



Transport
Canada

Transports
Canada

REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

Proposal To: Transport 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 and services listed herein and on any attached sheets at the price(s) set out therefore.

Proposition à : Transports 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 et services énumérés ici et sur toute feuille ci-annexée, au(x) prix indique(s).

Comments - Commentaires

RETURN BIDS TO: RETOURNER LES SOUMISSIONS À :

epost Connect
Instructions to follow

Title - Sujet MOC.1.B. – Composite Cylinder Acoustic Emission Requalification	
Solicitation No. N° de l'invitation T8080-200634	Date of Solicitation Date de l'invitation May 11, 2021
Address enquiries to: - Adresser toute demande de renseignements à : Natasha Blackstein Telephone No. - N° de telephone 343-550-2321 E-Mail Address - Courriel Natasha.blackstein@tc.gc.ca	
Destination See herein - Voir aux présentes	

Instructions: Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item.

Instructions : Les taxes municipales ne s'appliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés « rendu droits acquittés », tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.

Delivery required OR requested Livraison exigée OR demandée See herein - Voir aux présentes OR [Insert date] - [Insérer la date]	Delivery offered Livraison proposée Not applicable - Sans objet
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Person authorized to sign on behalf of Vendor/Firm (type or print): La personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie) :	
Name - Nom	Title - Titre
Signature	Date

Solicitation Closes -

At - à :
2:00 PM - 14:00

On :
June 10, 2021

Time Zone - Fuseau Horaire :
[EDT]



PART 1 - GENERAL INFORMATION3

1.1 STATEMENT OF WORK 3

1.2 DEBRIEFINGS..... 3

1.3 EPOST CONNECT SERVICE 3

PART 2 - BIDDER INSTRUCTIONS4

2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS 4

2.2 SUBMISSION OF BIDS 4

2.4 FORMER PUBLIC SERVANT 6

2.5 ENQUIRIES - BID SOLICITATION 7

2.6 APPLICABLE LAWS 7

2.7 BID CHALLENGE AND RECOURSE MECHANISMS 8

PART 3 - BID PREPARATION INSTRUCTIONS.....9

3.1 BID PREPARATION INSTRUCTIONS..... 9

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION.....10

4.1 EVALUATION PROCEDURES 10

4.2 BASIS OF SELECTION 12

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION14

5.1 CERTIFICATIONS REQUIRED WITH THE BID 14

5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION..... 14

PART 6 - RESULTING CONTRACT CLAUSES.....16

6.1 SECURITY REQUIREMENTS 16

6.2 STATEMENT OF WORK 16

6.3 STANDARD CLAUSES AND CONDITIONS 16

6.4 TERM OF CONTRACT 16

6.5 AUTHORITIES..... 16

6.6 PROACTIVE DISCLOSURE OF CONTRACTS WITH FORMER PUBLIC SERVANTS..... 17

6.7 PAYMENT..... 17

6.8 INVOICING INSTRUCTIONS 18

6.9 CERTIFICATIONS AND ADDITIONAL INFORMATION 18

6.10 APPLICABLE LAWS 18

6.11 PRIORITY OF DOCUMENTS 19

6.12 DISPUTE RESOLUTION 19

ANNEX "A"20

STATEMENT OF WORK..... 20

ANNEX "B"23

BASIS OF PAYMENT 23

ANNEX "C" TO PART 3 OF THE BID SOLICITATION24

ELECTRONIC PAYMENT INSTRUMENTS 24

ANNEX "D"25

RESEARCH SUMMARY TEMPLATE.....26

PART 1 - GENERAL INFORMATION

1.1 Statement of Work

The Transportation of Dangerous Goods Directorate (TDG), as part of the Safety and Security Group at Transport Canada (TC) serves as the major source of regulatory development, information, and guidance on dangerous goods transport for the public, industry, and government employees. The transportation of compressed gases in Canada is regulated under the *Transportation Dangerous Goods Act, 1992* and its Regulations (TDG Regulations).

Composite compressed gas cylinders are constructed by winding glass or carbon fibre filaments over a metal liner to form a composite overwrap. One example of use for these cylinders is in emergency response. First responders use composite cylinders containing compressed air in hazardous situations that require a self-contained breathing apparatus (SCBA). These cylinders require periodic visual inspections and hydrostatic testing throughout their service life to validate their structural integrity and safety.

TDG – Scientific Research performed research in FY 2019/20 under project MOC.1.A. to assess the mechanical integrity of TC-3CCM composite cylinders at the end of their 15 year service life. The study also evaluated three test methods for cylinder requalification: hydrostatic testing, modal acoustic emission (MAE) testing, and acoustic emission (AE) testing. AE testing was performed as per draft ISO/CD 23876 standard, and the number of false positives and false negatives obtained (when results were compared to burst testing) were found to vary greatly based on the evaluation criteria used.

The ISO/CD 23876 standard is expected to be submitted for review by the ISO committee, and as a member of this committee, TDG-Regulatory Framework and International Engagement (RFIE) branch will be asked to provide comments on the draft. RFIE have asked for a re-evaluation of the AE data, by a new contractor, in order to assess whether there is variability in interpretation of results.

1.2 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.

1.3 epost Connect service

This bid solicitation allows bidders to use the epost 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](#) (2020-05-28) 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: 120 days

2.2 Submission of Bids

Bids must be submitted only to Transport Canada via epost Connect by the date, time and place indicated in the bid solicitation.

Note: For bidders choosing to submit using epost Connect for bids closing at the Bid Receiving Unit in the National Capital Region (NCR) the email address is:

natasha.blackstein@tc.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.

2.3 epost Connect

- a. Unless specified otherwise in the bid solicitation, bids may be submitted by using the [epost Connect service](#) provided by Canada Post Corporation.
 - i. The only acceptable email address to use with epost Connect for responses to bid solicitations issued by Transport Canada is: natasha.blackstein@tc.gc.ca , or, if applicable, the email address identified in the bid solicitation.
- b. To submit a bid using epost Connect service, the Bidder must either:
 - i. send directly its bid only to natasha.blackstein@tc.gc.ca , using its own licensing agreement for epost Connect provided by Canada Post Corporation; or
 - ii. send as early as possible, and in any case, at least six business days prior to the solicitation closing date and time, (in order to ensure a response), an email that includes the bid solicitation number to natasha.blackstein@tc.gc.ca requesting to



open an epost Connect conversation. Requests to open an epost Connect conversation received after that time may not be answered.

- c. If the Bidder sends an email requesting epost Connect service to the specified email in the bid solicitation, an officer of Transport Canada will then initiate an epost Connect conversation. The epost Connect conversation will create an email notification from Canada Post Corporation prompting the Bidder to access and action the message within the conversation. The Bidder will then be able to transmit its bid afterward at any time prior to the solicitation closing date and time.
- d. If the Bidder is using its own licensing agreement to send its bid, the Bidder must keep the epost Connect conversation open until at least 30 business days after the solicitation closing date and time.
- e. The bid solicitation number should be identified in the epost Connect message field of all electronic transfers.
- f. It should be noted that the use of epost Connect service requires a Canadian mailing address. Should a bidder not have a Canadian mailing address, they may use the Bid Receiving Unit address specified in the solicitation in order to register for the epost Connect service.
- g. For bids transmitted by epost Connect service, Canada will not be responsible for any failure attributable to the transmission or receipt of the bid including, but not limited to, the following:
 - i. receipt of a garbled, corrupted or incomplete bid;
 - ii. availability or condition of the epost Connect service;
 - iii. incompatibility between the sending and receiving equipment;
 - iv. delay in transmission or receipt of the bid;
 - v. failure of the Bidder to properly identify the bid;
 - vi. illegibility of the bid;
 - vii. security of bid data; or,
 - viii. inability to create an electronic conversation through the epost Connect service.
- h. Transport Canada will send an acknowledgement of the receipt of bid document(s) via the epost Connect conversation, regardless of whether the conversation was initiated by the supplier using its own license or Transport Canada. This acknowledgement will confirm only the receipt of bid document(s) and will not confirm if the attachments may be opened nor if the content is readable.
- i. Bidders must ensure that that they are using the correct email address for Transport Canada when initiating a conversation in epost Connect or communicating with Transport Canada and should not rely on the accuracy of copying and pasting the email address into the epost Connect system.
- j. A bid transmitted by epost Connect service constitutes the formal bid of the Bidder and must be submitted in accordance with section 05.



2.4 Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the [Financial Administration Act](#), R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the [Public Service Superannuation Act](#) (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the [Supplementary Retirement Benefits Act](#), R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the [Canadian Forces Superannuation Act](#), R.S., 1985, c. C-17, the [Defence Services Pension Continuation Act](#), 1970, c. D-3, the [Royal Canadian Mounted Police Pension Continuation Act](#), 1970, c. R-10, and the [Royal Canadian Mounted Police Superannuation Act](#), R.S., 1985, c. R-11, the [Members of Parliament Retiring Allowances Act](#), R.S. 1985, c. M-5, and that portion of pension payable to the [Canada Pension Plan Act](#), R.S., 1985, c. C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes** () **No** ()

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.



By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with [Contracting Policy Notice: 2019-01](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes** () **No** ()

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

2.5 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.

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.

2.6 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.

2.7 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

Canada requests that the Bidder submits its bid in accordance with section Part 2 – Bidder Instructions 2.3 epost Connect. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

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

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

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

Section I: Technical Bid

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Section II: Financial Bid

Bidders must submit 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 “C” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “C” 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

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 the 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

Item	Description	Reference to location in bid	Met/Not Met
MT-1	<p>The Bidder must submit a Work Plan that must include the following components:</p> <ul style="list-style-type: none"> - A description of the approach/methodology proposed for completing the work, including the preferred file format for TC-supplied raw test data, (.param and/or .csv); - A proposed Acoustic Emission requalification testing procedure in accordance with the applicable sections of the ISO/CD 23876, as outlined in Annex A; - A time table (e.g. Gantt chart) showing activities and milestones in compliance with Timeline section in SOW; - An outline of the final technical report. 		
MT-2	<p>The Bidder must demonstrate experience with AE testing and analysis of AE data by providing the following:</p> <ul style="list-style-type: none"> - A Sample test report; - A List of at least two completed AE testing and/or AE analysis projects which includes the following: <ul style="list-style-type: none"> o Name of the client(s)/employer(s); o A brief description of the objective and the scope of the service provided; o The start and end dates (month and year) of the project/work; o The approximate dollar (\$) value of the project; and o Client/employer reference that can attest to the project details (References may be contacted to validate the information provided in the bidder's proposal). 		
MT-3	<p>The Bidder must propose a team, comprised of a Project Lead and key project resources (e.g. researchers/technicians/staff).</p> <ul style="list-style-type: none"> - At least one of the team members performing data analysis must have Level 2 AE technician certification. - A copy of the certificate must be included in the contractor's proposal, including training dates and evidence of supervision by a Level 3 AE technician if applicable. 		



Item	Description	Reference to location in bid	Met/Not Met
	- CV for each team member must be provided.		

4.1.1.2 Point Rated Technical Criteria

Bids which meet all the mandatory criteria will be evaluated and scored as specified below, to a maximum of 52 points. Each point-rated technical criterion should be addressed separately.

Item	Description	Scoring Methodology	Reference to Location in Bid	Maximum Available Points
R-1	The draft work plan submitted in response to MT-1 as part of bidder's proposal should include the following elements; <ul style="list-style-type: none"> - The proposed approach/methodology, aligned with the requirement described in the Statement of Work, for completing the work. (5 points) - A project timeline (e.g. Gantt chart) displaying work breakdown structure which includes dates, activities and milestones, in accordance with Timeline section in SOW. (5 points) - Anticipated risks of the project, including those that lead to incomplete or delayed deliverables as per the original schedule. (5 points) - Contingency plan to minimize the risks of the project. (5 points) 	5 points will be allotted for each element, up to a maximum of 20 points.		20
R-2	The Bidder should demonstrate the proposed resource as Project Lead has 4 years' experience as a Project Lead has in leading technical projects,	4 points for 4 years of experience, with 1 point for each additional year, up to a maximum of 10 points.		10
R-3	The Bidder should demonstrate the proposed key resources have 2 years' experience in AE testing and/or evaluation of AE test results.	4 points for 2 years of experience, with 2 points for each additional year, up to a maximum of 10 points.		10
R-4	The Bidder should demonstrate the proposed key resources have experience in the requalification of composite pressure vessels.	1 point for each year of experience in composite pressure vessel requalification to a maximum of 5 points.		5
R-5	The Bidder should demonstrate using project descriptions experience in	1 point for each AE composite pressure		5



Item	Description	Scoring Methodology	Reference to Location in Bid	Maximum Available Points
	performing Acoustic Emission Testing on composite pressure vessels (or similar structures or containers).	vessel testing project to a maximum of 5 points.		
R-6	The Bidder should provide a description of AE equipment and software package used for composite pressure vessel (or similar structure or container) requalification projects, e.g. whether equipment is owned/leased, type of sensors typically used, software details.	2 points for description.		2
Maximum Total Score				52

4.2 Basis of Selection

4.2.1 Highest Combined Rating of Technical Merit and Price.

1. To be declared responsive, a bid must:
 - (a) Comply with all the requirements of the bid solicitation; and
 - (b) Meet all mandatory criteria.
2. Bids not meeting (a) or (b) will be declared non-responsive.
3. The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 70% for the technical merit and 30% for the price.
4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 70%.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 30%.
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid(s) with the highest combined rating of technical merit and price will be recommended for award of a contract.



The table below illustrates an example where all 3 bids are responsive and the selection of the contractor is determined by a 70/30 ratio of technical merit and price, respectively. The total available points equals 135 and the lowest evaluated price is \$45,000 (45), and the highest rated bid is from Bidder 1.

Basis of Selection - Highest Combined Rating Technical Merit (70%) and Price (30%)

		Bidder 1	Bidder 2	Bidder 3
Overall Technical Score		115/135	89/135	92/135
Bid Evaluated Price		\$55,000.00	\$50,000.00	\$45,000.00
Calculations	Technical Merit Score	$115/135 \times 70 = 59.63$	$89/135 \times 70 = 46.15$	$92/135 \times 70 = 47.70$
	Pricing Score	$45/55 \times 30 = 24.55$	$45/50 \times 30 = 27.00$	$45/45 \times 30 = 30.00$
Combined Rating		84.18	73.15	77.70
Overall Rating		1st	3rd	2nd



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](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.



5.2.3 Additional Certifications Precedent to Contract Award

5.2.3.1 Status and Availability of Resources

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

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

5.2.3.4 Education and Experience

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



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 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work 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

[2010B](#) (2020-05-28), General Conditions - Professional Services (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 February, 2022

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Natasha Blackstein
Title: Procurement Specialist
Transport Canada
Address: 275 Sparks Street
Ottawa, Ontario
K1A 0N5
Telephone: 343-550-2321
E-mail address: natasha.blackstein@tc.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 provided upon contract award)**

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

Name: _____

Title: _____

Organization: _____

Address: _____

Telephone: ____ _

Facsimile: ____ _

E-mail address: _____

6.6 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a [Public Service Superannuation Act \(http://laws-lois.justice.gc.ca/eng/acts/P-36/FullText.html\)](http://laws-lois.justice.gc.ca/eng/acts/P-36/FullText.html) (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with [Contracting Policy Notice: 2019-01 \(https://www.canada.ca/en/treasury-board-secretariat/services/policy-notice/changes-contracting-limits-approval-new-requirements.html\)](https://www.canada.ca/en/treasury-board-secretariat/services/policy-notice/changes-contracting-limits-approval-new-requirements.html) of the Treasury Board Secretariat of Canada.

6.7 Payment

6.7.1 Basis of Payment

6.7.2 Limitation of Expenditure

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 \$ _____. 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.



6.7.3 Method of Payment (Milestone)

Canada will make milestone payments in accordance with the Schedule of Milestones and the payment provisions of the Contract if all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

6.7.5 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)

6.8 Invoicing Instructions

The Contractor must submit invoices in accordance with the section titled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

Invoices must be distributed as follows:

- a. The original copy must be forwarded to the address shown on page 1 of the Contract for certification and payment;

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 [2010B](#) (2020-05-28), General Conditions - Professional Services (Medium Complexity);
- (c) Annex A, Statement of Work;
- (d) Annex B, Basis of Payment;
- (e) Annex D Research Summary Template;
- (f) the Contractor's bid dated _____ .

6.12 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "[Dispute Resolution](#)".



ANNEX "A"
STATEMENT OF WORK

Project Title

MOC.1.B. – Composite Cylinder Acoustic Emission Requalification

Introduction

The Transportation of Dangerous Goods Directorate (TDG), as part of the Safety and Security Group at Transport Canada (TC) serves as the major source of regulatory development, information, and guidance on dangerous goods transport for the public, industry, and government employees. The transportation of compressed gases in Canada is regulated under the *Transportation Dangerous Goods Act, 1992* and its Regulations (TDG Regulations).

Background

Composite compressed gas cylinders are constructed by winding glass or carbon fibre filaments over a metal liner to form a composite overwrap. One example of use for these cylinders is in emergency response. First responders use composite cylinders containing compressed air in hazardous situations that require a self-contained breathing apparatus (SCBA). These cylinders require periodic visual inspections and hydrostatic testing throughout their service life to validate their structural integrity and safety.

TDG – Scientific Research performed research in FY 2019/20 under project MOC.1.A. to assess the mechanical integrity of TC-3CCM composite cylinders at the end of their 15 year service life. The study also evaluated three test methods for cylinder requalification: hydrostatic testing, modal acoustic emission (MAE) testing, and acoustic emission (AE) testing. AE testing was performed as per draft ISO/CD 23876 standard, and the number of false positives and false negatives obtained (when results were compared to burst testing) were found to vary greatly based on the evaluation criteria used.

The ISO/CD 23876 standard is expected to be submitted for review by the ISO committee, and as a member of this committee, TDG-Regulatory Framework and International Engagement (RFIE) branch will be asked to provide comments on the draft. RFIE have asked for a re-evaluation of the AE data, by a new contractor, in order to assess whether there is variability in interpretation of results.

Up to three contracts may be awarded further to this solicitation, with work performed concurrently by all contractors.

Objectives

The objective of this project is to:

- Evaluate Acoustic Emission data collected as per draft ISO/CD 23876 standard for use in cylinder requalification.



Requirement

Task 1: Data evaluation

Specific Objective – Re-evaluate AE data

The following steps shall be performed by the selected contractor to achieve the Task 1 objective:

- a) Accept raw AE data in either .param and/or .csv file format from TC (representing up to 100 requalification tests) and perform data validation as required
- b) Evaluate AE data using criteria described in ISO/CD 23876 to perform cylinder requalification
- c) Assess impact of rejection criteria on requalification results, and recommend best practice criteria

Task 2: Monthly Update Meetings

Specific Objective – Inform TC team of ongoing project work

The following steps shall be performed by the selected contractor to achieve the Task 2 objective:

- a) Attend monthly update meetings by teleconference with the technical authority for the duration of the project in order to inform TC on the progress of the project, including data analysis and scheduling issues.

Timeline

All work must be completed on or before February 28, 2022. Contractor should provide best firm complete dates for Tasks outlined above in bid documentation.

Deliverables

The Contractor shall prepare and provide the following deliverables to Transport Canada:

1. AE requalification test results for all provided cylinders.
2. Draft project report, containing as follows:
 - i. Methodology for AE data analysis for cylinder requalification
 - ii. Results of all AE requalifications
 - iii. Effect of rejection criteria on requalification outcome
 - iv. Recommended best practices for data evaluation
3. Draft project research summary, containing the information set out in Transport Canada's brief template (as shown in Annex D)
4. Final report and summary delivered to Transport Canada no later than 15 days after receipt of Transport Canada's comments on the draft versions.

All reports must be delivered in electronic format using the most appropriate format of a) through d), listed below:

- a) Adobe Acrobat (PDF),
- b) Microsoft Word,
- c) Microsoft Excel, and
- d) Microsoft PowerPoint.



Inspection and Acceptance

All deliverables and services rendered under any contract are subject to inspection by the TC Project Authority defined in the Contract. Should any deliverables not be to the satisfaction of the TC Project Authority, as submitted, the TC Project Authority shall have the right to reject it or to require correction before payment will be authorized.

This Contract shall not be considered to have been completed until the Contractor has demonstrated to the satisfaction of the Project Authority that the Project Report meets the requirements detailed in this SOW.

Performance Reporting

The Contractor must provide written or oral progress reports at the request of TC. The Progress Reports must include the following to ensure that the project is progressing in accordance with the agreement:

- The status of the project,
- Proposed approach(es),
- Implementation, and
- Results of work.

The Contractor shall attend monthly update meetings by teleconference with TC throughout the course of the project. In addition to the timely submission of all deliverables and fulfillment of obligations specified in the agreement, the Contractor must facilitate and maintain regular communication with TC and to immediately notify the TC of any issues, problems, or areas of concern (e.g. delays) in relation to any work completed under the agreement, as they arise. Communication may include: phone calls, email, and teleconference meetings.



ANNEX "B"

BASIS OF PAYMENT

In consideration of the Contractor satisfactorily completing all of its obligations under the terms and conditions of this Contract, the Contractor will be paid an all-inclusive fixed price:

All prices and costs must be submitted in Canadian Dollars, Canadian customs duties and excise taxes included, Applicable Taxes excluded.

Initial Period of the Contract: Award to February 28, 2022

Milestone No.	Description or "Deliverable"	Firm Amount	Target Delivery Date
1	1,2,3 – Submission of test results, draft report and summary to Project Authority	\$ _____ (70% of price)	September 30, 2021
2	4 – Acceptance of final report and summary	\$ _____ (30% of price)	30 days after receipt of TC comments
3	Attend monthly update meetings	n/a	Monthly for duration of project.
Total Cost		\$ _____	



ANNEX “C” 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 "D"

RESEARCH SUMMARY TEMPLATE

Research Summary – Title

Transportation of Dangerous Goods | Scientific Research Division



SUMMARY

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Figure 1 – Caption

BACKGROUND

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OBJECTIVES

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METHODS

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Table 1 – Caption

RESULTS

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CONCLUSIONS

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FUTURE ACTION

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REFERENCES

1. **Name.** *Title.* Location: Publisher.Agency, year.

ISBN:

Catalogue Number:

ACKNOWLEDGEMENTS

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CONTACT

To obtain a copy of the report, please contact us:

TDG Scientific Research Division
[TC.TDGScientificResearch-
RecherchescientifiqueTMD.TC@tc.gc.ca](mailto:TC.TDGScientificResearch-RecherchescientifiqueTMD.TC@tc.gc.ca)

KEYWORDS

As needed, not in title.