



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada

1713 Bedford Row

Halifax, N.S./Halifax, (N.É.)

Halifax

Nova Scotia

B3J 1T3

Bid Fax: (902) 496-5016

REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

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 therefor.

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

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-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du

fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Atlantic Region Acquisitions/Région de l'Atlantique
Acquisitions

1713 Bedford Row

Halifax, N.S./Halifax, (N.É.)

Halifax

Nova Scot

B3J 1T3

Title - Sujet Power Based Fusion 3D Printer Power Based Fusion 3D Printer	
Solicitation No. - N° de l'invitation W7707-227170/B	Date 2022-06-28
Client Reference No. - N° de référence du client W7707-22-7170	
GETS Reference No. - N° de référence de SEAG PW-\$HAL-207-11541	
File No. - N° de dossier HAL-1-87186 (207)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM Atlantic Daylight Saving Time ADT on - le 2022-07-19 Heure Avancée de l'Atlantique HAA	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Grieve, Bronwen	Buyer Id - Id de l'acheteur hal207
Telephone No. - N° de téléphone (902) 943-2394 ()	FAX No. - N° de FAX (902) 496-5016
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF NATIONAL DEFENCE DRDC ATLANTIC RESEARCH CENTRE 9 GROVE ST DARTMOUTH NOVA SCOTIA B3A 3C5 CANADA	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée See Herein – Voir ci-inclus	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
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

Solicitation No. - N° de l'invitation
W7707-227170/B
Client Ref. No. - N° de réf. du client

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
ha1207
CCC No./N° CCC - FMS No./N° VME

This bid solicitation cancels and supersedes previous bid solicitation number **W7707-227170/A** dated **2022-02-10** with a closing of **2022-03-16** at **14:00 ADT**. A debriefing or feedback session will be provided upon request to bidders/offerors/suppliers who bid on the previous solicitation.

TABLE OF CONTENTS

PART 1 - GENERAL INFORMATION	4
1.1 SECURITY REQUIREMENTS	4
1.2 REQUIREMENT	4
1.3 DEBRIEFINGS	4
1.4 CANADA POST CORPORATION'S (CPC) CONNECT SERVICE	4
PART 2 - BIDDER INSTRUCTIONS	5
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS	5
2.2 SUBMISSION OF BIDS.....	5
2.3 ENQUIRIES - BID SOLICITATION.....	5
2.4 APPLICABLE LAWS.....	6
2.5 BID CHALLENGE AND RECOURSE MECHANISMS.....	6
PART 3 - BID PREPARATION INSTRUCTIONS.....	7
3.1 BID PREPARATION INSTRUCTIONS	7
PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION	9
4.1 EVALUATION PROCEDURES.....	9
4.2 BASIS OF SELECTION.....	9
PART 5 - CERTIFICATIONS AND ADDITIONAL INFORMATION	10
5.1 CERTIFICATIONS REQUIRED WITH THE BID	10
5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION	10
PART 6 - RESULTING CONTRACT CLAUSES	12
6.1 SECURITY REQUIREMENTS	12
6.2 REQUIREMENT	12
6.3 STANDARD CLAUSES AND CONDITIONS.....	12
6.4 TERM OF CONTRACT	12
6.5 AUTHORITIES	12
6.6 PAYMENT	13
6.7 INVOICING INSTRUCTIONS	14
6.8 CERTIFICATIONS AND ADDITIONAL INFORMATION.....	14
6.9 APPLICABLE LAWS.....	14
6.10 PRIORITY OF DOCUMENTS	14
6.11 DEFENCE CONTRACT	15
6.12 INSPECTION AND ACCEPTANCE.....	15
6.13 DISPUTE RESOLUTION.....	15
6.14 SACC MANUAL CLAUSES	15
ANNEX "A"	16
REQUIREMENT	16
ANNEX "B"	21
BASIS OF PAYMENT	21
ANNEX "C"	23
TECHNICAL EVALUATION	23

Solicitation No. - N° de l'invitation
W7707-227170/B
Client Ref. No. - N° de réf. du client

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
ha1207
CCC No./N° CCC - FMS No./N° VME

ANNEX “D” TO PART 3 OF THE BID SOLICITATION 25
ELECTRONIC PAYMENT INSTRUMENTS25

ANNEX “E” TO PART 5 OF THE BID SOLICITATION 26
FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION.....26

ANNEX “F” 27
INTEGRITY PROVISIONS – LIST OF DIRECTORS27

PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement applicable to the Contract.

1.2 Requirement

The requirement is detailed under Article 6.2 of the resulting contract clauses.

1.3 Debriefings

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

1.4 Canada Post Corporation's (CPC) Connect service

This bid solicitation allows bidders to use the CPC Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

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

The [2003](#) (2022-03-29) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of [2003](#), Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days
Insert: 90 days

2.2 Submission of Bids

Bids must be submitted only to the Public Works and Government Services Canada (PWGSC) Bid Receiving Unit specified below by the date and time indicated on page 1 of the bid solicitation:

Bid Receiving Public Works and Government Services Canada / Réception des soumissions
Travaux publics et services gouvernementaux
1713 Bedford Row
Halifax, NS B3J 1T3

Email for epost Connect:

TPSGC.RARceptionSoumissionsNE-ARBidReceivingNS.PWGSC@tpsgc-pwgsc.gc.ca

Note: Bids will not be accepted if emailed directly to this email address. This email address is to be used to open an epost Connect conversation, as detailed in Standard Instructions [2003](#), or to send bids through an epost Connect message if the bidder is using its own licensing agreement for epost Connect.

Facsimile number: (902) 496-5016

2.3 Enquiries - Bid Solicitation

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

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

2.4 Applicable Laws

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

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 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) 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:
 - Office of the Procurement Ombudsman (OPO)
 - Canadian International Trade Tribunal (CITT)
- (c) 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

- If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. The CPC Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

Canada requests that the Bidder submits its bid in separately bound sections as follows:

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

- If the Bidder chooses to submit its bid in hard copies, Canada requests that the Bidder submits its bid in separately bound sections as follows:

Section I: Technical Bid (1 hard copy)
Section II: Financial Bid (1 hard copy)
Section III: Certifications (1 hard copy)

If there is a discrepancy between the wording of the soft copy on electronic media and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

- If the Bidder is simultaneously providing copies of its bid using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy provided through CPC Connect service, the wording of the electronic copy provided through CPC Connect service will have priority over the wording of the other copies.

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

Canada requests that bidders follow the format instructions described below in the preparation of hard copy of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

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) (<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.)
- 3) Unless otherwise noted, bidders are encouraged to submit bids electronically. If hard copies are required, bidders should:

-
- a. use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
 - b. use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

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

Section II: Financial Bid

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

3.1.1 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex "D" Electronic Payment Instruments, to identify which ones are accepted.

If Annex "D" Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.2 Exchange Rate Fluctuation

C3011T (2013-11-06), Exchange Rate Fluctuation

3.1.3 SACC Manual 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

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including technical, and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

See Annex "C" – Technical Evaluation

4.1.2 Financial Evaluation

SACC Manual Clause [A0220T](#) (2014-06-26), Evaluation of Price-Bid

4.2 Basis of Selection

4.2.1 Basis of Selection – Mandatory Technical Criteria

SACC Manual Clause [A0031T](#) (2010-08-16), Basis of Selection - Mandatory Technical Criteria

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

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

5.2.1 Integrity Provisions – Required Documentation

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

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](#) website.

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.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

Solicitation No. - N° de l'invitation
W7707-227170/B
Client Ref. No. - N° de réf. du client

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
ha1207
CCC No./N° CCC - FMS No./N° VME

The Bidder must provide the Contracting Authority with a completed annex titled Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

PART 6 - RESULTING CONTRACT CLAUSES

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

6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

6.2 Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex "A".

6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

6.3.1 General Conditions

[2010A](#) (2022-01-28), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from date of Contract to March 31, 2023 inclusive

6.4.2 Delivery Date

All the deliverables must be received on or before March 31, 2023.

6.4.3 Optional Goods

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at **Annex "A"** of the Contract under the same conditions and at the prices and/or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option at any time before the expiry of the Contract by sending a written notice to the Contractor.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Bronwen Grieve
Title: Supply Specialist
Public Works and Government Services Canada
Acquisitions Branch

Address: 1713 Bedford Row
Halifax, NS B3J 1T3

Telephone: 902-943-2394

E-mail address: bronwen.grieve@tpsgc-pwgsc.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 Project Authority

The Project Authority for the Contract is: *(to be named up award of contract)*

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

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

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

6.5.3 Contractor's Representative *(Bidder to complete)*

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

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

6.6 Payment

6.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price, as specified in Annex "B" for a cost of \$ _____ (insert the amount at contract award). Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.6.2 Limitation of Price

SACC Manual clause C6000C (2017-08-17) Limitation of Price

6.6.3 Single Payment

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

6.6.4 Electronic Payment of Invoices – Contract

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

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

6.7 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
 - a. The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

6.8 Certifications and Additional Information

6.8.1 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.

6.8.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "FCP Limited Eligibility to Bid" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

6.9 Applicable Laws

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

6.10 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](#) (2022-01-28), General Conditions - Goods (Medium Complexity),;
- c) Annex A, Requirement;
- d) Annex B, Basis of Payment;
- e) the Contractor's bid dated _____

6.11 Defence Contract

SACC Manual clause [A9006C](#) (2012-07-16) Defence Contract

6.12 Inspection and Acceptance

The Project Authority is the Inspection Authority. All reports, deliverable items, documents, goods 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 requirements of the Statement of Work 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.

6.13 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](#)".

6.14 SACC Manual Clauses

SACC Manual Clause [B1501C](#) (2018-06-21) Electrical Equipment

ANNEX "A"

REQUIREMENT

1. TITLE

Powder Based Fusion (Metal) 3D printer

2. BACKGROUND

Department of National Defence (DND)/Defence Research and Development Canada (DRDC) currently uses traditional manufacturing equipment and techniques, which tend to limit how complex manufactured prototypes and their parts can be. Therefore, it is DRDC's intent to augment its current manufacturing capabilities, by introducing the Additive Manufacturing (AM) technique known as Powder Based Fusion (PBF) – which is sometimes referred to as metal 3D printing. By doing so, it will provide DRDC the ability to create new alloys and print testable designs and participate with other North Atlantic Treaty Organization (NATO) countries in the research and development of the structural stability of parts created with the additive manufacturing process.

3. ACRONYMS

A	Amp
AM	Additive Manufacturing
C	Celsius
CSA	Canadian Standards Association
DND	Department of National Defence
DRDC	Defence Research and Development Canada
in	Inch
lbs	Pounds
NATO	North Atlantic Treaty Organization
TA	Technical Authority
PBF	Powder Based Fusion
HSS	High Speed Steel
kg	Kilogram
MDS	Material Data Sheet
m	Meter
mm	Millimeter
mm/s	Millimeter per Second
V	Volt
W	Watt
WXDXH	WidthXDepthXHeight
Yb	Ytterbium-Doped Silica

4. APPLICABLE DOCUMENTS & REFERENCES

None

5. REQUIREMENTS

5.1 [FIRM] Powder Based Fusion Metal 3D Printer

Required Quantity: 1

The Contractor must provide the requirement with the following specifications:

Specifications	Value
Build volume	Minimum of 250mm x 250 mm x 250mm
Scanner exposure	Exposure area of 250mm x 250 mm
Scan speed	Minimum of 6500 mm/s
Machine Dimensions	Maximum 2.6m x 1.5m x 2.4m
Weight of machine	Minimum 1300kg
Z-axis position repeatability	$\leq \pm 0.005$ mm
Recirculating Filtration+ System	Must utilize self-cleaning filters, expected time between filter changes at 1500 laser hours
Re-coater blade	Must be either: Hard re-coaters (high-speed steel (HSS) or ceramic blades) OR Soft, flexible re-coaters (a brush or silicone) Re-coating system travel speed must be minimum 40-500 mm/s.
Material Parameters	All offered materials should include published Material Data Sheets (MDS) related to build properties and be backed up by 3 rd party testing
Support	Vendor must have Support Engineers in North America
Laser Power Range	Yb fiber laser, 400W – 1000W
Power Supply	Minimum 30A, 400V
Gases Used	Nitrogen and Argon
Heated Build Platform	System must have integrated platform heating module capable of operating between approximately 40 to 200 deg C
User Interface	Touch Screen
Powder Bed Camera	Monitoring system in between coats
Materials to be Printed	Aluminum, Steel, Nickel Alloy, Stainless Steel, Titanium, Copper

5.2 [FIRM] Powder Management Unit

Required Quantity: 1

The Contractor must provide the requirement with the following specifications suitable for use with the unit provided in Section 5.1:

Specifications	Value
Function	Automated powder sieving and conveying under ambient air for reliable part production.
Unit Dimensions (WxDxH)	Maximum of 53in x 32in x 84in
Unit Weight	Maximum of 1,200lbs
Operating Gases	Argon, Nitrogen, Oxygen
Operating Principal:	Ultrasonic Cleaning & Vibrating Sieving
Power Supply	200-480V

5.3 [FIRM] Accessories

The Contractor must provide the following accessories, which comply with the specifications of the system delivered under Section 5.1:

5.3.1 Powders

The Contractor must provide enough of each of the following powders to complete the installation of the Powder Based Fusion Metal 3D Printer as per section 5.1.

Costs for the powders must be included in the price for the Powder Based Fusion Metal 3D Printer in Annex "B".

Item	Description
5.3.1.1	Stainless Steel Powder
5.3.1.2	Steel Powder
5.3.1.3	Nickel Allow Powder
5.3.1.4	Aluminum Powder
5.3.1.5	Copper Powder
5.3.1.6	Titanium Powder

5.3.2 Accessories

Item	Description	Required Quantity
5.3.2.1	Filters for recirculating system	3
5.3.2.2	Internal Powder Bed Camera	1

5.4 [FIRM] Technical Data

The Contractor must provide Technical Manuals for machine maintenance and operation:

Operations and Maintenance Manuals (one (1) PDF and two (2) hard copies).

5.5 [Optional] Accessories

Item	Description	Estimated Quantity
5.6.1	Stainless Steel Powder	Up to 50 kg
5.6.2	Steel Powder	Up to 50 kg
5.6.3	Nickel Alloy Powder	Up to 50 kg
5.6.4	Aluminum Powder	Up to 50 kg
5.6.5	Copper Powder	Up to 50 kg
5.6.6	Titanium Powder	Up to 50 kg
5.6.7	Filters for recirculating system	Up to 5

5.6 [Firm] Installation

Required Quantity: 1

The Contractor must unpack, assemble and install the AM Hardware at the delivery location. All accessories must be installed prior to "Turn Key" operation by the Contractor. The Contractor must also ensure that the machine runs to normal operational standards and that models created by DRDC's SolidWorks software can be printed. The Contractor must bring tools and other supplies that are required for the installation and startup of the 3D Printer, and remove these tools and supplies once the installation is complete. All components and installation must meet Canadian Standards Association (CSA) codes.

5.7 [Firm] Training**Required Quantity: 1**

The Contractor must provide on-site training on the general operation of the 3D printer to four (4) individuals. The training must include basic operation of the equipment, calibration instructions and minor troubleshooting. The Contractor must review the operation manual with the individuals and demonstrate the operation of the equipment.

The training must occur at the delivery location, DRDC Atlantic, 9 Grove Street Dartmouth, NS, between the hours of 08:00 and 16:00 AST, Monday through Friday.

Training must occur either at the time of delivery, or within a maximum of 1 month after delivery has occurred. The date must be agreed upon, in advance, by the Contractor and the DRDC Technical Authority (TA).

6. Deliverables

Number	Requirement Reference	Description of the deliverable
6.1	5.1	[Firm] Metal 3D printer
6.2	5.2	[Firm] Powder Sieve Unit
6.3	5.4	[Firm] Technical Data – Operations and Maintenance Manuals.
6.4	5.3.1.1	[Firm] Stainless Steel Powder
6.5	5.3.1.2	[Firm] Steel Powder
6.6	5.3.1.3	[Firm] NickelAlloy Powder
6.7	5.3.1.4	[Firm] Aluminum Powder
6.8	5.3.1.5	[Firm] Copper Powder
6.9	5.3.1.6	[Firm] Titanium Powder
6.10	5.3.2.1	[Firm] Filters for the recirculating system.
6.11	5.3.2.1	[Firm] Internal Powder Bed Camera
6.12	5.5.1	[Optional] Stainless Steel Powder
6.13	5.5.2	[Optional] Steel Powder
6.14	5.5.3	[Optional] Nickel Allow Powder
6.15	5.5.4	[Optional] Aluminum Powder
6.16	5.5.5	[Optional] Copper Powder
6.17	5.5.6	[Optional] Titanium Powder
6.18	5.5.7	[Optional] Filters for recirculating system
6.19	5.6	[Firm] Installation
6.20	5.7	[Firm] Training

7. DATE OF DELIVERY

Deliverable	Delivery date
6.1 - 6.11	On or before 31 March 2023.
6.12 to 6.18	Within 20 workings days, following receipt of contract amendment.
6.19 – 6.20	On or before 31 March 2023.

8. LANGUAGE OF WORK

The language of all work and deliverables must be in English.

9. DELIVERY LOCATIONS

Defence Research and Development Canada – Atlantic Research Centre
Building DA-12
9 Grove Street
Dartmouth, Nova Scotia, B3A 3C5
Canada

ANNEX "B"

BASIS OF PAYMENT

Bidders must submit firm unit prices for each item listed below to be given further consideration. A financial bid addressing only a portion of the requirement will be declared non-responsive.

Pricing offered must be in Canadian dollars, Applicable Taxes excluded, Canadian customs duties and excise taxes included.

Pricing offered must be inclusive of all delivery costs. No further charges will be allowed.

NOTE: In Table 2, Qty = Estimated order quantity. These are estimates only for evaluation purposes and actual quantities will be determined through a Contract Amendment.

TABLE 1 – FIRM REQUIREMENTS

Annex "A" Item	Description of the Deliverable	Unit of Issue	Qty (A)	Unit Price (B)	Extended Total (A x B)
5.1 and 5.3.1	Metal 3D Printer as per Annex "A" item 5.1 Price must include cost all powders required to complete installation of the Metal 3D Printer as per Annex "A", item 5.3.1	EACH	1		
5.2	Powder Sieve Unit	EACH	1		
5.4	Technical Data – Operations and Maintenance Manuals (1 PDF and 2 hard copies)	LOT	1		
5.4.7	Filters for the recirculating system	EACH	3		
5.4.8	Internal Powder Bed Camera	EACH	1		
5.6	Installation	LOT	1		
5.7	Training	LOT	1		
Subtotal (GST/HST not included)					

TABLE 2 – OPTIONAL REQUIREMENTS

Annex “A” Item	Description of the Deliverable	<u>Bidder to indicate how many Kilograms (kg) per package*</u>	Unit of Issue	Estimated Qty (A)	Unit Price (cost per kg) (B)	Extended Total (A x B)
5.5.1	Stainless Steel Powder		kg	50		
5.5.2	Steel Powder		kg	50		
5.5.3	Nickel Alloy Powder		kg	50		
5.5.4	Aluminum Powder		kg	50		
5.5.5	Copper Powder		kg	50		
5.5.6	Titanium Powder		kg	50		
5.5.7	Filters for recirculating system		EACH	5		
Subtotal (GST/HST not included)						

*Kilograms (kg) per package will be used for reference when purchasing optional goods.

Table 3: Evaluated Total

Description	Total
Table 1 Subtotal	
Table 2 Subtotal	
Total (Table 1+2) (GST/HST not included)	

ANNEX "C"

TECHNICAL EVALUATION

Instructions:

The Bidder **must** address each Mandatory Technical Criteria listed below.

The Bidder should include one (1) copy of descriptive literature; if available, for the item(s) offered in sufficient detail to clearly indicate compliance with each of the individual requirements from the Mandatory Technical Criteria detailed herein. References to Internet websites or information that is not included in the bid will not be evaluated.

The Bidder should comment /cross reference the page number and highlight the specification in your technical data sheets or brochure to demonstrate and support your compliance for each of the Mandatory Technical Criteria.

The Bidder must provide as much detail as possible to support their comments and their claims of compliance for each specification.

NOTE: The Crown is under NO obligation to seek clarification of the bid(s) or the supporting technical documentation provided. Failure to meet any of the following will render your proposal non-compliant and will be given no further consideration.

	CRITERIA	Bidder to Reference Page Number/Comments
M1	Build Volume: Minimum of 250mm x 250 mm x 250mm	
M2	Scanner Exposure Area: 250mm x 250mm	
M3	Scan Speed: Minimum of 6500 mm/s	
M4	Z-Axis Position Repeatability of $\leq \pm 0.005$ mm	
M5	Recirculating Filtration System: Must utilize self-cleaning filters, expected time between filter changes at 1500 laser hours.	
M6	Re-Coater Blade must be either: 1. Hard re-coaters (high-speed steel (HSS) or ceramic blades) OR 2. Soft, flexible re-coaters (a brush or silicone)	
M7	Re-Coating system minimum travel speed of : 40-500mm/s	

M8	Laser Power Range: Yb fiber laser, 400W – 1000W	
M9	Power Supply: minimum 30A, 400V	
M10	Gases Used: Nitrogen &/or Argon	
M11	Heated Build Platform: integrated heating operating between 40C and 200C.	
M12	User Interface: Touch Screen.	
M13	Powder Bed Camera: Ability to monitor work between coats.	
M14	Print Materials: Aluminium, Steel, Nickel Allow, Stainless Steel, Titanium, Cooper.	
Powder-Based Management Unit		
M15	Unit Dimensions (WxDxH): Maximum of 53in x 32in x 84in	
M16	Unit weight: Maximum of 1,200lbs	
M17	Operating Gases: Argon, Nitrogen, Oxygen	
M18	Operating Principal: Ultrasonic Cleaning & Vibrating Sieving	
M19	Power Supply: 200-480V	

ANNEX “D” to PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

The Bidder accepts any of the following Electronic Payment Instrument(s):

- () VISA Acquisition Card;
- () MasterCard Acquisition Card;
- () Direct Deposit (Domestic and International);
- () Electronic Data Interchange (EDI);
- () Wire Transfer (International Only);
- () Large Value Transfer System (LVTS) (Over \$25M)

ANNEX "E" to PART 5 OF THE BID SOLICITATION

FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\)-Labour's](#) website.

Date: _____ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- ☐ A1. The Bidder certifies having no work force in Canada.
- ☐ A2. The Bidder certifies being a public sector employer.
- ☐ A3. The Bidder certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- ☐ A4. The Bidder certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- ☐ A5.1. The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.

OR

- ☐ A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity](#) (LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- ☐ B1. The Bidder is not a Joint Venture.

OR

- ☐ B2. The Bidder is a Joint Venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

ANNEX "F"

INTEGRITY PROVISIONS – LIST OF DIRECTORS

Please provide list of names of the following entities, according to the ownership nature of the company

1. For a Corporation - each current member of the Bidder's Board of Directors;

2. For a Partnership, General Partnership or Limited Partnership - the names of all current partners;

3. For a Sole Proprietorship or an individual doing business under a firm name - the name of the sole proprietor or individual;

4. In the case of a joint venture - For a Joint Venture - the names of all current members of the Joint venture;

5. For an individual - the full name of the person
