



## Request for Information

### Risk and Hazard Assessment Methodology for Dangerous Goods

#### 1. Introduction

The Transportation of Dangerous Goods (TDG) Program develops regulations, provides oversight, and gives expert advice on dangerous goods incidents, to promote public safety in the transportation of dangerous goods by all modes of transport in Canada. One key component of the TDG Program is Emergency Response Assistance Plans (ERAPs), which must be prepared under certain conditions specified in the TDG Regulations (TDGR) in order to be able to respond effectively to dangerous goods transportation incidents.

The TDG Directorate is continually reviewing when ERAPs are required under the TDGR and is considering the development of a systematic, risk- and hazard-based methodology to assess the requirement for an ERAP for each product, substance, or organism within the nine classes of dangerous goods defined under the TDG Act. This methodology may incorporate the risk posed by the transportation of, the hazardous nature of, and the need for specialized knowledge and equipment to respond to incidents involving particular dangerous goods. This methodology may be used to review the criteria and thresholds for ERAPs currently in the TDGR.

The purpose of this Request for Information (RFI) is to obtain information about existing methodologies used to assess comparatively commodities, or events involving commodities, based on their hazard(s) (e.g. physical, health, environmental) or risk (e.g. operational, occupational, actuarial). These methodologies do not have to address specifically the transportation of dangerous goods requiring ERAPs, but can be more generally related to comparative risk quantification or hazard analysis involving such types of commodities.

#### 2. Background

An ERAP describes what to do in the event of a release or anticipated release of certain higher-risk dangerous goods while they are in transport. ERAPs are designed to assist first responders in responding to dangerous goods incidents that present a risk to public safety and require specialized knowledge and equipment to be mitigated.

Each plan is specific to particular:

- dangerous goods;
- mode(s) of transport (air, rail, road or marine);
- geographical area(s) in which the dangerous goods will be transported; and
- means of containment used to hold the dangerous goods.



The TDGR specify the dangerous goods that require an ERAP and at which thresholds. The TDG Act divides dangerous goods into nine classes according to the type of danger they present. The nine classes are:

- Class 1, Explosives;
- Class 2, Gases;
- Class 3, Flammable Liquids;
- Class 4, Flammable Solids, Substances Liable to Spontaneous Combustion, and Substances That on Contact with Water Emit Flammable Gases (Water-reactive Substances);
- Class 5, Oxidizing Substances and Organic Peroxides;
- Class 6, Toxic and Infectious Substances;
- Class 7, Radioactive Materials;
- Class 8, Corrosives; and
- Class 9, Miscellaneous Products, Substances or Organisms.

Historically, the identification of which dangerous goods require an ERAP was based on general class properties, past incidents involving dangerous goods in transport, and the response capabilities available at the time. However, changes in commodity flows and an evolving emergency response landscape drive continuous review and improvements to ERAP requirements in the TDGR.

### 3. Instructions to the Respondents

- a) This document is not a bid solicitation. This RFI will not result in the award of any contract. As a result, potential respondents of any goods or services described in this RFI should not reserve stock or facilities, nor allocate resources as a result of any information contained in this RFI, nor will this RFI result in the creation of any source list. Therefore, whether or not any potential respondent responds to this RFI will not preclude that respondent from participating in any future procurement.
- b) Also, the procurement of any of the goods or services described in this RFI will not necessarily follow this RFI. This RFI is simply intended to solicit feedback from industry with respect to the matters described in this RFI. The Government of Canada will not reimburse any respondent for expenses incurred in responding to this RFI.
- c) Respondents should mark any portions of their response that they consider proprietary or confidential. The Government of Canada will handle the responses in accordance with the Access to Information Act.
- d) The Government of Canada will review all responses received by the RFI closing date although responses will not be formally evaluated. The Government of Canada may, in its discretion, review responses received after the RFI closing date. A review team composed of representatives of TC will review the responses.



- e) The Government of Canada reserves the right to hire any independent consultant or use any government resources that it considers necessary to review any response. Not all members of the review team will necessarily review all responses.
- f) The Government of Canada may, in its discretion, hold a single Post-Submission Review Meeting with all interested vendors or request individual Post-Submission Review Meetings with selected respondents, to provide clarity on information provided or to invite a presentation about some or all of the proposed solutions. If required, these will be held at the most appropriate location, to be determined at a later date. The intent of these meetings will be to provide an opportunity for a face-to-face discussion with respondents. Although respondents may request a meeting, and their request will be considered, the Government of Canada will determine whether or not it requires additional information from any given respondent and will schedule meetings accordingly. All such requests, by respondents, should be forwarded to the Contracting Authority identified herein.

#### 4. Format of Responses Requested

- a) Respondents are requested to submit one soft copy of their response in Portable Document Format (PDF), and should include:
  - I. Cover Page: If the response includes multiple volumes, respondents are requested to indicate on the cover page of each volume the title of the response, the RFI number, the volume number and the full legal name of the respondent.
  - II. Title Page: The first page of each volume of the response, after the cover page, should be the title page, which should contain the:
    - a. title of the respondent's response and the volume number;
    - b. name and address of the respondent;
    - c. name, address and telephone number of the respondent's contact;
    - d. date; and
    - e. RFI number.
- b) Respondents should send responses electronically via e-mail to the Contracting Authority's e-mail address identified herein. All requested information is to be provided to the Contracting Authority on or before the closing date of the RFI.
- c) The Contracting Authority for this RFI is:

Name: Bruce Weir

E-mail Address: [bruce.weir@tc.gc.ca](mailto:bruce.weir@tc.gc.ca)

Telephone: 613-990-7632



## 5. Information Requested

Please reply to questions as you see fit.

1. Please briefly describe your company or organization and the nature of work it conducts or services it provides.
2. Do you have a methodology for comparatively assessing commodities, or events involving commodities, based on their hazard(s) (e.g. physical, health, environmental) or risk (e.g. operational, occupational, actuarial)?
3. What main principle(s) does the methodology rely on (e.g. statistical sampling, decision tree analysis, risk matrix)?
4. Does your methodology define risk to public safety? How?
5. Does your methodology consider the need for specialized knowledge and equipment to deal with the hazard or risk posed by the commodity or the event involving the commodity? How?
6. In what way can your methodology be applied or modified to rank dangerous goods within a class based on the risk to public safety when involved in an incident?
7. Are there any aspects of your methodology that you would consider unique?
8. Does the methodology have any checks or quality assurance (QA)/quality control (QC) measures to ensure all relevant aspects of the applicable risk or hazard have been accounted for?

## 6. Enquiries - Bid Solicitation

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

Responders should reference as accurately as possible the numbered item of the RFI to which the enquiry relates. Care should be taken by Responders 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



Responders. Enquiries not submitted in a form that can be distributed to all Responders may not be answered by Canada.

## 7. Submission of Responses

Responses to this RFI should be submitted to the Contracting Authority by March 6, 2020.  
Responses submitted after this date may not be considered.