of the requirement will be made to delivery point specified at Annex A of the Contract.

6.4.4 **Delivery and Unloading**

When making deliveries, sufficient personnel must be provided to permit unloading of any type of vehicle without the assistance of federal government personnel.

6.4.5 **Shipping Terms and Instructions - Delivered At Place**

Goods must be consigned and delivered to the destination specified in the Contract:

Incoterms® 2020 "DAP Delivered At Place"

100 Sussex Drive Ottawa, Ontario K1A 0R6

NRC Customs contacts for any Customs and Transportation Logistics enquiries:

- Daniel Frampton: (613) 993-9113 / daniel.frampton@nrc-cnrc.gc.ca
- -Christian Latreille: (613) 993-2259 / christian.latreille@nrc-cnrc.gc.ca

As part of NRC's commitment to Greening Government Operations, the Contractor is encouraged to minimize, include recycled content, re-use, or reduce/eliminate toxics in packaging, when possible.

6.4.6 Packaging

The methods used for preservation and packaging must be in conformity with the Contractor's normal standard for domestic shipment or, if necessary, with standards for overseas shipment as below deck cargo.

6.5 **Authorities**

6.5.1 **Contracting Authority**

The Contracting Authority for the Contract is:

Name: Kacendra Dion Title: Senior Contracting Officer National Research Council Canada



Telephone: (438) 324-8125 E-mail address: Kacendra.Dion@nrc-cnrc.gc.ca

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

6.5.2 Technical Authority

The Technical Authority for the Contract is:

Name:	
Title:	
Organization: _	
Address:	

Telephone: ____ ___ ____ E-mail address: _____

The Technical 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 Technical Authority; however, the Tehcnical 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:	
Address:	
Telephone:	

E-mail address: _____

6.6 Payment

6.6.1 Basis of Payment

The Contractor will be paid for costs reasonably and properly incurred in the performance of the work under this Contract in accordance with the following:

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price, as specified in contract for a cost of \$ _____. Customs duties are excluded 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.

6.6.2 Limitation of Expenditure

Unless otherwise authorized in writing by the National Research Council of Canada (NRC), NRC's financial liability to the Contractor under this Contract shall not exceed \$_____. Customs duties are

excluded and Applicable Taxes are extra. The Contractor must not perform any work that would cause the total liability of NRC to exceed this limitation unless authorized in writing by the Contracting Authority through a contract amendment. All work shall be done to the full satisfaction of the Technical Authority named herein before any payment shall become due to the Contractor.

6.6.3 Method of Payment

SACC Manual clause H1000C (2008-05-12), Single Payment

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

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

6.6.4 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Direct Deposit (Domestic Only);
- b. Wire Transfer (International Only);

6.7 Inspection and Acceptance

The Technical Authority is the Inspection Authority. All reports, deliverable items, documents, good and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the Statement of Requirement and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

6.8 Invoicing Instructions

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.

Invoices must be sent to: nrc.invoice-facture.cnrc@nrc-cnrc.gc.ca

PLEASE QUOTE CONTRACT NO. [to be inserted at contract award] ON ALL DOCUMENTATION AND INVOICES.

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 2010A (2022-12-01), Goods (Medium Complexity), apply to and form part of the Contract _____;
- (c) ANNEX A, Statement of Requirement;
- (d) ANNEX D, Security Requirements Check List;
- (e) the Contractor's bid dated _____.

6.12 SACC Manual Clauses

SACC Manual clause <u>B1501C</u> (2018-06-21) Electrical equipment **SACC Manual clause** <u>G1005C</u> (2016-01-28) Insurance – No Specific Requirements

6.13 Dispute Resolution

The Parties agree to make every reasonable effort, in good faith, to settle amicably all disputes or claims relating to the Contract, through negotiations between the Parties' representatives authorized to settle. If the Parties do not reach a settlement within 25 working days after the dispute was initially raised to the other party in writing, either Party may contact the Office of the Procurement Ombudsman (OPO) to request dispute resolution/mediation services. OPO may be contacted by e-mail at <u>boa.opo@boa-opo.gc.ca</u>, by telephone at 1-866-734-5169, or by web at <u>www.opo-boa.gc.ca</u>. For more information on OPO's services, please see the <u>Procurement Ombudsman Regulations</u> or visit the <u>OPO website</u>.

6.14 Government Smoking Policy

Where the performance of the work requires the presence of the Contractor's personnel on government premises, the Contractor shall ensure that its personnel shall comply with the policy of the Government of Canada which prohibits smoking on any government premises.

6.15 Access to Government Facilities/Equipment

Access to the facilities and equipment necessary to the performance of the work shall be provided through arrangements to be made by the Technical Authority named herein. There will be however, no day-to-day supervision of the Contractor's activities, nor control of the Contractor's hours of work by the Technical Authority.

The Contractor undertakes and agrees to comply with all Standing Orders and Regulations in force on the site where the work is to be performed, relating to the safety of persons on the site or the protection of property against loss or damage from any and all causes including fires.





ANNEX A

STATEMENT OF REQUIREMENT

SU_ATTO_05_Custom XUV Spectrometer

The SDT Research Center at The National Research Council Canada has a requirement for a Custom Extreme Ultraviolet (XUV) Spectrometer with an XUV CCD camera in an integrated package (which must meet all mandatory technical requirements as specified below).

The system will be located at 100 Sussex Drive, Ottawa, Ontario, Canada.

The delivered system must include all the following:

- (a) One spectrograph.
- (b) One set of gratings installed and calibrated.
- (c) One CCD camera with in-vacuum interface adapter for the spectrograph.
- (d) A software package and computer interface.
- (e) Vacuum equipment.
- (f) Installation.
- (g) Manuals.
- (h) Maintenance and Technical Support Services available at least for 5 years.
- (i) The system must meet all applicable Canadian Standard Association (CSA) or Underwriters' Laboratories of Canada (ULC) standards.

Section (a) – Technical Requirements for the spectrograph

The spectrograph must conform to the following technical requirements:

- 1. The spectrometer must be based on the aberration corrected flat field grazing incidence geometry
- 2. Spectral range with single grating must be 20nm 80nm or larger
- 3. Resolution must be better than 0.2nm at 60nm
- 4. The spectrometer must be configured in a slit-less configuration for the extreme ultra-violet source located at a distance of 650mm from the grating.
- 5. The spectrometer system must include the integrated slit holder for optional slits (variable or fixed) in the range of 25 microns to 200 microns.
- 6. The spectrometer must include an integrated filter insertion device for at least 2 metal foil filters of 30mm diameter each
- 7. The system must have an adjustable grating position and alignment
- 8. The spectrometer must include integrated zero order beam block
- 9. The spectrometer must be compatible with ultra-high vacuum requirements at 1×10^{-9} mbar or better
- 10. The spectrometer must include a DN100CF mounting flange to the research vacuum chamber.
- 11. The spectrometer must include a DN100CF mounting flange for mounting the camera.
- 12. The spectrometer must include a DN63CF mounting flange for the turbo pump.
- 13. The spectrometer must be configured for Canadian power requirement at 120VAC, 60Hz.

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14. The spectrometer must include all necessary components, vacuum equipment, power supplies, cabling, and software.

Section (b) – Technical Requirements for the gratings

One set of gratings must be installed and calibrated.

Section (c) – Technical Requirements for the CCD camera

The spectrometer must have an integrated extreme ultra-violet CCD camera such as Newton DO940P-BEN (Oxford Instruments) or equivalent that meets or exceeds all mandatory specifications listed below:

- 1. The camera must contain Grade 1, back illuminated uncoated sensor with enhanced extreme ultra-violet sensitivity.
- 2. The sensor must have 2048 x 512 pixels
- 3. The sensor pixel size must be 13.5 x 13.5 microns
- 4. Full unobstructed imaging area must be 27 x 7mm or larger
- 5. The sensor peak quantum efficiency in the soft X-ray range must be 95% or better.
- 6. The full well depth must be 1×10^6 e- or better
- 7. Pixel readout rates must be 0.05MHz, 1 MHz and 3MHz.
- 8. The CCD camera must include 16-bit digitizer at all readout speeds
- 9. The system must have linearity 99% or better.
- 10. Crop and binning modes must be available.
- 11. The sensor must be thermo-electrically cooled down to -80C with air cooling.
- 12. The camera system must be configured for cooling down to -100C with optional liquid recirculated chiller.
- 13. Readout noise must be 2.5e- or lower at 0.05MHz readout rate.
- 14. System dark current must be 0.0002 e-/pixel/sec or lower at -100 C.
- 15. The camera must have a DN100CF mounting flange to the spectrometer.
- 16. The camera must be compatible with vacuum better than 1×10^{-8} mbar.
- 17. The camera must be configured for Canadian power requirement at 120VAC, 60Hz.
- 18. Camera control software must be provided and must be compatible with 64-bit Windows 10/11 operating system.
- 19. A software development kit must be provided for LabVIEW and MATLAB.

Section (d) – Software package and computer interface

Software and computer interface as detailed in Section (a) and Section (c).

<u>Section (e) – Vacuum Equipment</u>

- 1. The integrated spectrometer system must be compatible with high vacuum better than 10^{-8} mbar.
- 2. All vacuum flanges must be compatible with ultra-high vacuum and only metal gaskets are utilized.
- 3. The system must include a vacuum DN63CF flange for connecting a turbo pump.
- 4. The system must include Hipace80 turbo pump with DN63CF flange and stand-alone controller
- 5. The spectrometer system must be capable to support a free-standing turbo pump
- 6. The turbo pump must be configured for Canadian power requirement at 120VAC, 60Hz.

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Section (f) – Installation and Training

The Contractor must deliver, install, integrate, and configure all deliverables at the location specified in the Contract.

The Contractor must unpack, assemble, and install the deliverables at the site. If applicable, this includes but is not limited to the provision of required moving and installation resources, packing material, vehicles, cranes, personnel, and floor protection panels.

The Contractor must supply all associated materials required to effect complete installation, integration, and configuration of the deliverables at the site. This must include but not be limited to such things as all the required power connectors, cables, and any other accessories required to install, integrate, and configure the deliverables.

The Contractor must maintain all work areas at the installation site(s) in a clean and tidy condition on completion of each day's work and on completion of acceptance, including the removal and disposal of all related packing material.

The Contractor should provide training for two staff members during the installation visit.

Section (g) - Manuals

The Contractor must deliver 1 complete set of Documentation and software, electronically, in English with the deliverables.

This documentation must include all publications pertaining to technical specifications, installation requirements and operating instructions.



Annex B

MANDATORY TECHNICAL EVALUATION

(1) The spectrograph must conform to the following technical requirements: 1. Based on the aberration corrected flat field grazing incidence geometry (PASS or FAIL) 2. Spectral range with single grating 20nm – 80nm or larger (PASS or FAIL) 3. Resolution better than 0.2nm at 60nm (PASS or FAIL) 4. Configured in a slit-less configuration for the extreme ultra-violet source located at a distance of 650mm from the grating. (PASS or FAIL) ____ 5. Integrated slit holder for optional slits (variable or fixed) in the range of 25 microns to 200 microns. (PASS or FAIL) 6. Integrated filter insertion device for at least 2 metal foil filters of 30mm diameter (PASS or FAIL) ____ 7. Adjustable grating position and alignment (PASS or FAIL) 8. Integrated zero order beam block (PASS or FAIL) _____ 9. Compatible with ultra-high vacuum requirements at 1×10^{-9} mbar or better (PASS or FAIL) 10. Include a DN100CF mounting flange to the research vacuum chamber (PASS or FAIL) 11. Include a DN100CF mounting flange for mounting the camera (PASS or FAIL) ____ 12. Include a DN63CF mounting flange for the turbo pump (PASS or FAIL) 13. Configured for Canadian power requirement at 120VAC, 60Hz (PASS or FAIL) 14. Include all necessary components, vacuum equipment, power supplies, cabling and software. (PASS or FAIL)

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(2) The CCD camera must conform to the following technical requirements:

1.	Contain Grade 1, back illuminated uncoated sensor with enh	nanced extreme
	ultra-violet sensitivity	
	(PASS or FAIL)	
2.	Sensor must have 2048 x 512 pixels	
	(PASS or FAIL)	
3.	Sensor pixel size must be 13.5 x 13.5 microns	
	(PASS or FAIL)	
4.	Full unobstructed imaging area 27 x 7mm or larger	
	(PASS or FAIL)	
5.	Sensor peak quantum efficiency in the soft X-ray range 95%	or better
	(PASS or FAIL)	
6.	Full well depth 1×10^6 e- or better	
	(PASS or FAIL)	
7.	Pixel readout rates 0.05MHz, 1 MHz and 3MHz	
	(PASS or FAIL)	
8.	Include 16-bit digitizer at all readout speeds	
	(PASS or FAIL)	
9.	Have linearity 99% or better	
	(PASS or FAIL)	
10.	Crop and binning modes available	
	(PASS or FAIL)	
11.	Sensor thermo-electrically cooled down to -80C with air cool	oling
	(PASS or FAIL)	
12.	Camera system configured for cooling down to -100C with	optional liquid
	recirculated chiller.	
	(PASS or FAIL)	
13.	Readout noise 2.5e- or lower at 0.05MHz readout rate	
	(PASS or FAIL)	
14.	System dark current 0.0002 e-/pixel/sec or lower at -100 C	
	(PASS or FAIL)	
15.	Camera with DN100CF mounting flange to the spectrograph	1
	(PASS or FAIL)	
16.	Camera compatible with vacuum better than 1×10^{-8} mbar	
	(PASS or FAIL)	

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- 17. Camera configured for Canadian power requirement at 120VAC, 60Hz (PASS or FAIL)_____
- 18. Camera control software compatible with 64-bit Windows 10/11 operating system.
 - (PASS or FAIL)
- 19. An SDK package provided for LabVIEW and MATLAB (PASS or FAIL) _____
- (3) The Vacuum equipment must conform to the following technical requirements:
 - 1. Integrated spectrometer system compatible with high vacuum better than 10^{-8} mbar
 - (PASS or FAIL) ____
 - 2. Vacuum flanges compatible with ultra-high vacuum and only metal gaskets utilized

(PASS or FAIL)

- 3. System includes a vacuum DN63CF flange for connecting a turbo pump (PASS or FAIL) _____
- 4. System includes a Hipace80 turbo pump with DN63CF flange and stand-alone controller

(PASS or FAIL) _____

- 5. Spectrometer system capable to support a free-standing turbo pump (PASS or FAIL) _____
- 6. Turbo pump configured for Canadian power requirement at 120VAC, 60Hz (PASS or FAIL)_____





BASIS OF PAYMENT

The Contractor will be paid fix lump sum amount in CAD funds for the supply and delivery of the goods and services in accordance with Annex A – Statement of Requirement, Delivered at Place (DAP) including all delivery charges. Customs duties are excluded and applicable taxes are extra.

Item	Description	Number of Units	Unit of Issue	Extended Fixed Price (CAD)
1	Custom Extreme Ultraviolet (XUV) Spectrometer with an XUV CCD camera, Software and computer interface, Manuals and Training.	1	Lump sum	\$

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SECURITY REQUIREMENTS CHECK LIST (SRCL) LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

 PART A - CONTRACT INFORMATION / PARTIE A 1. Originating Government Department or Organizati Ministère ou organisme gouvernemental d'origine 	2. Branch or Directorate / Direction générale ou Direction								
3. a) Subcontract Number / Numéro du contrat de so	ous-traitance 3. b)	Name and Addres	ss of Subcontractor / Nom	et adresse du sous-traita	ant				
 Brief Description of Work / Brève description du tr 	avail								
 a) Will the supplier require access to Controlled G Le fournisseur aura-t-il accès à des marchandis 					No Yes Non Oui				
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control No Ye Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?									
Indicate the type of access required / Indiquer le t	ype d'accès requis								
6. a) Will the supplier and its employees require acc Le fournisseur ainsi que les employés auront-ils (Specify the level of access using the chart in C (Préciser le niveau d'accès en utilisant le tablea	s accès à des renseignem Juestion 7. c) au qui se trouve à la quest	ients ou à des bier tion 7. c)	ns PROTÉGÉS et/ou CLAS	SSIFIÉS?	No Yes Non Oui				
 6. b) Will the supplier and its employees (e.g. cleaned PROTECTED and/or CLASSIFIED information Le fournisseur et ses employés (p. ex. nettoyeu à des renseignements ou à des biens PROTÉC 6. c) Is this a commercial courier or delivery requirer 	or assets is permitted. irs, personnel d'entretien) GÉS et/ou CLASSIFIÉS n'	auront-ils accès à est pas autorisé.		intes? L'accès	No Yes Non Oui				
S'agit-il d'un contrat de messagerie ou de livrai	son commerciale sans er	treposage de nuit		N	No Yes Non Oui				
7. a) Indicate the type of information that the supplie	r will be required to acces	s / Indiquer le type	d'information auquel le fo	urnisseur devra avoir aco	Cès				
Canada	NATO / 01	ΓΑΝ	For	eign / Étranger					
7. b) Release restrictions / Restrictions relatives à la									
No release restrictions Aucune restriction relative à la diffusion	All NATO countries Tous les pays de l'OTA	AN	No release r Aucune rest à la diffusion	riction relative					
Not releasable À ne pas diffuser									
Restricted to: / Limité à :	Restricted to: / Limité à		Restricted to						
Specify country(ies): / Préciser le(s) pays :	Specify country(ies): / I	Préciser le(s) pays	: Specify cour	ntry(ies): / Préciser le(s) p	bays :				
7. c) Level of information / Niveau d'information									
PROTECTED A	NATO UNCLASSIFIED		PROTECTE						
PROTÉGÉ A	NATO NON CLASSIFI	É L	PROTÉGÉ /						
PROTECTED B	NATO RESTRICTED		PROTECTE						
	NATO DIFFUSION RE		PROTÉGÉ E						
PROTECTED C PROTÉGÉ C	NATO CONFIDENTIAL		PROTECTE						
	NATO CONFIDENTIEL		PROTÉGÉ (CONFIDEN						
	NATO SECRET		CONFIDEN						
SECRET	COSMIC TOP SECRE	T [SECRET						
SECRET	COSMIC TRÈS SECR		SECRET						
		<u> </u>	TOP SECRE						
			TRÈS SECR						
TOP SECRET (SIGINT)			TOP SECRE						

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PART A (con 8. Will the sup	SSIFIÉS?	No Non	Yes Oui					
If Yes, indic	eur aura-t-il accès à des renseignements ate the level of sensitivity: native, indiquer le niveau de sensibilité :							
9. Will the sup	plier require access to extremely sensiti eur aura-t-il accès à des renseignements				No Non	Yes Oui		
	s) of material / Titre(s) abrégé(s) du mat Number / Numéro du document :	ériel :						
PART B - PER	SONNEL (SUPPLIER) / PARTIE B - P nel security screening level required / Niv							
	RELIABILITY STATUS				FT			
	COTE DE FIABILITÉ	CONFIDENTIEL	SECRET	TRÈS SEC				
	TOP SECRET – SIGINT	NATO CONFIDENTIAL	NATO SECRET NATO SECRET		OP SECRET RÈS SECRET			
	SITE ACCESS ACCÈS AUX EMPLACEMENTS							
	Special comments: Commentaires spéciaux :					_		
	NOTE: If multiple levels of screening an REMARQUE : Si plusieurs niveaux de			o la cácuritá doit âtro f	ourpi			
	screened personnel be used for portions	of the work?	ž		No	Yes		
	onnel sans autorisation sécuritaire peut vill unscreened personnel be escorted?	li se voir confier des parties d	u travali <i>?</i>		Non No	_lOui]Yes		
Dans l'a	ffirmative, le personnel en question sera	a-t-il escorté?			Non	_Oui		
	EGUARDS (SUPPLIER) / PARTIE C - ON / ASSETS / RENSEIGNEMENT		I (FOURNISSEUR)					
11. a) Will the premise	supplier be required to receive and stor	e PROTECTED and/or CLAS	SIFIED information or assets or	its site or	No Non	Yes Oui		
Le fourr CLASS	nisseur sera-t-il tenu de recevoir et d'ent FIÉS?	reposer sur place des renseig	nements ou des biens PROTÉC	∃ÉS et/ou				
	supplier be required to safeguard COM isseur sera-t-il tenu de protéger des rer		DMSEC?		No Non	Yes Oui		
PRODUCTIO	DN							
11 c) \//ill the r	production (manufacture, and/or repair and	l/or modification) of PPOTECT	ED and/or CLASSIEIED matorial	l or oquipmont		−Yes		
occur at	the supplier's site or premises? allations du fournisseur serviront-elles à la	,			Non	Oui		
	ASSIFIÉ?							
INFORMATIO	ON TECHNOLOGY (IT) MEDIA / SUP	PORT RELATIF À LA TECHN	OLOGIE DE L'INFORMATION (TI)				
11 d) Will the	supplier be required to use its IT systems	o electronically process, produ	ce or store PROTECTED and/or		No T	∃Yes		
ínformat	ion or data? isseur sera-t-il tenu d'utiliser ses propres				Non	_Oui		
	nements ou des données PROTÉGÉS et/							
	e be an electronic link between the supplie ra-t-on d'un lien électronique entre le syst			ience	No Non	_Yes _Oui		
gouvernementale?								

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PART C - (continued) / PARTIE C - (suite)

For users completing the form **manually** use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.

Les utilisateurs qui remplissent le formulaire manuellement doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form **online** (via the Internet), the summary chart is automatically populated by your responses to previous questions. Dans le cas des utilisateurs qui remplissent le formulaire **en ligne** (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

SUMMARY CHART / TABLEAU RÉCAPITULATIF

Category Catégorie		PROTECTED PROTÉGÉ		CLASSIFIED CLASSIFIÉ			NATO CO				COMSEC					
	А	в	с	CONFIDENTIAL	SECRET	TOP SECRET	NATO RESTRICTED	NATO CONFIDENTIAL	NATO SECRET	COSMIC TOP		TECTE OTÉGI		CONFIDENTIAL	SECRET	TOP SECRET
				CONFIDENTIEL		Très Secret	NATO DIFFUSION RESTREINTE	NATO CONFIDENTIEL		SECRET COSMIC TRÈS SECRET	A	В	С	CONFIDENTIEL		TRES SECRET
Information / Assets																
Renseignements / Biens																
Production																
IT Media /																
Support TI																
IT Link /																
Lien électronique																
 12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED? La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE? If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification". Dans l'affirmative, classifier le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire. 12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED? La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉ? 																
La documentation associée à la présente LVERS sera-t-elle PROTEGEE et/ou CLASSIFIEE? Non Oui If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments). Dans l'affirmative, classifier le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).																





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PART D - AUTHORIZATION / PART	IE D - AUTORISATIO	Ν								
13. Organization Project Authority / Chargé de projet de l'organisme										
Name (print) - Nom (en lettres moulé	Title - Titre		Signature							
Telephone No N° de téléphone	télécopieur	E-mail address - Adresse cour	riel	Date						
14. Organization Security Authority /	Responsable de la séc	urité de l'orgar	nisme							
Name (print) - Nom (en lettres moulé	Title - Titre		Signature							
Telephone No N° de téléphone	Facsimile No N° de	télécopieur	E-mail address - Adresse cour	riel	Date					
 Are there additional instructions (Des instructions supplémentaires 				t-elles jointes	? No Yes Non Oui					
16. Procurement Officer / Agent d'app	provisionnement									
Name (print) - Nom (en lettres moulées)		Title - Titre		Signature						
Telephone No N° de téléphone	Facsimile No N° de	télécopieur	E-mail address - Adresse cou	urriel	Date					
17. Contracting Security Authority / A	utorité contractante en	matière de sé	curité							
Name (print) - Nom (en lettres moulées)		Title - Titre		Signature						
Telephone No N° de téléphone	télécopieur	E-mail address - Adresse cou	urriel	Date						

As per the Directive on Security Management, throughout the contract or arrangement, the project authority (signed above at section 13) must monitor the supplier, partner and departmental compliance of security requirements identified on this SRCL, and take corrective actions to address issues of noncompliance

Conformément à la directive sur la gestion de la sécurité, tout au long du contrat ou de l'accord, le Chargé de projet (signé ci-dessus à la section 13) doit surveiller la conformité du fournisseur, du partenaire et du ministère aux exigences de sécurité énoncées sur la présente LVERS, et prendre des mesures correctives pour régler les problèmes de non-conformité.

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