



Technology Demonstration Program



Statement of interest Application Guide



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Introduction

The Statement of Interest is the official document of the first phase of the Technology Demonstration Program (TDP) application process, in which applicants are to include a high-level overview of the various aspects of their project proposal as detailed in this Statement of Interest application guide. The guide was developed to assist in the completion of a Statement of Interest and provide guidance on the information required for a Statement of Interest to be deemed complete. Annex 1 provides the evaluation criteria against which a Statement of Interest will be assessed, with a particular emphasis on the anticipated economic and broader benefits to Canada.

A Statement of Interest should not exceed 25 pages (8 ½" x 11" paper, 12 point font) excluding annexes. To be considered for the Technology Demonstration Program, applicants are required to submit the Statement of Interest by the specified due date, as indicated on the website at: www.ito.ic.gc.ca.

Late submissions will not be accepted. A complete submission consists of one electronic version and one paper copy (unbound). It is acceptable to submit an electronic version by the specified due date and to send a paper copy thereafter to the address listed below:

Industrial Technologies Office
235 Queen Street, 8th floor, East Tower
Ottawa, Ontario K1A 0H5
Attention: Project and Claims Officer
Email: ic.tdp-pdt.ic@canada.ca

Additional information on the program may be found in the Program Guide, available at www.ito.ic.gc.ca or by contacting the Industrial Technologies Office (ITO) at 1-800-266-7531 (Fax: 613-954-5649).

Confidentiality of Applicant's Information

Any information in the Statement of Interest that, in the applicant's opinion, is of a proprietary or confidential nature should be clearly marked by the Applicant as "PROPRIETARY" or "CONFIDENTIAL" on each relevant item or page or in a statement covering the entire proposal.

Section 1 – Lead Applicant

A TDP application must be submitted by a group of applicants comprised of a Lead Applicant and Partner Applicants, all of which must be Canadian entities. The Lead Applicant, normally an OEM or Tier 1 supplier, will be responsible for submitting a Statement of Interest on behalf of the group of applicants and managing the project. The group of applicants may be invited to submit a Project Proposal in the second phase of the application process.

The information submitted under this section will be used to assess the **management and technological capability** of the Lead Applicant to successfully lead and undertake the project (evaluation criterion #5), and should:

- Provide general information on the Lead Applicant, including the legal name, address, incorporation status, public or privately held status, total number of employees, number of employees in Canada, corporate structure including parent and subsidiaries (if applicable), growth over time, area of specialization and share of key markets.
- Provide information to demonstrate that the Lead Applicant is an Original Equipment Manufacturer (OEM) or a Tier 1 company (supplying directly to an OEM), if possible.
- Describe the Lead Applicant's history in performing research and development (R&D): annual level of gross and net R&D investment over the past ten years in absolute terms and as a percent of sales, outcome of past R&D, and number of employees performing R&D in Canada. Describe the Lead Applicant's historical track record as it relates to technological development to demonstrate that it has the capability to undertake the project.
- Provide a point of contact for this Statement of Interest including name, title, phone, email and preferred language of communication.

Section 2 – Project

The TDP provides non-repayable contributions in support of demonstration projects that are expected to include activities up to the achievement of Technology Readiness Level (TRL) six. See Annex 2 for a description of the TRL scale. Demonstration projects cannot be directly commercialized upon project completion as further technological development and investment are required to tailor, adapt, test and validate results for specific product/service applications.

The project description should provide a clear understanding of the need for the project, its key elements and potential benefits. The project should be described in non-technical terms. Should the group of applicants be invited to submit a Project Proposal, additional technical detail will be required at that stage for review by technical experts.

The information submitted under this section will be used, to the extent applicable, to assess the project's **economic and broader benefits to Canada** (evaluation criteria #1 and #2) and degree of **innovation** (evaluation criterion #4).

In this section, provide a general, overview of the proposed project addressing each of the following areas:

- The need for the proposed technologies in terms of responding to market opportunities, competitive threats, etc.
- The project's overall objectives.
- The major activities that will be undertaken, in general terms.
- The duration of the project, including proposed start and end dates.
- The project locations. (Generally, Eligible Costs must be incurred in Canada. However, limited funding from the program may support R&D outside Canada when necessary for the project's success and when the R&D cannot otherwise be undertaken in Canada. In the event that there will be R&D undertaken outside Canada, describe the R&D contribution that a foreign based entity will make to the project.)
- The novelty of the technology with respect to advancing the state of the art compared to commercially available technologies.
- The feasibility of the project, including key risks.
- The major equipment requirements and how any proposed infrastructure will support innovation activity by the group, and possibly others, after the project is complete.

Describe the economic benefits for Canada that the project is expected to generate, including:

- How this technology is expected to be the basis for the next generation of manufacturing and/or services in Canada.
- How the Lead Applicant is expected to use the technology to remain or become an internationally competitive OEM or Tier 1 company, if applicable.
- How other private sector Partner Applicants are to become more innovative, productive and competitive.
- The anticipated spill-over economic benefits to other corporations in the aerospace, defence, space and security sectors, improving their competitiveness.
- Any expected spill-over economic benefits to other sectors of the Canadian economy, improving their competitiveness.

Describe any other anticipated benefits to Canada that the project is expected to generate, including social, environment, health, security and defence related benefits.

Identify anticipated benefits to non-industrial Partner Applicants, and to university and college students.

Section 3 – Collaboration

Partner Applicants are Canadian organizations that undertake R&D for the project. Partner Applicants may be added to the project at any time during the work phase of the project. This section should clearly identify the initial Partner Applicants and their respective contribution to the project. Partner Applicants are expected to attest to their role and financial contribution to the project (see Required Information section on page 10).

The information submitted under this section will be used to assess whether Partner Applicants meet the **collaboration** requirements of the program (evaluation criterion #3) and, through the letters of commitment, possess the **management and technological capability** (evaluation criterion #5) and the **financial capability** (evaluation criterion #6) to successfully undertake the project. A Statement of Interest will be rejected if there is not at least one Canadian-based small or medium-sized enterprise and one Academic Institution (accredited Canadian universities, colleges or affiliated research institutes) among the Partner Applicants.

- For each industrial Partner Applicant provide the legal name, address, incorporation status, public or privately held status, total number of employees and number of employees in Canada. Briefly describe the organization and its area of specialization.
- For each Academic Institution provide the legal name, location, brief description of the organization, and area of expertise.
- Describe the R&D contribution that the Partner Applicants will make to the project in general terms.

Please note that federal research institutes such as the National Research Council or Defence Research and Development Canada, being government entities, may not be direct recipients of TDP funding but may participate in TDP projects as sub-contractors of an applicant, who may claim eligible sub-contract costs under the contribution agreement.

Section 4 – Financial Information

TDP will award a non-repayable contribution to support one or more large scale projects with significant potential to benefit Canada. Under TDP, the contribution to any eligible project will not exceed 50 percent of total Eligible Costs. Refer to Annex 3 for a description of the eligible costs and costing principles.

The information provided in this section will be used to assess whether the Applicant has the **financial capability** to complete the project and whether significant private sector investment will be **leveraged** by the project (evaluation criterion #6).

Provide the following financial information for the Lead Applicant:

- Last three years of annual financial statements: income statements, cash flow statements and balance sheets with notes (audited or Chief Financial Officer – certified).
- Most recent quarterly statements showing year to date results.

Provide information on the project’s costs as indicated in the following tables:

Project Costs	
Total Eligible Cost (A)	\$
Total Ineligible Cost (B)	\$
Total Project Cost (C)=(A+B)	\$

Eligible Project Costs	
Lead Applicant	\$
Partner Applicant 1	\$
Partner Applicant 2	\$
Partner Applicant 3	\$
Total Eligible Project Costs (A)	\$

Project Sources of Funding	
Lead Applicant Funding (D)	\$
Partner Applicant Funding (E)	\$
Non-Applicant Funding (F)	\$
Other Government Support (G)	\$
Total Tax Credits (Applicants) (H)	\$
TDP Assistance (I)	\$
Total Funding (J)=(D+E+F+G+H+I)	\$
Note: Total funding (J) equals total project cost (C)	

Identify the estimated TDP assistance that will be distributed to the Lead and Partner Applicants. The TDP contribution provided to each shall not exceed 50 percent of their respective Eligible Costs except for those that are Academic Institutions where the contribution provided may cover 100 percent of their Eligible Costs.

TDP Assistance to Lead and Partner Applicants		
Lead Applicant	\$	%
Partner Applicant 1	\$	%
Partner Applicant 2	\$	%
Partner Applicant 3	\$	%
Total TDP Assistance (H)	\$	100 %

Provide a break-down of the total Eligible Project Cost (A).

Eligible Project Costs by Category						
Direct Labour	Direct Materials	Other Direct	Equipment	Subcontractor	Overhead	Total (A)
\$	\$	\$	\$	\$	\$	\$
Notes: Subcontractor is not a Partner Applicant. Overhead is 75% of direct labour costs.						

Section 5 – Post Project Commitment

The information provided in this section will be used to assess whether the group of applicants has a credible plan to undertake the follow-on investment required, after project completion, to achieve the anticipated benefits of the project. The information submitted under this section will be used to assess the adequacy of the **post-project commitment** (evaluation criterion #7).

- Describe the key R&D activities, time and financial commitment that the group of applicants is prepared to undertake, if the project is successful, to develop products, services and processes for commercial exploitation.
- If the project involves an investment in infrastructure that will need to be maintained after the project is complete, identify which organization plans to assume the longer-term operating costs associated with this investment. Identify the estimated annual financial obligation this will entail (e.g. if/how the infrastructure will be made available after the project, etc.)

Section 6 – Declaration

The Lead Applicant certifies that:

- The information provided in this Statement of Interest is accurate and complete.
- It is in full compliance with all current obligations, financial and otherwise, to federal, provincial and municipal governments.
- The execution of the proposed project will not prevent the Lead Applicant from meeting existing obligations in other agreements; and existing obligations in other agreements will in no way preclude the Lead Applicant from fulfilling its obligations under the proposed project.
- The work to be performed by the group of applicants will be performed in accordance with the requirements of all regulatory bodies that have jurisdiction over the group on this project.
- It possesses an accounting system that accurately tracks and records project costs (particularly hours of direct labour) associated with the performance of the

project and it shall be able to demonstrate in sufficient detail the allocation of time spent on different projects.

- It is in full compliance with the Lobbying Act.

Confidentiality Considerations

The Lead Applicant understands that no commercially confidential information provided in this Statement of Interest and attachments will be disclosed other than:

- to other Canadian government departments or agencies involved in the governance, funding or assessment of the proposal;
- as required to be released or disclosed by law or in a judicial or other governmental investigation or proceeding;
- if the information is generally known or in the public domain at the time of the applicant's disclosure;
- if the information subsequently becomes a matter of public knowledge through no fault of the Minister; or
- if the information is required to be released by the Minister of Innovation, Science and Economic Development Canada to an international or internal trade panel for the purposes of the conduct of a dispute in which Canada is a party or a third-party intervener.

Once funding is approved, information such as the amount of funding, the purpose for which the funds were provided, descriptive information about the project, and the name of the organizations receiving the funding are considered public information and will be published by Innovation, Science and Economic Development Canada.

The Lead Applicant understands that the TDP is a discretionary program subject to available funding, and that submission of a Statement of Interest, meeting any or all of the assessment criteria, or responding to requests from program officers for further information in respect of a Statement of Interest, does not mean that assistance will be granted. All applicants whose projects are approved for assistance will be so notified in writing.

By signing below, the Lead Applicant attests, to each of the certifications outlined above.

Full Corporate Name of Lead Applicant

Name of Authorized Signing Authority

Title of Authorized Signing Officer

Signature of Authorized Signing Officer

Date

Complete Statement of Interest

Innovation, Science and Economic Development Canada will only assess your Statement of Interest if it satisfies the eligibility requirements and includes the required information.

Eligibility Requirements

1. Statement of Interest is received no later than the due date, as specified herein.
2. Statement of Interest conforms to the guidelines described herein.
3. Generally, the Lead Applicant is an OEM or a Tier 1 company supplying directly to an OEM, is a for-profit corporation, incorporated pursuant to the laws of Canada and carries on business in Canada.
4. At least one small or medium-sized enterprise Canadian enterprise (fewer than 500 employees), incorporated pursuant to the laws of Canada and carrying on business in Canada, is among the Partner Applicants.
5. At least one Academic Institution (accredited Canadian universities, colleges or affiliated research institutes) is among the Partner Applicants.

Required Information

1. A letter of commitment from each Partner Applicant attesting that it has reviewed and agrees with its proposed role and its financial contribution to the project as well as understanding the overall project. The letter should also certify that the Partner Applicant has rights to the background intellectual property, has the management team and technical personnel in place and financial capacity to undertake the project.
2. Financial information for the Lead Applicant:
 - Last three years of annual financial statements: income statements, cash flow statements and balance sheets, with notes (audited or CFO-certified).
 - Most recent quarterly statements showing year to date results.
 - Forecast annual income statements and cash flows for the R&D phase (hard copy and Excel spreadsheet).
3. Lobbying Act Documents (www.ocl-cal.gc.ca)
 - List of employees and consultants who are representing the Applicant in discussions with Government of Canada officials about the Statement of Interest.
 - Printout from the Lobbyist Registration System confirming registration of employees and consultants who must be registered under the *Lobbying Act*.
 - Explanation of why employees and consultants representing the Applicant in discussions and who are not included on the printout of registered lobbyists do not need to be registered.

Annex 1 – Evaluation Criteria

1. Economic Benefits to Canada

The degree to which the Applicant demonstrates that the project is expected to benefit all parties involved in the project, be the basis for the next generation of manufacturing and/or services in Canada, and generate material economic benefits for Canada in the longer term.

2. Broader Benefits to Canada

The degree to which the Applicant demonstrates that the project is expected to generate social, environmental, health, security or other benefits to Canada.

3. Collaboration

The degree to which the Applicant consists of a significant group of corporate and academic partners working collaboratively to achieve mutually beneficial outcomes.

4. Innovation

The degree to which the Applicant demonstrates that the project is technologically feasible and that it can reasonably be expected to result in new technological capabilities that are essential to achieving the proposed benefits.

5. Management and Technological Capability

The Applicant demonstrates the required managerial and technological capability and track record to successfully undertake the project.

6. Financial Capability

The Applicant demonstrates the financial capability to complete the project and the degree to which funding by the Technology Demonstration Program will leverage incremental private sector investment in R&D.

7. Post-Project Commitment

The Applicant demonstrates a commitment to further develop the technology for potential commercialization and to sustain any infrastructure after project completion.

Annex 2 – Technology Readiness Level (TRL) Scale

Technology Readiness Level	Description
TRL 1 Basic principles observed and reported	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development (R&D). Examples might include paper studies of a technology's basic properties.
TRL 2 Technology concept and/or application formulated	Once basic principles are observed, practical applications can be invented. Applications are speculative, and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies.
TRL 3 Analytical and experimental critical function and/or characteristic proof of concept	Active R&D is initiated. This includes analytical studies and laboratory studies to physically validate that the analytical predictions are correct. These studies and experiments should constitute proof of concept validation of the applications/concepts formulated at TRL 2.
TRL 4 Component and/or breadboard validation in laboratory environment	Basic technological components are integrated to establish that they will work together. This validation is relatively "low fidelity" compared with the eventual system. Examples include integration of "ad hoc" hardware in the laboratory.
TRL 5 Component and/or breadboard validation in relevant environment	Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so they can be tested in a simulated environment. Examples include "high-fidelity" laboratory integration of components.
TRL 6 System/subsystem model or prototype demonstration in a relevant environment	Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Several to many new technologies might be integrated into the demonstration. Examples include testing a prototype in a high-fidelity laboratory environment or in a simulated operational environment.
TRL 7 System prototype demonstration in an operational environment.	Prototype near or at planned operational system. Represents a major step up from TRL 6 by requiring demonstration of an actual system prototype in an operational environment (e.g., in an aircraft, in a vehicle, or in space).
TRL 8 Actual system completed and qualified through test and demonstration.	Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation (DT&E) of the system in its intended system to determine if it meets design specifications.
TRL 9 Actual system proven through successful mission operations.	Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation (OT&E). Examples include testing the system under operational mission conditions.

Source: Based on the NASA TRL system.

Annex 3 – TDP Project Cost Principles

1. GENERAL PRINCIPLE

The Eligible Costs of the Project are the sum of the applicable direct costs and indirect costs which, in the opinion of the Minister, are, or must reasonably and properly be, incurred and/or allocated in the performance of the Project by the Eligible Recipients. These costs must be determined in accordance with the Eligible Recipient's cost accounting practices as accepted by the Minister and applied consistently over time.

2. REASONABLE COSTS

A cost is reasonable if the nature and amount do not exceed what would be incurred by an ordinary prudent person in the conduct of a competitive business.

In determining the reasonableness of a particular cost, consideration will be given to:

- (a) whether the cost is of a type generally recognized as normal and necessary for the conduct of the business of the Eligible Recipients, or performance of the Project;
- (b) the restraints and requirements by such factors as generally accepted sound business practices, arm's length bargaining, federal, provincial and local laws and regulations, and Agreement terms;
- (c) the action that prudent business persons would take in the circumstances, considering their responsibilities to the owners, employees and customers of the business, the Government of Canada and the public at large;
- (d) significant deviations from the established practices of the Eligible Recipients which may unjustifiably increase the Eligible Costs; and
- (e) the specifications, delivery schedule and quality requirements of the particular Project as they affect costs.

2.1 AFFILIATED PERSONS

In the case of Eligible Costs for goods or services incurred with an Affiliated Person, the amount of the costs incurred must:

- (a) not exceed their Fair Market Value; or
- (b) in the case of a good or service for which there is no Fair Market Value, the amount must not exceed the Fair Market Value of Similar Goods; or

- (c) in the case of a good or service for which there is neither a Fair Market Value nor Similar Goods, the amount must not exceed one hundred and five percent (105%) of the sum of the applicable Direct Costs and Indirect Costs (representing the total applicable Eligible Costs, plus 5% profit), all as determined and measured consistently in accordance with International Financial Reporting Standards, that were reasonably incurred or allocated for the good or service in the performance of the Statement of Work.

3. DIRECT COSTS

Direct Costs are the following, when identified and measured consistently using the cost accounting practices of the Eligible Recipients as accepted by the Minister:

- (a) the costs of materials, whether or not procured in Canada, which can be specifically identified and measured as having been used or to be used in the performance of Project Activities carried out in Canada (“Direct Material Costs”). For the purposes of calculating Direct Material Costs:
 - (i) materials may include, in addition to materials purchased solely for the performance of the Project and processed by the Eligible Recipients or obtained from subcontractors, any materials issued from the Eligible Recipients’ general stocks solely for the performance of the Project;
 - (ii) materials purchased solely for the performance of the Project must be charged to the Project at the net laid down cost to the Eligible Recipients, before any discounts for prompt payment; and
 - (iii) materials issued from the general stocks of the Eligible Recipients must be charged to the Project in accordance with the method as used consistently by the Eligible Recipients in pricing its material inventories.
- (b) the costs of the portion of gross wages or salaries incurred for work which can be specifically identified and measured as having been incurred in the performance of the Project (“Direct Labour Costs”);
- (c) costs not falling within the definitions of Direct Material Costs or Direct Labour Costs, but which can be specifically identified and measured as having been incurred in the performance of Project Activities (“Other Direct Costs”);
- (d) the costs of equipment, including, but not limited to, ancillary systems, instrumentation, or special test equipment that is purchased, leased, manufactured or otherwise acquired for the purposes of the Project (“Equipment Costs”); and

- (e) the costs of subcontracts or consultants incurred for work or services which can be specifically identified and measured as having been incurred in the performance of the Project (“Subcontracts or Consultants Costs”).

4. INDIRECT COSTS (OVERHEAD)

Indirect Costs, also called Overhead, are those costs which, though necessarily having been incurred during the period of the performance of the Project for the conduct of the business in general of the Eligible Recipients cannot be identified and measured as directly applicable to the performance of the Project.

Indirect Costs include:

- (a) indirect materials and supplies (including, but not limited to, supplies of low-value, high-usage items which could meet the definition of Direct Material Costs but for which it is commercially unreasonable, in the context of the Project, to account for their costs in the manner prescribed for Direct Costs);
- (b) indirect labour;
- (c) fringe benefits;
- (d) public utilities expenses of a general nature, including, but not limited to, power, HVAC, lighting, and the operation and maintenance of general assets and facilities;
- (e) expenses such as property taxes, rentals and depreciation costs; and
- (f) general and administrative expenses including, but not limited to, the remuneration of executive and corporate officers, general office wages and salaries, clerical expenses related to the administration and management of the Project, such as processing claims and reporting, and expenses such as stationery, office supplies, postage and other necessary administration and management expenses.

Notwithstanding the definition of Indirect Costs, Overhead shall be calculated at a fixed rate of 75% of Direct Labour Costs.

5. INELIGIBLE COSTS

Certain costs are not included in the definitions of Direct Costs and Indirect Costs and are not eligible for reimbursement (“Ineligible Costs”), regardless of whether they are reasonably and properly incurred by the Eligible Recipients in the performance of the Project.

Ineligible Costs include:

- (a) allowance for interest on invested capital, bonds, debentures, bank or other loans together with related bond discounts and finance charges;
- (b) legal, accounting and consulting fees in connection with financial reorganization, security issues, capital stock issues, obtaining of licenses and prosecution of claims against the Minister;
- (c) losses on investments, bad debts and expenses for the collection charges;
- (d) losses on other projects or contracts;
- (e) federal and provincial income taxes, goods and services taxes, excess profit taxes or surtaxes and/or special expenses in connection with those taxes;
- (f) provisions for contingencies;
- (g) premiums for life insurance on the lives of officers and/or directors where proceeds accrue to the Eligible Recipients;
- (h) amortization of unrealized appreciation of assets;
- (i) depreciation of assets paid for by the Minister;
- (j) fines and penalties;
- (k) expenses and depreciation of excess facilities;
- (l) unreasonable compensation for officers and employees;
- (m) product development or improvement expenses not associated with the work being performed under the Project;
- (n) advertising, except reasonable advertising of an industrial or institutional character placed in trade, technical or professional journals for the dissemination of information for the industry or institution;
- (o) entertainment expenses;
- (p) donations;
- (q) dues and other memberships other than regular trade and professional associations;

- (r) extraordinary or abnormal fees for professional advice in regard to technical, administrative or accounting matters, unless approval from the Minister is obtained;
- (s) any cost relating to land or buildings; and
- (t) selling and marketing expenses associated with the products or services or both being developed under the Agreement.

Notwithstanding item (b) above, legal, accounting and consulting fees incurred in connection with obtaining patents or other statutory protection for Project Intellectual Property are Eligible Costs.