

# 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
THIS DOCUMENT CONTAINS NO SECURITY
REQUIREMENT

#### RETURN BIDS TO: RETOURNER LES SOUMISSIONS À :

By e-mail to: - Par courriel au: Natasha.blackstein@tc.gc.ca

Attention: - Attention: Natasha Blackstein

Solicitation Closes - L'invitation prend fin

At - à:

2:00 PM - 14:00

On - le:

December 18, 2023

Time Zone - Fuseau Horaire : Eastern Standard Time (EST)

Title - Suiet

Stranded Energy in Lithium-ion Energy Storage Systems

Solicitation No. N° de l'invitation T8080-230227 Date of Solicitation Date de l'invitation Novemeber 8, 2023

Address enquiries to: - Adresser toute demande de renseignements à :

Natasha Blackstein

Telephone No. - N° de telephone E-Mail Address - Courriel
343-550-2321 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 Livraison exigée See herein -

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



# **TABLE OF CONTENTS**

PART '	1 - GENERAL INFORMATION	4
1.1	Introduction	4
1.2	SUMMARY	4
1.3	Debriefings	5
PART 2	2 - BIDDER INSTRUCTIONS	6
2.1	STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS	6
2.2	SUBMISSION OF BIDS	
2.3	FORMER PUBLIC SERVANT	-
2.4	ENQUIRIES - BID SOLICITATION	
2.5	APPLICABLE LAWS	_
2.6	BID CHALLENGE AND RECOURSE MECHANISMS	
PART:	3 - BID PREPARATION INSTRUCTIONS	
3.1	BID PREPARATION INSTRUCTIONS	9
PART 4	4 - EVALUATION PROCEDURES AND BASIS OF SELECTION	11
4.1	EVALUATION PROCEDURES	11
4.2	Basis of Selection	17
PART	5 – CERTIFICATIONS AND ADDITIONAL INFORMATION	18
5.1	CERTIFICATIONS REQUIRED WITH THE BID	18
5.2	CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION	18
PART (	6 - RESULTING CONTRACT CLAUSES	20
6.1	STATEMENT OF WORK	20
6.2	STANDARD CLAUSES AND CONDITIONS	
6.3	SECURITY REQUIREMENTS	
6.4	TERM OF CONTRACT	
6.5	AUTHORITIES PROACTIVE DISCLOSURE OF CONTRACTS WITH FORMER PUBLIC SERVANTS	
6.6 6.7	PAYMENTPAYMENT	
6.8	INVOICING INSTRUCTIONS	
6.9	CERTIFICATIONS AND ADDITIONAL INFORMATION	
6.10	APPLICABLE LAWS	
6.11	PRIORITY OF DOCUMENTS	
6.12	Insurance-No Specific Requirement	23
6.13		
6.14	DISPUTE RESOLUTION	23
ANNE	( "A"	24
STA	TEMENT OF WORK	24
ANNEX	( "B "	33
BASI	S OF PAYMENT	33
ANNE	C "C" TO PART 3 OF THE BID SOLICITATION	34

ELECTRONIC PAYMENT INSTRUMENTS	34

# **PART 1 - GENERAL INFORMATION**

# 1.1 Introduction

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides Bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications and Additional Information: includes the certifications and additional information to be provided;
- Part 6 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work, the Basis of Payment, the Electronic Payment Instruments, and any other annexes.

# 1.2 Summary

1.2.1 Stranded energy (SE) refers to electrical energy that remains inside a battery when there are no immediate means to discharge it, even when the battery is completely disconnected. Lithium-ion batteries are commonly used in ESS, however, in situations such as accidents or at end-of-life, the presence of SE can pose a significant safety risk during transportation (e.g., electrocution of personnel handling the battery, or thermal runaway events). SE can be difficult to assess and remove, especially in situations where the battery management system (BMS) is damaged, inaccessible, or simply not present.

TC would like to focus on large, high voltage (greater than 100Wh, above 100V-400V) lithium-ion ESS, as the intent is to study ESSs where SE may pose significant hazards to humans or the environment due to shock or fire. Lithium-ion batteries less than 300Wh are considered small batteries and should be excluded for the scope of the study. The key objective is to define hazards and challenges of dealing with SE as it relates to transportation depending on the type of ESS (grouped by size, use, cell form-factor/chemistry, etc.) and condition of the battery (end of life, post incident, defective), rather than focusing on any particular type of ESS (e.g., electric cars).

Transport Canada (TC) would like to better understand the hazards related to the presence of stranded energy (SE) in lithium-ion energy storage systems (ESS) during transportation and related handling and storage, and how these hazards vary by battery characteristics and environmental factors. The study should also explore strategies (including specific technologies for hazard reduction) as it relates to transportation of ESS with SE.

Thus, the objective of the study is to:

- Define the hazards caused by SE during transportation of lithium-ion ESSs and how they
  may vary depending on ESS type (electric vehicle (EV), solar installation, etc.), specification
  (voltage, capacity, chemistry), mode of transportation (excluding marine) and state of the
  ESS (end of life, post-incident, defective).
- 2. Identifying strategies/technologies for managing SE (i.e., would it be safer to leave the SE in the battery during transport or are there safe and practical means to remove the SE?) to reduce hazards and mitigate potential risks. This may include recommendations on potential areas of additional research.

For the purposes of this scope of work, "lithium-ion ESSs" include high voltage (above 100V-400V) lithium-ion batteries larger than 300Wh. The intent of this study is to focus on ESSs where SE could pose a serious safety hazard.

As part of identifying hazards of SE and gaps that may exist in achieving safe transportation of these ESSs, it is important to understand the relevant regulations, standards, and industry best practices currently in place. To support this aspect of the study:

☐ TC will provide an overview of the current requirements for transporting lithium-ion batteries (including when damaged or defective), and electric vehicles under the Transportation of Dangerous Goods Regulations.

TC is aware of current studies related to SE that center around emergency response to EV accidents, economical methods to de-energize small lithium-ion batteries for bulk transport at end of life and scanning technologies for battery health and re-use. To reduce duplication of work, this study should not focus on these topics.

# 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

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the <u>Standard Acquisition Clauses and Conditions Manual</u> (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 <u>2003</u> (2023-06-08) 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: 180 days

#### 2.2 Submission of Bids

Bids must be submitted only to Natasha Blackstein by the date and time indicated in the bid solicitation at natasha.blackstein@tc.gc.ca.

# 2.3 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 <u>Public Service Superannuation</u>

<u>Act</u> (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the <u>Supplementary Retirement</u>

<u>Benefits Act</u>, R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the <u>Canadian Forces Superannuation Act</u>, R.S., 1985, c. C-17, the <u>Defence Services Pension</u>

<u>Continuation Act</u>, 1970, c. D-3, the <u>Royal Canadian Mounted Police Pension Continuation Act</u>, 1970, c. R-10, and the <u>Royal Canadian Mounted Police Superannuation Act</u>, R.S., 1985, c. R-11, the <u>Members of Parliament Retiring Allowances Act</u>, R.S. 1985, c. M-5, and that portion of pension payable to the <u>Canada Pension Plan Act</u>, 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 <a href="Contracting Policy Notice">Contracting Policy Notice</a>: 2019-01 and the <a href="Guidelines on the Proactive Disclosure of Contracts">Guidelines on the Proactive Disclosure of Contracts</a>. 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.

# 2.4 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 10 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.

# 2.5 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

- (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 <u>Buy and Sell</u> website, under the heading "<u>Bid Challenge and Recourse Mechanisms</u>" 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 05 of the 2003 standard instructions.

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

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

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

It is recommended that all electronic documents be submitted in PDF format.

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

Canada is committed to achieving <u>net zero greenhouse gas (GHG) emissions by 2050</u> in an effort to position Canada for success in a green economy and to mitigate climate change impacts. As a result, future solicitations may include the following:

- there may be evaluation criteria or other instructions in the solicitation or contract documents related to measuring and disclosing your company's GHG emissions;
- you may be requested or required to join one of the following initiatives to submit a bid, offer or arrangement or if you are awarded the contract:
  - Canada's Net-Zero Challenge;
  - the United Nations Race to Zero;
  - the Science-based Targets Initiative;
  - the Carbon Disclosure Project;
  - the International Organization for Standardization;
- you may be required to provide other evidence of your company's commitment and actions toward meeting net zero targets by 2050.

#### 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

3.1.1 Bidders must submit their financial bid in accordance with "Basis of Payment in Annex "B".

# 1.1.2 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.

# 3.1.3 Exchange Rate Fluctuation

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

# 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

Bids which fail to meet the mandatory technical criteria will be declared non-responsive. Each mandatory technical criterion should be addressed separately. Please note where in the bid each criterion is addressed.

For each Project Summary provided in demonstration of a mandatory or rated experience requirement below, the Bidder must provide:

- Name of the client(s)/employer(s) (Note: if this cannot be provided due to confidentiality, replace with "confidential");
- b. The start and end dates of the project (month and year);
- c. Objective(s) of the project and the general approach/methodology, and the success of the project;
- d. Name(s) of the proposed project team member(s) who worked on the project, with details about the work performed by them, the number of working months, the tasks, technologies used, and deliverables completed; and,
- e. Reference contact information that can attest to the quality of the work completed by the Bidder. References may be contacted to validate the information provided in the bidder's proposal.

All Project Summaries submitted may have a combined maximum of 2000 words.

The month(s) of experience attributed to a given team member for a referenced project or experience where the timeframe overlaps with that of another referenced project or experience will only be counted once per criteria.

For example: Jane worked on Project A from July to December 2019 and on Project B from October 2019 to January 2020; this demonstrates seven (7) months of experience. John worked on Project A from July to December 2019 and on Project C from January to April 2020; this demonstrates ten (10) months of experience. Cumulatively, this demonstrates 17 months of experience for the team.

Criterion		Met / Not Met	Cross Reference to Proposal
MTC1	<ul> <li>The Bidder must submit a Preliminary Work Plan for meeting the objectives of the work described in Annex A as part of their bid, which must include the following in no more than ten (10) pages:  1. Details on their proposed approach or methodology to meet the project objectives, including how the subject matter expertise or required information will be obtained;</li> <li>2. A Quality Assurance/Quality Control plan for ensuring the integrity, quality, and reliability of deliverables;</li> <li>3. A proposed schedule of deliverables and a Gantt chart (or similar) showing a project timeline, including duration of tasks and milestones;</li> <li>4. Anticipated risks that may lead to incomplete or delayed work as per the original schedule; and</li> <li>5. Contingency plan to minimize the risks identified above.</li> </ul>		roposai
MTC2	The Bidder must propose a project team and identify each member's anticipated role in the project.  There must be a project lead (or technical lead) who has at a minimum:  - a degree from a recognized university in Engineering or Applied Science or hold a Professional Engineering License. A copy of the degree or license must be included in the bidder's proposal. And,  - two (2) years of experience managing projects of a technical nature within the period of April 1, 2018 to date of Bid Closing.		

Criterion	Mandatory Criteria	Met / Not Met	Cross Reference to Proposal
MTC3	The Bidder must demonstrate using Project Summa		riupusai
IVIICS	that the proposed project team has, at minimum, the		
	(3) years of cumulative project/work experience with		
	the period from April 1, 2018, to date of Bid Closing		
	one of the following:	""	
	one of the following.		
	a. Experience in engineering consulting service	ces,	
	or		
	b. Experience in technical or engineering		
	research and report writing,		
	And at minimum, that one proposed team member I	has	
	two (2) years of project/work experience* within the		
	period from April 1, 2018, to date of Bid Closing in o		
	or more of the following:		
	a. Experience working with regulations, codes	s, or	
	technical standards related to transportatio	n of	
	lithium-ion cells, batteries, or energy storage		
	systems.	, -	
	b. Experience related to transporting, handling	a or	
	temporary storage of lithium-ion energy	9, 01	
	storage systems.		
	c. Experience assessing hazard and risk factor	ors	
	of lithium-ion cells, batteries, or energy stor		
	systems.	3.	
	d. Experience researching end-of-life, damag	ed.	
	or defective lithium-ion cells or batteries.	,	
	e. Experience designing or researching lithiur	n-	
	ion energy storage systems.		
	* A project covering multiple criteria may only be		
	counted once.		
	The Bidder must state which experience item is being	na	
	demonstrated by which proposed team member in e		
	Project Summary.		

# 4.1.1.2 Point Rated Technical Criteria

Bids which meet all the mandatory technical criteria will be evaluated and scored as specified below.

Each point rated technical criterion should be addressed separately. Please note where in the bid each criterion is addressed. The Bidder may use the same references provided in the Mandatory Criteria provided that they have clearly noted which project summaries, work plans, or other references the point rated technical criteria addressed.

Criterion		Point Rated Technical Criteria  The Bidder should demonstrate in the Preliminary Work Plan submitted in					
RTC1	MT1 that th	ney can deliver on pro	oject objectiv	res detailed in Annex A by ore than ten (10) pages:  Point Allocation Rubric  • 5 points – Description of approach or methodology proposed on how the	50 Points (Minimum of 25 points required)		
	1	Details on the approach or methodology proposed on how the project objectives will be met, including how the subject matter expertise, or required information will be obtained.	20 points	project objectives will be met is missing major details (i.e., unclear how the subject matter expertise or required information will be obtained and methodology is vague).  • 10 points – Description of approach or methodology proposed on how the project objectives will be met is missing minor details (i.e., methodology is missing detailed task breakdown, but sufficient details are provided to demonstrate how project objectives will be met, general approach to obtain required information is presented. , ta  • 20 points – Detailed information of the description of approach or methodology proposed on how the project objectives will be met. (i.e., methodology has detailed task breakdown clearly linking how project objectives will be met, and how required information will be obtained is clearly laid out.).			

2	A Quality Assurance/Quality Control plan for ensuring the integrity, quality, and reliability of deliverables.	10 points	•	3 points – Description of the quality assurance/control plan is missing major details (i.e., plan is vague or missing). 7 points – Description of the quality assurance/control plan is missing minor details. (Ex. Quality assurance control plan lacks detail regarding roles and responsibilities, quality standards and criteria) 10 points – Description of the quality assurance/control plan includes detailed information. Quality assurance/control plan clearly describes roles and responsibilities, quality standards and criteria.	
3	A proposed schedule of deliverables and a Gantt chart (or similar) showing a project timeline, including duration of tasks and milestones.	10 points	•	3 points – The proposed schedule is missing major details (i.e., missing deliverables identified in Annex A, breakdown of tasks and milestones is missing).  7 points – Proposed schedule is missing minor details (i.e., all deliverables identified in Annex A with appropriate tasks and milestones are included in a project timeline, but resource information may be missing or insufficient or task durations are vague).  10 points – Proposed schedule is comprehensive and detailed (i.e., all deliverables identified in Annex A with appropriate tasks and milestones are included in a logical project timeline, with planned resources (names & estimated level of effort).	

	4	Anticipated risks that may lead to incomplete or delayed work as per the original schedule, and contingency plan to minimize the risks identified	10 points	3 points – Anticipated risks and/or contingency plan is missing major details (i.e., vague, not well thought out, mitigation strategies are ineffective or missing).      7 points – Anticipated risks and/or contingency plan is missing minor details (i.e., most risks are identified with mitigation strategies)      10 points – Anticipated risks and contingency plan is detailed and comprehensive (i.e., risks are well thought out, and all risks have robust mitigation strategies identified).		
RTC2				ct Summaries that the proposed	10 Points	
	The Bidder should demonstrate using Project Summaries that the proposed project lead (or technical lead) has experience (within the period from April 1, 2018 to date of Bid Closing) in one of the following:  a. Leading projects in engineering consulting services, or b. Leading technical or engineering research and report writing,  Point allocation: Two (2) points for every year of experience demonstrated, to a maximum of					
	ten (10) po	ints.	·			
RTC3						
	the experie					
	inuitipie cri	teria may only be cou		Rated Technical Score = /100		
A mini	mum score	of 65 points overall		a minimum score of 25 for RT1)		
	is required to be considered.					

#### 4.1.2 Financial Evaluation

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

# 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;
  - c. obtain the required minimum points specified for criterion number 1 for the technical evaluation, and
  - d. obtain the required minimum of 65 points overall for the technical evaluation criteria which are subject to point rating. The point rating is performed on a scale of 100 points.
- 2. Bids not meeting (a) or (b) or (c) or (d) 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 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 three 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).

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 x 70 = 59.62	89/135 x 70 = 46.14	92/135 x 70 = 47.70
	Pricing Score	45/55 x 30 = 24.54	45/50 x 30 = 27.00	45/45 x 30 = 30.00
Combined Rating		84.16	73.14	77.70
Overa	all 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 Integrity 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.

# 5.1.2 Additional Certifications Required with the Bid

# 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 specified 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.

# 5.2.3 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 <a href="Employment and Social">Employment and Social</a> <a href="Development Canada">Development Canada</a> (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.

#### 5.2.4 Additional Certifications Precedent to Contract Award

#### 5.2.4.1 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.

# 5.2.4.2 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 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex "A".

#### 6.2 Standard Clauses and Conditions

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

#### 6.2.1 General Conditions

2035 (2022-12-01), General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

# 6.3 Security Requirements

**6.3.1** There is no security requirement applicable to 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 October 31, 2024 inclusive.

# 6.5 Authorities

# 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Natasha Blackstein Title: Procurement Specialist

Transport Canada

Address: 330 Sparks Street Ottawa, Ontario K1A 0N5 Telephone: 343-550-2325

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:	
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 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:	
Telephone:	
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 <u>Public Service Superannuation Act</u> (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 of the Treasury Board Secretariat of Canada.

# 6.7 Payment

# 6.7.1 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 \$\_\_\_\_\_. 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.

# 6.7.2 Method of Payment (Milestone)

For the Work described in the Statement of Work in Annex A, Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and Appendix B-Basis of Payment.

# 6.7.3 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.

Each invoice must be supported by:

- a. description of the Work delivered.
- b. a copy of the release document and any other documents as specified in the Contract.
- 2. Invoices must be distributed as follows:
  - The original 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 2035 (2022-12-01), General Conditions Higher Complexity Services;
- (c) Annex A, Statement of Work;
- (c) Annex B, Basis of Payment;
- (d) Annex X, Security Requirements Check List (if applicable);
- (e) the Contractor's bid dated \_\_\_\_\_.

# 6.12 Insurance-No Specific Requirement

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

# 6.13 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.

# 6.14 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

# 1 TITLE

Stranded Energy in Lithium-ion Energy Storage Systems

#### 2 OBJECTIVE

Transport Canada (TC) would like to better understand the hazards related to the presence of stranded energy (SE) in lithium-ion energy storage systems (ESS) during transportation and related handling and storage, and how these hazards vary by battery characteristics and environmental factors. The study should also explore strategies (including specific technologies for hazard reduction) as it relates to transportation of ESS with SE.

Thus, the objective of the study is to:

- 1. Define the hazards caused by SE during transportation of lithium-ion ESSs and how they may vary depending on ESS type (electric vehicle (EV), solar installation, etc.), specification (voltage, capacity, chemistry), mode of transportation (excluding marine) and state of the ESS (end of life, post-incident, defective).
- 2. Identifying strategies/technologies for managing SE (i.e., would it be safer to leave the SE in the battery during transport or are there safe and practical means to remove the SE?) to reduce hazards and mitigate potential risks. This may include recommendations on potential areas of additional research.

For the purposes of this scope of work, "lithium-ion ESSs" include high voltage (above 100V-400V) lithium-ion batteries larger than 300Wh. The intent of this study is to focus on ESSs where SE could pose a serious safety hazard.

As part of identifying hazards of SE and gaps that may exist in achieving safe transportation of these ESSs, it is important to understand the relevant regulations, standards, and industry best practices currently in place. To support this aspect of the study:

 TC will provide an overview of the current requirements for transporting lithium-ion batteries (including when damaged or defective), and electric vehicles under the *Transportation of Dangerous Goods Regulations*.

# 3 BACKGROUND AND SCOPE

Stranded energy (SE) refers to electrical energy that remains inside a battery when there are no immediate means to discharge it, even when the battery is completely disconnected. Lithium-ion batteries are commonly used in ESS, however, in situations such as accidents or at end-of-life, the presence of SE can pose a significant safety risk during transportation (e.g., electrocution of personnel handling the battery, or thermal runaway events). SE can be difficult to assess and remove, especially in situations where the battery management system (BMS) is damaged, inaccessible, or simply not present.

TC would like to focus on large, high voltage (greater than 100Wh, above 100V-400V) lithium-ion ESS, as the intent is to study ESSs where SE may pose significant hazards to humans or the environment due to shock or fire. Lithium-ion batteries less than 300Wh are considered small batteries and should be excluded for the scope of the study. The key objective is to define hazards and challenges of dealing with SE as it relates to transportation depending on the type of ESS (grouped by size, use, cell form-

factor/chemistry, etc.) and condition of the battery (end of life, post incident, defective), rather than focusing on any particular type of ESS (e.g., electric cars).

TC is aware of current studies related to SE that center around emergency response to EV accidents, economical methods to de-energize small lithium-ion batteries for bulk transport at end of life and scanning technologies for battery health and re-use. To reduce duplication of work, this study should not focus on these topics.

#### 4 TASKS

# 4.1 KICK-OFF MEETING AND PROJECT PLAN

4.1.1 Upon award of the contract, the Contractor must schedule a meeting with Transport Canada within two (2) weeks, and set a project start date within four (4) months of contract award. This initial meeting will be held with the TC Project Authority in attendance to clarify the tasks, objectives, and ensure a common understanding of the project. The Contractor will present a brief project plan (their provisional approach and methodology to the work, and timeline (duration and project start date). If the project start date is more than one (1) month from this initial meeting, the contractor must schedule a second kick-off meeting closer to the project date prior to project start.

A communications plan and schedule for reoccurring update meetings, not more than one month apart, will also be agreed upon during the kick-off meeting. These meetings are to inform TC on the progress of the project and discuss any risks or issues with project completion.

#### 4.2 DETAILED WORK PLAN

4.2.1 Following the kick-off meeting, the Contractor will submit a detailed work plan based on the preliminary work plan submitted as part of the bid submission. This detailed work plan will explain the approach to achieve the study objectives and a detailed methodology (i.e., specific tasks, interim results and expected outcomes), as well as identify key information sources. The detailed work plan should also include the contact information, roles and responsibilities of project personnel involved, and a project timeline (with task durations, interim and key milestones identified, and discussion on risks and mitigation strategies for potential risks as they relate to project completion).

The detailed work plan must be submitted to the Project Authority for review, feedback, and approval within five (5) business days of the kick-off meeting (or other timeline mutually agreed upon during the kick-off meeting).

#### 4.3 BACKGROUND & SPECIFYING ESS GROUPS

4.3.1 Research types of ESS used or emerging in North America (i.e., through detailed market analysis or similar method), to identify at least four (4) types of ESS of interest. Create groupings based on this, and list specific examples that may fall into each group. Capture key characteristics (e.g., voltage, capacity, chemistry, cell form-factors, lifespan, other pertinent information) that may impact hazards posed by stranded energy in ESS as it relates to transportation. For each group, create sub-groups based on potential condition before transport (new, end-of-life, defective/damaged).

These groups and sub-groups will be used to organize regulatory requirements and hazards as these may differ based on the use, characteristics, and condition of the ESS.

Small batteries (under 300Wh) and low voltage batteries (under 100V) shall be excluded.

Provide the groups and subgroups for review and approval by TC prior to proceeding with subsequent project tasks.

Table 1 contains suggested groupings as an example; however, this should not be taken as the exact output of this task.

Table 1: Example of ESS groups

Group-	Types/Use	Voltage	Capacity range	Condition before	Examples
Subgroup		range (V)	(kWh)	transport	
1-1	Electric	450-800	75-100	New	Kia EV6 GT
1-2	Cars			End-of-life	Taycon Turbo
1-3				Defective	
1-4				Post-Incident	
2-1	Consumer	120-240	8.6-20	New	LG RESU Flex
2-2	Home ESS			End-of-life	Panasonic EverVolt
2-3				Defective	
2-4				Post-Incident	
3-1	Industrial	700-1000	100-10,000	New	LG M48218P5B
3-2	ESS			End-of-life	BYD C230
3-3				Defective	
3-4				Post-Incident	

# 4.4 REGULATION/GUIDELINE REVIEW

4.4.1 TC will provide an overview of the current requirements for transporting lithium-ion batteries (including when damaged or defective), and electric vehicles under the *Transportation of Dangerous Goods Regulations*.

Use this information to describe how ESSs are transported. Are there requirements specific to any of the groups developed in 4.3? Describe how each group/subgroup is being transported (e.g., are some limited to a given mode of transportation, how are these packaged for transport?).

Supplemental sources such as standards, codes, government-issued guidance documents, or industry best practices (if known) for transporting, and handling and storage during transport of lithium-ion ESS in Canada may also be used.

# 4.5 IDENTIFY HAZARDS POSED BY SE IN ESS TRANSPORT

- 4.5.1 Using available literature, expertise and/or other relevant sources of information, conduct a hazard identification and assessment to describe the hazards that can occur during transport, handling, and storage for each group developed in 4.3. Comment on how these may vary depending on the type of battery, state of the battery, the environment (end of life, after a crash, after fire damage, recalled/defective). Consider who may be encountering the ESS as it is being transported (i.e., public, local firefighter, carrier) and if that impacts potential risk.
- 4.5.2 Assess whether current transport regulations or guidance, as identified in 4.4 are addressing the hazards identified in 4.5.1. Document the gaps, as well as potential barriers to compliance.

4.5.3 Identify missing or unobtainable information that would be beneficial for this exercise. Briefly describe what additional testing, research, or data collection can be done to improve the

knowledge gap. If industry consultation is recommended, include potential contacts (if known).

# 4.6 INTERIM REPORT

4.6.1 Submit an Interim Report based on the findings of tasks 4.3 to 4.5.

#### 4.7 MITIGATION STRATEGIES FOR STRANDED ENERGY

- 4.7.1 Identify strategies that could either remove or mitigate the hazards and risks when transporting ESSs that have stranded energy, or reduce the challenge for consumers, first responders, lithium battery manufacturers, carriers, and lithium battery recyclers to transport these ESSs. Strategies should be targeted towards transport regulations and/or guidelines, where the target audience for these strategies is clearly defined.
- 4.7.2 Compare the advantages and disadvantages of measures involving the removal of SE vs. leaving the SE but managing the risk.
- 4.7.3 Identify missing or unobtainable information that may need to be considered when transporting ESS with SE. Briefly describe what additional testing, research, or data collection can be done to improve the knowledge gap.

#### 4.8 NEW TECHNOLOGIES & NOVEL APPROACHES FOR STRANDED ENERGY

- 4.8.1 Identify at least four (4) methods, technologies, or tools that could help address the most significant risks or hazards for transporting ESSs with SE identified in 4.7. Consider at least one (1) case where the SE is completely removed, and another where the SE is left within the ESS but the risk is mitigated. These measures should be based on either real-world use or existing laboratory testing. In describing the methods, the following questions should be considered:
  - To what groups (from 4.3) and in which situations can the method be applied?
  - How feasible and effective is the method at addressing risks of SE?
  - Does the method keep the ESS operational, recyclable, or destroyed/non-recyclable?
  - What are the practical costs, expected time and personnel needed to use the method?
  - Are there any limitations (technology, regulations, safety, etc.) impeding wide adoption of the method?

#### 4.9 FINAL REPORT AND PRESENTATION

- 4.9.1 Three (3) weeks after project start, the Contractor will submit a planned table of contents for the final report.
- 4.9.2 At least eight (8) weeks prior to project completion, the Contractor will submit a Draft Final Report that includes key findings, observations, conclusions, and recommendations resulting from this work. This should include a summary of all work done for each task (4.3-4.8) and include a discussion of the findings. Work and findings should be specific to each of the groups developed in 4.3 whenever sensible. The Draft Final Report will be reviewed by Transport Canada, for up to a maximum of four (4) weeks, which may include peer-review from subject matter experts of TC's

- choice. All comments, questions, and issues identified in this review step shall be addressed by the Contractor within two (2) weeks of TC returning the reviewed report.
- 4.9.3 Within two (2) weeks of TC returning to the contractor the reviewed report from 4.9.2, a Final Report will be submitted to Transport Canada and will be reviewed by Transport Canada to ensure all feedback has been addressed and meets the requirements for the work, which will then be approved by the Project Authority.
- 4.9.4 At least four (4) weeks prior to project completion, the Contractor will submit a Draft Powerpoint Presentation that will provide an overview of the work completed, including the final outcomes and any potential recommendations discussed in the final report. The Draft Powerpoint Presentation will be reviewed by Transport Canada, for up to a maximum of two (2) weeks. All comments, questions, and issues identified in this review step shall be addressed by the Contractor within one (1) week of TC returning the reviewed presentation.
- 4.9.5 At least one (1) week prior to project completion, the Contractor will submit a Final Powerpoint Presentation, and schedule a virtual meeting to present their final work. The meeting should have a 30-minute presentation plus 30-minute question and answer period.

# 4.10 PROJECT CLOSEOUT MEETING

4.10.1 At project closeout, a final meeting will take place between the Contractor and Project Authority to wrap up all items and close the project.

#### 5 DELIVERABLES

#### 5.1 DELIVERABLE TIMELINES

Due dates listed below are tentative and will be finalized at the kick-off meeting.

No.	Deliverable	Content	Format	Due Date
5.1.1	Detailed Work Plan	See 4.2	.DOCX	1 week after project kick-off meeting
5.1.2	List of ESS Groups and Subgroups	See 4.3	.PDF or .DOCX	3 weeks after project start
5.1.3	Final Report Table of Contents	See 4.9.1.	.DOCX	3 weeks after project start
5.1.4	Interim Report	See 4.6	.PDF and.DOCX	16 weeks after project start
5.1.5	Draft Final Report	See 4.9.2	.DOCX	8 weeks prior to project completion
5.1.6	Final Report	See 4.9.3	.PDF and .DOCX	2 weeks prior to project completion
5.1.7	Draft Presentation Slides	See 4.9.4	.PDF and .PPTX	4 weeks prior to project completion
5.1.8	Final Presentation Slides	See 4.9.5	.PDF and .PPTX	1 week prior to project completion
5.1.9	Final Presentation	See 4.9.5	Virtual meeting	On project completion

Note: Project completion should be approximately 32 weeks from project kick-off meeting, including time for any optional tasks actioned.

# 5.2 REPORTING REQUIREMENTS

The contractor must provide all electronic copies of deliverables in Microsoft Word DOCX, Microsoft PowerPoint PPTX, or PDF format depending on the deliverable listed. The electronic copies will be sent either via email or alternatively by using Transport Canada's secure file transport site (https://transportcanada.titanfile.com/login/?next=/).

The final report shall meet these general requirements:

- a. The final report will be professionally written and edited in English.
- b. The report shall be prepared in accordance with the TC Publication Standards and Guidelines for Contractors (TP 929), provided in Appendix B. Certain exemptions apply and will be communicated by TC at project kick-off. Reports are subject to review by TC for quality control and adherence to TP 929.
- c. SI (metric) units shall be used (unless special exception is warranted).
- d. The reports must, as a minimum, cover these sections:
  - Introduction: The introduction section will provide a project overview, context behind the report and a brief overview of the goals of the report. In other words, the "why" behind the work conducted as part of the report and "what" was actually completed.
  - **Methods**: A detailed methodology behind the work conducted as part of the milestone. The methodology should include the planning, experimental set-up (as applicable), and any other related background information required prior to the results section.
  - Analysis and Results: An overview of the analysis and results to show the completion of the required work of the milestone. The results section should be clear, concise, and simply demonstrate what was achieved. The use of tables and figures to present results is encouraged, where applicable.
  - **Summary and Conclusions:** The summary will discuss the results, conclusions showing how the objective was reached, and may provide insight into next steps.
  - e. If there is proprietary information that cannot be released to the general public, two final reports may be necessary one without proprietary information that is released to the general public and one that will remain confidential to the Government of Canada, with confidential information clearly noted as such.

# **6 OTHER TERMS AND CONDITIONS**

#### 6.1 LANGUAGE

The principal language of communication will be English.

#### 6.2 TC OBLIGATIONS

- 6.2.1 TC will schedule and host monthly update meetings with the Contractor for the duration of the project.
- 6.2.2 TC will provide responses to emailed questions concerning the project within three (3) working days.
- 6.2.3 TC will provide a user account to Transport Canada's secure file transport site (https://transportcanada.titanfile.com/login/?next=/) for the duration of the project to send electronic copies of deliverables.

6.2.4 TC will provide an overview of the requirements for transporting lithium-ion batteries (including when damaged or defective, and electric vehicles under the *Transportation of Dangerous Goods Regulations*.

#### 6.3 CONTRACTOR'S OBLIGATION

The Contractor will be responsible for ensuring the work is adequately planned, organized, and carried out by experienced personnel; when required, arranging meetings necessary for the conduct of the work; and providing their own equipment, and administrative and logistical support.

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 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, videoconferencing (via MS Teams), electronic mail, written and/or oral progress reports, and meetings.

The Contractor will be responsible for obtaining their own copy of the most recent versions of all relevant standards, articles, and research reports necessary for performing the work. TC will not be responsible for providing these documents for the contractor.

#### 6.4 PROGRESS REPORTING PROCEDURE

- 1. The Contractor shall meet with the TA by teleconference or web conference monthly, and at the request of the TA or his/her designated representatives(s).
- 2. In addition to the reports described in Section 5, the Contractor must provide a written monthly update (template provided in Appendix A) by e-mail two (2) business days in advance of each monthly meeting with the TA that includes:
  - i. Technical progress on tasks;
  - ii. Financial update;
  - iii. Any delays identified and mitigations suggested; and,
  - iv. Any new risks identified, and mitigations suggested.

# **6.5 CONFIDENTIALITY**

The Contractor is responsible for ensuring information from all stakeholders is properly protected in terms of data processing and sensitive information and that confidential information is identified as such to the TC Project Authority.

# 6.6 LOCATION OF WORK, WORK SITE, AND DELIVERY POINT

The Contractor will complete the required work from their own work location. Unless specified otherwise, meetings will be held via the videoconferencing service MS Teams.

#### APPENDIX A: MONTHLY PROGRESS REPORT

UNCLASSIFIED / NON CLASSIFIÉ Transports Transport Canada Canada MONTHLY PROGRESS REPORT FOR TC-TDG Click here to enter text. Click here to enter a date. Progress Report # Date Click here to enter text. Date of Last Report Click here to enter text. Period Covered Click here to enter text. Click here to enter text. Project Title & Phase Click here to enter text. Click here to enter text. Project Identifiers Client Contact

TC Project # Deliverable Original Completion Date: Revised Completion Date: Click here to enter text. Click here to enter text. Draft Final Report Click here to enter text. Click here to enter text. Final Report

Persons Actively on Project:

Contract #

Name Functions Click here to enter text. Click here to enter text.

Click here to enter text.

Current Status of Work Estimated % Complete enter % Planned cost Cost to date Remaining cost TOTAL: enter total amount here enter total amount here enter total amount here Project proceeding on budget Choose an item. Choose an item. Project proceeding on schedule

Explanation:

Click here to enter text.

Problem Areas and Proposed Remedial Action:

Click here to enter text.

Technical Problem Areas and Proposed Remedial Action:

Click here to enter text.

Technical progress this month:

Click here to enter text.

Planned work for next month:

Click here to enter text. Any action required from client:

Click here to enter text.

Any other appropriate information:

lick here to enter text.



Click here to enter text.

# **APPENDIX B**

# TC PUBLICATION STANDARDS AND GUIDELINES FOR CONTRACTORS (TP 929) (SEE ATTACHED)

# 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 firm price.

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

Milestone No.	Description or "Deliverable"	Firm Amount	Milestone Delivery Date
1	Acceptance of Detailed Work Plan (4.2 of SOW)	\$(25% of fixed price, divided equally amongst the three deliverables)	1 week after project kick-off meeting
	Acceptance of List of ESS Groups and subgroups (4.3 of SOW)		3 weeks after project start, subject to accepted workplan
	Acceptance of Final Report Table of Contents (4.9.1 of SOW)		3 weeks after project start, subject to accepted workplan
2	Acceptance of Interim Report (4.6 of SOW)	\$ (25% of fixed price)	16 weeks after project start, subject to accepted workplan
3	Acceptance of Final Project Report (4.9.3 of SOW)	\$(25% of fixed price)	At least 2 weeks prior to project completion, subject to accepted workplan
4	Acceptance of all remaining project deliverables (See 5.1 in SOW)	\$(25% of fixed price)	On project completion
Total Cost for Evaluation Purposes (Sum of Milestone 1 to Milestone 4 (with no Taxes))		\$	
Applicable Taxes (insert the amount, as applicable)		\$	
Total Cost (taxes included)		\$	

# **ANNEX "C" to PART 3 OF THE BID SOLICITATION**

# **ELECTRONIC PAYMENT INSTRUMENTS**

The Bidder accepts to be paid by any of the following Electronic Payment I	nstrument(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)