



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

<b>Title</b> Logistics Analysis of Dangerous Goods Waste in Canada	
<b>Solicitation No.</b> T8080-210059	<b>Date of Solicitation</b> June 11, 2021
<b>Address enquiries to:</b> Natasha Blackstein <b>Telephone No. - N° de telephone</b> <b>E-Mail Address - Courriel</b> 343-550-2321 <a href="mailto:Natasha.blackstein@tc.gc.ca">Natasha.blackstein@tc.gc.ca</a>	
<b>Destination</b> 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.

<b>Delivery required OR requested Livraison exigée OR demandée</b> See herein - Voir aux présentes OR [Insert date] - [Insérer la date]	<b>Delivery offered Livraison proposée</b> Not applicable - Sans objet
<b>Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>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) :</b>	
<b>Name - Nom</b>	<b>Title - Titre</b>
<b>Signature</b>	<b>Date</b>

### Solicitation Closes - L'invitation prend fin

At - à :  
2:00 PM - 14:00

On - le :  
July 26, 2021

Time Zone - Fuseau Horaire :  
EDT

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## **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 Security, Financial and Other Requirements: includes specific requirements that must be addressed by Bidders; and
- Part 7 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, and the Electronic Payment Instruments.

### **1.2 Summary**

The Transportation of Dangerous Goods (TDG) Directorate, based on risks, develops safety standards and regulations, conducts oversight, and provides expert advice on the safe transportation of dangerous goods (DGs) by all modes to promote public safety in Canada.

Each year 8 million tonnes of dangerous goods waste are generated by industry in Canada, of which 40% is treated with the remainder going to landfill sites or being discharged into municipal sewers. This waste may contain chemical substances that are considered dangerous to human health and safety or to the environment if improperly handled. In Canada, DG wastes and DG recyclable materials are defined as those with hazardous behavioral properties such as flammability, corrosiveness, or toxicity. These wastes and materials can pose a variety of hazards to the Canadian public in the event of exposure, from skin damage, environmental contamination and even fatality. This bears significance to the TDG directorate as the logistics of dangerous goods waste can have a considerable transportation footprint. An integral component of a dangerous waste management program is controlling the transport of dangerous goods that are wastes.

DG wastes and recyclables come from many sources, including material left over from industrial activities such as oil refining, chemical manufacturing and metal processing. Waste can be disposed, recycled or repurposed, necessitating the transportation of waste from production sites to disposal or recycling sites. Presently, the TDG Program is interested in expanding its comprehensive knowledge base regarding the logistics surrounding handling, offering for transportation and import of DG waste through a logistics analysis of DG waste.

The objective of this project is to analyze and describe the logistics of DG wastes in Canada. This includes identifying sites that produce (generate) or collect DG wastes; sites that process DG wastes (dispose or recycle); and the transportation logistics involved. The findings of this study will contribute to inform policy decisions regarding safety regulations.

#### 1.2.1 epost Connect

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.

### **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 [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](mailto: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.

#### 2.2.1 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](mailto: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](mailto: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](mailto: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 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.

### **2.3 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 [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.

## **2.4 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 Improvement of Requirement during Solicitation Period**

Should bidders consider that specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least 10 days before the bid closing date. Canada will have the right to accept or reject any or all suggestions

## **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)  
Section IV: Additional Information

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 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 the Basis of Payment in Annex "B".

##### **3.1.2 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

#### **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

For any project summaries provided in demonstration of mandatory or rated experience requirements, the resource must provide:

- a) Name of the client(s) / employer(s);
- b) A brief description of the objective and scope of the service provided and the number of participant(s)
- c) The start and end dates (month and year) of the project / work;
- d) The dollar (\$) value of the project;
- e) The total number of years' experience performing each mandatory and technical criteria;
- f) Details about the work performed by the proposed resource including number of working months, tasks, technologies used, and deliverables;
- g) The extent to which the services were provided on-time, on-budget and in accordance with the established project; and,
- h) Client / employer reference that can attest to the proposed resource's experience (References are only contacted to validate the information provided in the bidder's proposal)

\*The month(s) of experience listed for a project or experience whose timeframe overlaps that of another referenced project or experience will only be counted once.

For example: Project 1 timeframe is July 2015 to December 2015; Project 2 timeframe is October 2015 to January 2016; the total months of experience for these two project references is seven (7) months

<b>The Bidder's Proposed Resource</b>			
<b>Criterion</b>	<b>Mandatory Criteria</b>	<b>Met / Not Met</b>	<b>Cross Reference in Proposal</b>
<b>MT-1</b>	<p>The Bidder must submit a detailed Work Plan describing how it will meet the requirements of the Statement of Work (SOW) Annex A. The work plan should include:</p> <ul style="list-style-type: none"> <li>• The Contractor's understanding of the scope of work and requirements needed to complete the study;</li> <li>• A draft Table of Contents for the report which will define how the report is organized;</li> <li>• The approach/methodology proposed for completing the work;</li> <li>• The Contractor demonstrates that they can produce all geospatial deliverables using ESRI ArcGIS suite</li> </ul>		

	<p>of products including producing all maps in ESRI ArcGIS map documents (mxd) or ESRI ArcGIS Project Files (aprx).</p> <ul style="list-style-type: none"> <li>• Description of data and metadata formatting, naming conventions, and any other means to which the Contractor will organize the data;</li> <li>• A paragraph by paragraph statement of compliance with the Statement of Work (SOW) ;</li> <li>• A time table (GANNT chart or similar) showing activities and milestones; and,</li> <li>• A draft reference list, including preliminary sources for data, internal data sources TDG must provide, as well as external datasets that TDG may assist in acquiring.</li> </ul>		
<b>MT-2</b>	<p>The Bidder must propose a Project Team consisting of at least a Project Manager, a GIS Specialist, and a Waste Management Specialist.</p> <ul style="list-style-type: none"> <li>• The bidder must provide details on the Project Team proposed to carry out the study, complete with language capabilities (in the official languages of Canada), resumes and project descriptions for each team member.</li> </ul> <p>Note: The Bidder may use the same person to fill more than one position in the Project Team.</p>		
<b>MT-3</b>	<p>The Bidder must demonstrate using project descriptions (minimum 2) that the proposed resource as the Project Manager:</p> <ul style="list-style-type: none"> <li>• Has a minimum of two (2) years cumulative experience (within the period from March 31, 2011 to April 1, 2021)* in the transportation industry and/or for the transportation of dangerous goods within Canada; and,</li> </ul> <p>*A resume for the Project Manager must be included as part of Bidder's Proposal.</p>		
<b>MT-4</b>	<p>The Bidder must demonstrate using project descriptions that the proposed resource as the GIS Specialist has at a minimum:</p> <ul style="list-style-type: none"> <li>• A degree, diploma or certificate*, from a recognized university or college in geography or Geographic Information Systems; and,</li> <li>• Two (2) years' experience, (within the period from March 31, 2011 to April 1, 2021)*, working in the field of geography or GIS; and,</li> </ul>		

	<ul style="list-style-type: none"> <li>Two (2) years' experience, (within the period from March 31, 2011 to April 1, 2021), working with ESRI ArcGIS suite of products.</li> </ul> <p>*A copy of the degree, diploma or certificate must be included in the bidder's proposal.</p>		
<b>MT-5</b>	<p>The Bidder must demonstrate using project descriptions that the proposed resource as the Waste Management Specialist has at minimum:</p> <ul style="list-style-type: none"> <li>A degree* from a recognized university in science, engineering or business with a specialization in chemistry, waste management, waste logistics, or a related field; and,</li> <li>Two (2) years' experience, (within the period from March 31, 2011 to April 1, 2021)* working in waste management, waste logistics, or a related field.</li> </ul> <p>*A copy of the degree must be included in the bidder's proposal.</p>		

#### 4.1.1.2 Point Rated Technical Criteria

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

<b>Point Rated Technical Criteria</b>		<b>Maximum points available</b>	<b>Cross Reference in Proposal</b>
<b>RT1</b>	<p>The bidder should demonstrate an understanding of the logistics involved in the supply chain of Dangerous Goods (DG) waste in Canada, using a description of the following aspects, as detailed in the Statement of Work:</p> <ol style="list-style-type: none"> <li>1.1 DG Waste Sources;</li> <li>1.2 Disposal and Reverse Logistics;</li> <li>1.3 Disposal and Recovery Sites;</li> <li>1.4 DG Waste Incidents; and,</li> <li>1.5 International trade of DG waste.</li> </ol> <p><i>Each sub-criterion is assessed and worth up to 5 points. For each sub-criterion that is addressed, full marks for that sub-criterion will be awarded. For each sub-criterion not addressed, 0 points will be awarded.</i></p>	25	
	<p>The Work Plan submitted in MT1 addresses Quality Control as well as processes to ensure that the work can be delivered successfully, including:</p> <ol style="list-style-type: none"> <li>2.1 A plan describing quality assurance processes;</li> <li>2.2 A description of quality control checks; and,</li> <li>2.3 A timetable of milestones.</li> </ol> <p><i>Each sub-criterion is assessed and worth 5 points. For each sub-criterion that is addressed, full marks for that sub-</i></p>	15	

	<i>critereon will be awarded. For each sub-critereon not addressed, 0 points will be awarded.</i>		
<b>RT3</b>	<p>The Bidder should demonstrate using project descriptions that the proposed Project Manager has experience in the following elements:</p> <ul style="list-style-type: none"> <li>3.1 Analyzing transportation data;</li> <li>3.2 Properties of dangerous goods and/or dangerous goods waste;</li> <li>3.3 Roles and responsibilities of those involved in the supply chain of dangerous goods and/or dangerous goods waste; and,</li> <li>3.4 Managing projects with multidisciplinary team members.</li> </ul> <p><i>Each sub-critereon is assessed and worth 5 points. For each sub-critereon that is addressed, full marks for that sub-critereon will be awarded. For each sub-critereon not addressed, 0 points will be awarded.</i></p>	20	
<b>RT4</b>	<p>The Bidder should demonstrate using Project Descriptions that the proposed GIS Specialist or Academic has experience in the following GIS skills using ESRI ArcGIS Suite of products:</p> <ul style="list-style-type: none"> <li>4.1 Transportation route analysis;</li> <li>4.2 Spatial / statistical analysis; and,</li> <li>4.3 Programing or scripting in a GIS environment.</li> </ul> <p><i>Each sub-critereon is assessed and worth 5 points. For each sub-critereon that is addressed, full marks for that sub-critereon will be awarded. For each sub-critereon not addressed, 0 points will be awarded.</i></p>	15	
<b>RT5</b>	<p>The Bidder should demonstrate using Project Descriptions that the proposed Waste Management Specialist has experience in the following elements related to Dangerous Goods production, disposal and handling:</p> <ul style="list-style-type: none"> <li>5.1 Regulations associated with Hazardous Waste;</li> <li>5.2 The processes involved in the disposal, reuse, recovery and recycling of hazardous waste;</li> <li>5.3 The transportation and logistics involved in the disposal, reuse and recycling of hazardous waste; and,</li> <li>5.4 Risks associated with handling and transportation of DG waste.</li> </ul> <p><i>Each sub-critereon is assessed and worth 5 points. For each sub-critereon that is addressed, full marks for that sub-</i></p>	20	

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	<i>critérian will be awarded. For each sub-criterion not addressed, 0 points will be awarded.</i>		
<b>Total (maximum points)</b>		95	

## 4.2 Basis of Selection

### 4.2.1 SACC Manual Clause [A0027T](#) 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; and
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 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 60/40 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	$115/135 \times 70 = 59.62$	$89/135 \times 70 = 46.14$	$92/135 \times 70 = 47.70$
	Pricing Score	$45/55 \times 40 = 24.54$	$45/50 \times 40 = 27$	$45/45 \times 30 = 30$
Combined Rating		84.16	73.14	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 Integrity 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 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 [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.

#### **5.2.3.2 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 annex titled "Statement of Work".

### **6.2 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.

#### **6.2.1 General Conditions**

[2035](#) (2020-05-28), 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 March 31, 2022, inclusive.

### **6.5 Authorities**

#### **6.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Name: Natasha Blackstein  
Title: Procurement Specialist  
Address: 275 Sparks Street  
Floor 1  
Ottawa, Ontario  
K1A 0N5  
Telephone: (343) 550-2321  
E-mail address: [natasha.blackstein@tc.gc.ca](mailto: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 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: \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_  
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>) (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>) 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.

#### 6.7.2 Limitation of Price

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 (Schedule of 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 the payment provisions of the Contract.

### **6.7.4 Electronic Payment of Invoices – Contract**

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

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

### **6.8 Invoicing Instructions**

1. 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
2. Invoices must be distributed as follows:
    - a. 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\_\_\_\_\_.

### **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;
- (c) the general conditions 2035 (2020-05-28), General Conditions - Higher Complexity - Services;
- (d) Annex A, Statement of Work;
- (e) Annex B, Basis of Payment;
- (i) the Contractor's bid dated \_\_\_\_\_

### **6.12 Insurance**

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 Handling of Personal Information**

The Contractor acknowledges that Canada is bound by the Privacy Act, R.S., 1985, c. P-21 (<http://laws-lois.justice.gc.ca/eng/acts/P-21/index.html>), with respect to the protection of personal information as defined in the Act. The Contractor must keep private and confidential any such personal information collected, created or handled by the Contractor under the Contract, and must not use, copy, disclose, dispose of or destroy such personal information except in accordance with this clause and the delivery provisions of the Contract.

All such personal information is the property of Canada, and the Contractor has no right in or to that information. The Contractor must deliver to Canada all such personal information in whatever form, including all working papers, notes, memoranda, reports, data in machine-readable format or otherwise, and documentation which have been made or obtained in relation to the Contract, upon the completion or termination of the Contract, or at such earlier time as Canada may request. Upon delivery of the personal information to Canada, the Contractor will have no right to retain that information in any form and must ensure that no record of the personal information remains in the Contractor's possession.

## **6.15 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**

Logistics Analysis of Dangerous Goods Waste in Canada

**2. BACKGROUND**

The Transportation of Dangerous Goods (TDG) Directorate, based on risks, develops safety standards and regulations, conducts oversight, and provides expert advice on the safe transportation of dangerous goods (DGs) by all modes to promote public safety in Canada.

Each year 8 million tonnes of dangerous goods waste are generated by industry in Canada, of which 40% is treated with the remainder going to landfill sites or being discharged into municipal sewers<sup>1</sup>. This waste may contain chemical substances that are considered dangerous to human health and safety or to the environment if improperly handled. In Canada, DG wastes and DG recyclable materials are defined as those with hazardous behavioral properties such as flammability, corrosiveness, or toxicity<sup>2</sup>. These wastes and materials can pose a variety of hazards to the Canadian public in the event of exposure, from skin damage, environmental contamination and even fatality. This bears significance to the TDG directorate as the logistics of dangerous goods waste can have a considerable transportation footprint<sup>3</sup>. An integral component of a dangerous waste management program is controlling the transport of dangerous goods that are wastes<sup>4</sup>.

DG wastes and recyclables come from many sources, including material left over from industrial activities such as oil refining, chemical manufacturing and metal processing. Waste can be disposed, recycled or repurposed, necessitating the transportation of waste from production sites to disposal or recycling sites. Presently, the TDG Program is interested in expanding its comprehensive knowledge base regarding the logistics surrounding handling, offering for transportation and import of DG waste through a logistics analysis of DG waste.

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<sup>1</sup> Stephanie Meakin, Science and Technology Division. Hazardous Waste Management: Canadian Directions (1992). <http://publications.gc.ca/collections/Collection-R/LoPBdP/BP/bp323-e.htm>

<sup>2</sup> Government of Canada. Canadian Environmental Protection Act and hazardous waste and hazardous recyclable materials (2017). <https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/general-information/fact-sheets/hazardous-waste-recyclable-materials.html>

<sup>3</sup> Maria K. Triantafyllou and Tom J. Cherrett, International Journal of Logistics Research and Applications, Volume 13, 2010 - Issue 5. The logistics of managing hazardous waste: a case study analysis in the UK retail sector (2010). <https://www.tandfonline.com/doi/abs/10.1080/13675567.2010.512150>

<sup>4</sup> Stephanie Meakin, Science and Technology Division. Hazardous Waste Management: Canadian Directions (1992). <http://publications.gc.ca/collections/Collection-R/LoPBdP/BP/bp323-e.htm>



### 3. OBJECTIVE

The objective of this project is to analyze and describe the logistics of DG wastes in Canada. This includes identifying sites that produce (generate) or collect DG wastes; sites that process DG wastes (dispose or recycle); and the transportation logistics involved. The findings of this study will contribute to inform policy decisions regarding safety regulations.

### 4. SCOPE OF WORK

Dangerous goods waste includes waste of certain quantities and concentrations of DGs that pose a threat to human safety or the environment. This study will describe the logistics of DG Waste management which refers to the production, collection and storage, as well as treatment (processes for recycling or disposing) of DG waste as they pertain to transportation. This will include identifying the sites and facilities that generate, collect, store and treat DG waste, transportation routes and all other logistics involved. Impacts to safety will also be described by identifying incidents involving DG waste handling, packaging and transportation. Additionally, the study will investigate the import and export of DG waste to and from Canada from international markets, including any international import, export and re-export<sup>5</sup>. An analysis from a safety perspective of the logistics for DG waste will provide an overview of DG waste activity within Canada, from waste generation and collection through to disposal and recycling. The study will also determine trends that may have implications in Canada.

The work will include an analysis of the following five parts of the DG waste logistics and safety:

1. DG Waste Sources:
  - Identification of the industries that generate DG waste in Canada;
  - Identification of locations of all sites and facilities in Canada that produce DG waste as a by-product of their primary processes; and
  - Identification of DG wastes by UN number and DG class or division involved in the Canadian DG waste logistics.
2. Disposal Logistics:
  - Collection, transference and transportation of DG waste for disposal or recovery;
  - Identification of the routes and modes used to transport DG waste;
  - Description of the methods of handling, packaging, storing and transporting DG wastes;
  - Identification of quantities of DG wastes along routes; and
  - Identification of stakeholders involved in disposal logistics for DG wastes.
3. Disposal and Recovery Sites:
  - Identification of all sites in Canada that dispose of DG waste, including on-site disposal;
  - Identification of all sites in Canada that reuse, recycle, or recover DG wastes, including on-site recovery;
  - Description of processes of DG waste disposal;
  - Description of processes of DG waste recovery; and
  - Identification of the DG products involved and resulting from waste disposal or recovery.

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<sup>5</sup> **Re-export:** Exports of a country can be distinguished as exports of domestic goods and exports of foreign goods. The second class, exports of foreign goods, are generally referred to as re-exports. (Source: <https://unstats.un.org/unsd/tradekb/Knowledgebase/Reexports-and-Reimports>)

4. DG Waste Incidents: Identification and description of Canadian incidents involving the production, handling, packaging and transportation of DG waste.
5. International Trade for DG Waste: determine the international logistics for waste in Canada, (including Canadian imports, exports and re-exports) order to determine trends that may have implications in Canada.

The Contractor shall identify and map the Canadian transportation routes of DG waste products throughout the DG waste supply chain, from Canadian sources including producer sites, packaging, storage and distribution points, through to treatment and disposal facilities.

Collected data will be presented in tabular and geospatial formats including maps (details on data formatting is in Section 6.6). The data collected shall cover a period of at least one (1) recent full year (2018 or later). The year covered will be determined at the kick-off meeting.

The consultant is responsible for assembling all socio-economic and geospatial transportation data necessary to complete the study. TC will make available, subject to agreed limitations, the transportation statistics and geospatial data that it holds, providing the data in formats and aggregations that will be agreed upon at the kick off meeting. No sensitive information will be accessed by the Contractor.

## 5. TASKS/REQUIREMENTS

The Contractor must fulfill the following tasks to satisfy the requirements of the study:

1. Provide an in-depth analysis of the **DG waste sources**:
  - a) Identify DG wastes as distinct products by common name, shipping name, dangerous goods UN Number and other applicable commodity codes (ex. HS, STCC, SCTG, NAPCS, etc.);
  - b) Identify industries, sites, facilities and locations that generate, store or handle DG waste;
    - i. Canadian production and/or manufacturing locations including identification of the type of waste being generated;
    - ii. Storage facilities that temporarily contain DG waste for transport;
    - iii. Facility identification to include name and location of the facility, including geographic coordinates, North American Industry Classification System (NAICS) Code and NAICS Description.
  - c) General description of DG waste handling and packaging at the sites identified above.
2. Provide an in-depth analysis of the **disposal and recovery logistics for DG waste**:
  - a) Comprehensively describe the logistics for collection, transfer and transport of DG waste for disposal or recovery;
  - b) Describe the methods of handling, packaging, storing and transporting DG wastes;
  - c) Identify DGs involved in the process by common name, shipping name, dangerous goods UN Number and other applicable commodity codes;
  - d) Identify transportation routes, by mode and paired origin-destination;
  - e) Identify quantities transported on an annual basis along transportation routes; and
  - f) Identify stakeholders involved in disposal logistics for DG wastes.

3. Provide an in-depth analysis of **DG waste disposal and recovery sites**:
  - a) Identify facilities and locations of facilities in Canada involved in DG waste disposal and recovery;
    - i. Identify DG waste disposal facilities/locations including storage, warehousing and distribution facilities associated with DG waste disposal as well as sites that process and recover (recycle, repair, re-manufacture and/or dismantle) DG waste;
    - ii. Facilities identification to include name and location of the facility, including geographic coordinates North American Industry Classification System Code (NAICS) and NAICS Code Description
  - b) Describe the methods or processes involved in the disposal and recovery of DG waste commodities; and
  - c) Identify DG products involved and resulting from waste recovery or disposal.
4. Provide an in-depth description and identification of incidents involving DG waste handling, packaging and/or transportation in Canada:
  - a) Utilize various sources and records, such as Occupational Health and Safety (OHS) data, Dangerous Goods Incident data as well as other resources for incident and spill information; and
  - b) For all incidents, identify locations, date of incident, name of commodity / commodity identifier codes (UN Number and Class), quantity of spill / release and impact of incident.
5. Provide an in-depth analysis of the international trade of DG waste in Canada in order to determine trends that may have implications in Canada:
  - a) Comprehensively describe the industries in Canada involved in generating, disposing or recovering DG waste implicated by international transportation, including identification of facilities, goods, transportation routes and modes;
  - b) Identify all goods involved in the international logistics for Canadian DG waste by common name, shipping name, dangerous goods UN Number and other applicable commodity codes (ex. HS, STCC, SCTG, NAPCS, etc.); and
  - c) Provide an analysis of international trade to identify trends that may have implications in Canada, including an analysis of Canadian import, export and re-export.

## 6. DELIVERABLES AND REPORTING

### 6.1 Kick-off Meeting:

A kick-off meeting will be held between the contractor and the TC project authority. This meeting is intended to review the proposed work plan submitted as part of the Contractor's proposal and finalize the requirements for the study, including:

- a) Proposed work plan, including the schedule of work product delivery and scope of work.
- b) Proposed Table of Contents for the report which will define the scope and organization of the report;
- c) Description of data and metadata formatting, naming conventions, and organization of data;
- d) Proposed methodologies to be used for data collection, data analysis and GIS analysis; and

- e) Proposed reference list, including preliminary sources for data, internal data sources TDG must provide, as well as external datasets that TDG may assist in acquiring.

The Contractor will be responsible for obtaining all external data, except for that which can ONLY be obtained by TC. If internal TC data is required and available, the Contractor will advise, at the kick-off meeting, details of this data, including name of datasets, fields of interest and time period.

The kick-off meeting will be held within one (1) week after date of Contract award.

#### 6.2 Final Work Plan:

The final work plan will be based on the draft submitted with the Contractor's proposal. Edits and changes will be incorporated from discussions held during the kick-off meeting and other consultations with the client. The final work plan must specify:

- a) The specific activities anticipated;
- b) Timelines, milestones and deliverables;
- c) The level of effort and resource for each activity; and
- d) A project plan using a Gantt chart or equivalent format.

Once accepted, the contracted work shall begin. All tasks shall be completed within the timeframe specified. The Contractor shall seek approval from the TC Project Authority with regard to all updates or revisions to the project plan or schedule throughout the life cycle of the project.

Completion Date: Final work plan to be submitted within one (1) week after the kick-off meeting.

#### 6.3 Bi-weekly Meeting:

The Contractor must provide bi-weekly (every two weeks) written updates, in English, which will include a status update and/or progress report for the duration of that period. This frequency may be changed if deemed necessary and approved by TC.

Completion Date: Mid-day on an agreed upon day for each two-week period following the date of Contract award.

#### 6.4 Mid-project Report & Sample of GIS work:

The Contractor must provide TC with a mid-project report. The mid-project report must include:

- a) A detailed description of the work completed, status of work underway and description of work remaining;
- b) An explanation of the results to date;
- c) Contacts and references as applicable for sources of data;
- d) Data samples, as well as sample maps and GIS products in ESRI-compatible formats, as identified during the kick-off meeting of subsequent bi-weekly meetings; and

e) Data limitations.

The Contractor must implement TC's questions and comments in subsequent work.

Completion Date: Mid-project report and samples of GIS work must be completed by mid-day on the Friday of the twelfth (12<sup>th</sup>) week following the kick-off meeting, or any other completion date to be agreed to at the kick-off meeting.

Completion Date: On or before mid-day on the contract end date.

## 6.5 Draft Report

The Contractor must provide TC with a draft final report in English. The reports will document the research, analysis and final conclusions of the study, and must include:

- a) Title Page;
- b) Executive Summary of Report;
  - Summary of UNs and DG Classes, industries and facilities involved in production, facilities and locations involved in enteral disposal and recycling, on-site recycling, modes, volumes, geospatial patterns, market, trade and safety issues, as well as data limitations.
- c) Table of Contents;
- d) Glossary, List of Tables and List of Figures;
- e) Introduction;
  - Overview of the study
  - Background and the objective of the study
- f) Detailed Results and Analysis;
  - DG waste sources;
    - Details as per Section 5.1
  - Disposal logistics analysis for DG waste;
    - Details per Section 5.2
  - Disposal and recovery sites for DG waste;
    - Details per Section 5.3
  - Incidents involving DG waste, handling, packaging and transportation in Canada;
    - Details per Section 5.4
  - International trade for DG waste;
    - Details as per Section 5.5

- g) Conclusions, Next Steps, and Data Limitations;
  - Overall conclusions and recommendations on next steps;
  - Limitations of study, data gaps, and areas for further research;
  - Identification of possible resources and/or options for narrowing knowledge gaps associated within the study of the logistics analysis of DG waste commodities.
- h) Technical Memorandum;
  - Description of all geospatial work and modelling, including a discussion where applicable about the models chosen and why; and
  - Glossary of terms and data dictionary.
- i) References; and
  - Sources of data; and
  - List of companies and stakeholders that are identified in the course of the study, with address and geographic coordinates.
- j) Data Annexes, including but not limited to GIS maps and data tables for transportation modes, routes, and volumes for each DG or DG groupings (all including complete metadata), as well as any additional data tables graphics or information relevant to the study.

The Draft Report will be created using a word-processing program agreed to by TC and the Contractor at the start of the project, such as Microsoft Word (Office 2007 or more recent versions) and Adobe Acrobat (most recent version).

Completion Date: Mid-day fifteen (15) days prior to the contract end date.

#### 6.6 Electronic Data - Draft Tabular Data and GIS Data

- a) The Contractor must provide TC with a draft of the final tabular data. The draft spreadsheets must be created using Microsoft Excel (2013 or more recent versions). The data deliverable must include the following for DGs transported within Canada and within the study period:
  - i. Each DG identified within the scope of the study with attributes including (but not limited to):
    - Unique identifier for each record;
    - Names, class, and UN Number of DG;
    - Volumetric data of each DG;
    - Mode of transport used for distribution;
    - Type of route used for transportation including seasonal nature;
    - Latitude and Longitude coordinates of paired origin/destination locations; and
    - Province names of paired origin/destination locations.
- b) The Contractor must also provide TC with draft GIS data and draft map products. GIS data deliverables must include:
  - i. Point location feature classes or shapefiles of facilities in Canada involved in the DG waste logistics. Attributes should include, but are not limited to:
    - Unique identifier for each record (each records represents a location);
    - Address information of the facilities (street number, street name, province, postal code, and country in separate columns);
    - Name of facilities of facility;

- Type of facility (i.e. production facilities /distribution facilities /transportation and handling facilities /disposal and waste facilities/ repair and refurbishing facilities, etc.);
  - Coordinates (latitude and longitude in separate columns);
  - Names, classes and UN Numbers of DGs handled at the facilities;
  - Names, classes and UN Numbers of DG by-products and DG wastes produced at the facilities;
  - Names, classes and UN Numbers of DGs used in manufacturing at the facilities, as well as DGs used in the operation of the facility;
  - Volumetric data of DGs handled within the study period (estimates of volumes are acceptable when actual volumetric data is unavailable);
  - Data dictionary or use documentation (record layout with description of fields); and
  - Complete metadata
- ii. Line feature classes or shapefiles for each mode showing the commodity flows for all DG of interest with attributes including (but not limited to):
- Unique identifier; each record represents a route in the logistics;
  - UN Number, primary class, and subsidiary class(es) if applicable;
  - Volume and weight data of each DG;
  - Paired origin/destination locations;
  - Aggregated volume of the DG that traverses over each segment of the network;
  - Data dictionary or use documentation (record layout with description of fields); and
  - Complete metadata.
- iii. A map product (i.e. ArcGIS map document '.mxd' or ArcPro '.aprx') of all the commodity flows for each DG of interest, symbolized to show the aggregated volumes of DGs that traverses over each segment of the network, including the following map elements:
- Title clearly conveying the data being mapped;
  - Scale bar;
  - Legend that is legible and clearly reflects the presented data;
  - Date (month and year) when map was produced; and
  - Source(s) of the data being mapped.

All maps, including basemap information, must be in both English and French (or bilingual). Mapping **must** be conducted on, and produced with ESRI ArcGIS suite of products (i.e. all maps must have an accompanying ESRI ArcGIS map document (.mxd) or ESRI ArcGIS Project File (.aprx)). All GIS deliverables must be accompanied by complete data dictionaries (record layout with description of fields), application and usage documentation, and metadata. The record layout of geospatial data must meet the requirements as agreed to in the kick-off meeting.

The Draft Report and GIS Data will be reviewed by TC, with all questions and comments recorded on a disposition of comments document provided by the Contractor. The Contractor shall answer and implement TC's questions and comments when preparing the final report.

Complete Date: Mid-day fifteen (15) days prior to the contract end date.

## **7. FINAL REPORT AND FINAL TABULAR AND GIS DATA**

The Contractor must provide TC with four (4) copies of the final project report:

- One (1) copy in English for internal dissemination;
- One (1) copy in French for internal dissemination;
- One (1) copy in English for public dissemination, and
- One (1) copy in French for public dissemination.

The final report for internal dissemination will consist of the same deliverables outlined in Section 6.5 as in the Draft Report but with the implementation of all comments and feedback provided by TC during draft consultations.

The final report for public dissemination will be the same as the final report for internal use, but with the removal, reformatting and aggregation of data so that commercial sensitivity is protected.

The Contractor must also provide TC with the final tabular data and GIS data, in an electronic format as specified in Section 6.6.

All map products including base maps must be provided in both English and French in separate PDF packages (i.e. all maps in English in one PDF package and all maps in French in another PDF package).

Completion Date: On or before 12:00 pm EST on the contract end date.

## **8. PRESENTATION**

The contractor shall provide and deliver a presentation in English to TC. The presentation will be presented via webinar based on the Final Report. The Contractor must provide TC with two (2) versions as an electronic copy of the presentation, one (1) for internal dissemination, and one (1) to be made for public dissemination. The final presentation for public dissemination will be the same as the final presentation for internal use, but with the removal, reformatting and aggregation of data so that commercial sensitivity is protected. The presentation will be given in Microsoft Power Point format. In addition, the contractor shall include a recording made during the presentation, as well as permission to use the material in whole or in part.

Completion Date: On or before mid-day on the contract end date.

## **9. LANGUAGE REQUIREMENTS**

The principal language of communication with Transport Canada will be English. Draft reports will be in English. Final presentations and final results (i.e. project reports) must be both English and French as described in Section 7.0.



## **10. DATA / REFERENCES / MATERIAL**

### **Data**

The Contractor will be responsible for purchasing data outside of what resources Transport Canada (TC) currently has. Before receiving data from TC, the Contractor must conclude a non-disclosure agreement with TC on the handling, use and final disposition of the data. No sensitive information will be accessed by the Contractor and; therefore, no security clearance is required.

The Contractor is responsible for assembling all scientific, economic, transportation and any other data necessary to complete the study. TC will make available, subject to agreed limitations, the transportation statistics and geospatial data that it holds, providing the data in formats and aggregations that will be agreed upon at the kick-off meeting.

### **Documentation**

The Contractor will document and provide metadata for all sources of data and information used during this contract.

## **11. WORK LOCATION**

The work will be completed at the Contractor's site; however, the Contractor's primary contact will be required to participate in bi-weekly teleconference meetings with the TC Project Authority and a webinar presentation.

## **12. RESPONSIBILITIES OF THE PROJECT AUTHORITY**

The TC Project Authority is responsible for the following:

1. Monitor contract progress and provide feedback to the contractor as required within two weeks; and
2. Make available all required data using formats and aggregations that will be agreed upon in the kick-off meeting after the nondisclosure agreements have been signed.

## **13. RESPONSIBILITIES OF THE CONTRACTOR**

The Contractor will maintain responsibility for the following:

Ensure the availability of adequate resources to complete the contract on schedule, and the availability of back-up resources in case of unforeseen illness, injury or other reasons that may result in the withdrawal of the planned resources, as per section 17; and

Ensure that the interests of all stakeholders (e.g. industry, TC, Statistics Canada, etc.) are fully protected in accordance with the non-disclosure agreement.

The principal language of communication with Transport Canada will be English. Draft reports should be in English.

**ANNEX "B"**

**BASIS OF PAYMENT**

**Professional Services and Associated Costs**

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:

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

<b>Milestone No.</b>	<b>Description or "Deliverable"</b>	<b>Firm Amount</b>	<b>Delivery Date</b>
1	Delivery of final work plan	\$ _____ (10% of contract value)	One week following the contract signature and kick-off meeting
2	Delivery of mid-project report	\$ _____ (20% contract value)	12 <sup>th</sup> week following kick-off meeting
3	Delivery of draft final report	\$ _____ (60% contract value)	15 days prior to contract end date
4	Delivery of final report and presentation	\$ _____ (10% contract value)	Contract end date
Total Cost (Sum of Milestone 1 to Milestone 4 )		\$ _____	

**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 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)