Transport Canada Transports Canada

Solicitation No. T8080-230342
Advance Contract Award Notice

Advance Contract Award Notice (ACAN)
An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

1.0 Title

Expert Support for Transport Canada's Internal Zero Emission Vehicle (ZEV) Sales Projection Model

2.0 Definition of Requirement

Transport Canada seeks to procure the service of a subject matter expert to provide Light-duty Vehicle (LDV) modeling expertise to TC's internal Zero-Emission Vehicle (ZEV) Sales Projection Model. The project aims to address the recommendations outlined in the document titled "Transport Canada's Internal Zero Emission Vehicle (ZEV) Sales Projection Model: Review and Recommendations for Enhancement" (hereafter known as the Enhancement Study) to fulfill the federal government's ongoing policy analysis requirement.

TC has developed annual ZEV sales projections under the Business-As-Usual (BAU) Scenario since 2017 to contribute to a better understanding of trends and developments in the ZEV market. To meet the growing demand for robust projections and incorporate stakeholder feedback, TC conducted the Enhancement Study in 2022-2023 to review the existing LDV technology penetration forecasting models and provide detailed recommendations for model enhancement. After a thorough examination of the findings from the Enhancement Study, it became evident that the work involved was more complex and demanding than previously anticipated. Consequently, TC requires the assistance of an LDV modelling expert to ensure the effective implementation of the necessary modeling enhancements.

The specific TC model enhancement sub-tasks are as follows:

- Immediate improvement to several TC model features, such as inclusion of vehicle demand elasticities, endogenous LDV stock survival rate, calendar year and model year conversion.
- Enhancing demand-side features of the model, such as consumer segmentations and vehicle class, consumer utility function, valuation of charging on consumer choices etc.
- Enhancing supply-side features of the model, such as automaker decision making related to vehicle pricing, compliance strategies regarding ZEV sales regulations and vehicle emission regulations.
- Enhancing model's policy response, such as carbon pricing, provincial ZEV regulations, ZEV purchase incentives, etc.
- Offering further analysis and comments on an as-needed basis.

The Subject Matter Expert is required to participate in TC's modeling workplan session, gaining an understanding of the primary tasks and proposed approaches and providing expert technical advice to

refine those approaches; he/she is also required to provide timely input to TC throughout the modeling development process and a comprehensive evaluation of the final model-enhancement results. The technical advice should encompass insights derived from five types of LDV technology penetration models as outlined in the Enhancement Study, as well as any additional models, analyses, and studies conducted within the Canadian LDV market and on a global scale. And the advice should be based on international, peer-reviewed literature, with an emphasis on prioritizing insights according to their comprehensiveness, rigor, and relevance to the specific requirements of Canada and TC's modeling objectives.

Subject Matter Expert's input will include providing:

- Technical advice to TC related to regression models (selection of data, variables, and model technique), discrete choice models ((selection of data, variables, and model technique), and sensitivity analysis (which parameters and magnitudes of change to target for exploration of model uncertainty);
- Input to inquiries and concerns to TC on as-needed basis, such as evaluating data quality, variable choices, mode structure, and interpretation of outliers;
- Comprehensive evaluation after TC performs a modeling exercise, such as theoretical framework, data quality and relevance, empirical validation, comparative analysis (across models), and model usability.

3.0 Criteria for assessment of the Statement of Capabilities.

In order to meet the essential requirements, a statement of capabilities must outline the following:

Experience:

1) A minimum of 10 (ten) year of experience within the last 15 (fifteen) years in the transportation industry to conduct work related to Light Duty Vehicle technology adoption modeling in Canada, with a specific focus on the ZEV market and policy development. This experience is justified by the significant fluctuations in the Canadian LDV market over the past two decades, working in this field for at least a decade ensure a deep understanding of the key market drivers at different stages, particularly the evolution of ZEV development with regional variations, spanning from the early stages to the present.
2) A minimum of 20 (twenty) peer-reviewed journal articles published in the field of transportation technology and policy, accompanied by a Hirsch index of 50 (Fifty) or higher (via Google Scholar). The justification for this requirement lies in the assurance that the expert possesses substantial experience related to maintaining the technical quality of modeling and research, which in turn, ensures the ability to provide TC prompt and valuable technical guidance in selecting data, variables, and model techniques. The requirement on H-index, which evaluates both publication productivity and citation impact further guarantees that experts work is of high quality.
3) A minimum of 10 (ten) years of experience within the last 15 (fifteen) years to conduct work related to consumer behavior research and/or automotive supply-side behavior research, utilizing quantitative analysis or simulation models. This requirement is well-founded as it facilitates a comprehensive understanding of the concepts and strategies essential for enhancing TC's model's demand and supply side features. The accumulated experience enables the expert to provide efficient and accurate technical guidance based on a wealth of practical knowledge and expertise.

Education:

Must possess a doctoral degree from a recognized university in transportation technology and climate policy or related field.

4.0 Applicability of the trade agreement(s) to the procurement

No Trade Agreements apply to this requirement.

5.0 Justification for the Pre-Identified Supplier

The proposed supplier is the only known Contractor that meets the above requirements.

6.0 Government Contracts Regulations Exception

The following exception(s) to the *Government Contracts Regulations* is (are) invoked for this procurement under subsection *6(d) – "only one person or firm is capable of performing the work.*

7.0 Ownership of Intellectual Property

Canada intends to retain ownership of any Foreground Intellectual Property arising out of the proposed contract on the basis that the main purpose of the contract is to generate knowledge and information for public dissemination (Appendix A – 4.1 – Exceptions to Contractor Ownership and Treasury Board Exemption. (https://ised-isde.canada.ca/site/policy-title-intellectual-property-crown-procurement/en/policy-title-intellectual-property-arising-under-crown-procurement-contracts)

8.0 Period of proposed contract

The proposed contract period will be from Contract Award to March 1st, 2024, with one option year until March 1st, 2025.

9.0 Cost Estimate of proposed contract

The estimated maximum value of the proposed contract, including optional year, is less than $80,000.00 Cdn, including applicable taxes.

10.0 Name and address of the pre-identified supplier

Jonn Axsen
Address: #62 - 39920 Government Road,
Squamish BC, V8B OG5

11.0 Suppliers' right to submit a statement of capabilities

Suppliers who consider themselves fully qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

Responses received on or before the closing date will be considered solely for the purpose of deciding whether to conduct a competitive procurement. Information provided will be used by the Crown for technical evaluation purposes only and is not to be construed as a competitive solicitation. Your written response must provide sufficient evidence (e.g. specifications, technical data, drawings, or any other proof) that clearly demonstrates that your product or service is capable of fulfilling this requirement.

Suppliers that have submitted a response will be notified in writing of TC's decision to continue with the non-competitive procurement or to compete for the requirement.

12.0 Closing date

The closing date for a submission of a Statement of Capabilities is November 27, 2023 at 14:00 Eastern Standard Time.

13.0 Inquiries and submission of statements of capabilities

Inquiries and statements of capabilities are to be directed to:

Diana Daigle-Pietsch
Procurement Specialist
Transport Canada
Email: Diana.Daigle-Pietsch@tc.gc.ca