REGIONAL DEFENCE INVESTMENT INITIATIVE (RDII)

TECHNOLOGY QUESTIONNAIRE

For Businesses with Commercial Projects

This form must be completed and submitted with your application to be considered for funding under the Regional Defence Investment Initiative (RDII). All questions are mandatory. Your attestation in the Application Form applies to this form and your responses. An asterisk (*) indicates a required field. Please ensure you have reviewed the Instructions (on page 6) and answered all questions that are applicable to your project. Unanswered questions cannot be assessed by Pacific Economic Development Canada.

You may include a brief document (e.g. schematic, diagram, picture) of a maximum file size of 10MB that will assist in explaining the technology and/or describing the remaining work to commercialize the technology.

DEFINITION OF INNOVATION

1. Which definition(s) of innovation apply to your proposed project? *

Select best fit.

☐ **An invention, new technology or new process that is not currently available in the marketplace.**

☐ **Significant modifications to the application of an existing product, process or service that are applied in a setting or condition for which current applications are not possible or feasible.**

☐ **An improvement in functionality, cost or performance over an existing product, process or service that is considered state-of-the-art or the current industry best practice.**

INTELLECTUAL PROPERTY (IP) STRATEGY

2. Describe your organization's IP portfolio and strategy. Explain why your IP strategy is appropriate for your innovation. *

Maximum 2000 characters including spaces.

TECHNOLOGY READINESS LEVEL (5 OR HIGHER)

3. Select the appropriate technology readiness level (TRL) for your proposed innovation. *

☐ **TRL 9: Actual technology proven through successful operations.** Actual application of the technology in its final form and under real-life conditions, such as those encountered in operational test and evaluations.

☐ **TRL 8: Actual technology completed and qualified through test and demonstration.** The technology has been proven to work in its final form and under expected conditions.

☐ **TRL 7: Prototype ready (form, fit and function) for demonstration in an appropriate operational environment.** Prototype at planned operational level and is ready for demonstration in an operational environment.

☐ **TRL 6: System/subsystem model or prototype demonstration in a simulated environment.** A model or prototype that represents a near desired configuration. Activities include testing in a simulated operational environment or laboratory.

☐ **TRL 5: Component and/or validation in a simulated environment.** The basic technological components are integrated for testing in a simulated environment. Activities include laboratory integration of components.

4. Demonstrate that the proposed innovation is at TRL 5 or higher. *

Describe the testing conducted to date, test environment; and past and present technical challenges. Maximum 2000 characters including spaces.

TECHNOLOGY

5. Provide a technical description of your technology. *

This description should clearly describe the functions, key specifications, and outputs that best represent your technology. Maximum 1000 characters including spaces.

6. Describe the technology resources (e.g., equipment, external contractors, partnerships, etc.) in place to complete the project. *

Maximum 1000 characters including spaces.

7. What further development, technical activities, other resources, or partnerships are required to bring the technology to market? *

Maximum 1000 characters including spaces.

8. Describe all quality control procedures and production standards that are in place. Describe how you will manage parts, inventory and the overall integrated system, as applicable. *

Maximum 4000 characters including spaces.

COMPETITIVE ADVANTAGES

9. Describe in detail the competitive advantages and level of advancement over existing technologies / operating conditions. *

Include the following:

- *Improvements (minor or major) over existing technologies, operating conditions, or substitutes using direct comparison;*
- *How the proposed innovation will create competitive advantages in existing market niches or spaces; and*
- *Where appropriate, name existing technologies as well as competitors.*

Maximum 1000 characters including spaces.

MARKET RISK STRATEGY

10. What are the risks associated with bringing the technology to market? What is the plan to mitigate the risks? *

Include any technical barriers to implementation or other issues (e.g., certification, regulatory, standards compliance, environmental, safety of application, etc.). Maximum 2000 characters including spaces.

HELP GUIDE

Question 2
Intellectual property is defined as an “intangible creation of the mind that can be legally protected”. Legal protection includes several core categories: patents (protects your invention from outright thievery), trademarks (adopting a trademark as a brand name keeps it, and its reputation, all yours), copyrights (holding copyright shields protects your artistic expression from copying) and industrial rights (registering an in-dustrial design protects the non-functional design features of a product). Two other categories of rights are relevant to an IP strategy: trade secrets (keeping a formula or manufacturing process confidential safeguards it against imitators) and contractual rights (licensing the right to use someone else’s invention). Unlike the rights described above, these can only be enforced against people with whom you have a contractual relationship. Please provide us with your IP strategy including a description of the different kinds of IP protection you hold, considering the above key elements and describing why your strategy is appropriate for your technology.

Question 4
Your description should include: a description of the operational environment(s) in which the prototype has been tested; or evidence that a prototype of the proposed innovation is ready for testing in an operational environment at time of application submission; technical challenges that arose and were overcome; and technical challenges remaining to be addressed in order to reach commercialization.

Question 4
Responses should address the technical specifications of your proposed product/service/process highlighting, if appropriate, key specifications that distinguish your technology from existing ones.

Question 6
Provide information on the technology resources that are currently in place to successfully complete the project. If additional resources are required, describe them and your plan for securing these resources (acquisition, partnerships, external contractors, etc.).

Question 7
From a technical perspective, describe the remaining challenges and/or R&D activities to be completed prior to being market ready. Describe your plan for addressing these outstanding items including technical resources (in- house or to be hired), partnerships/licensing strate-gies (private sector, universities, research centres …), facilities (equipment, laboratory …), estimated level of effort and timeline. You can describe these elements in relation to your product roadmap.

Question 8
A description of activities and planning that have been carried out in anticipation of full-scale commercial production should be detailed. Provide details on additional activities and planning that would be required before commercial production could begin. If production partnerships are in place or will be required or if outsourced production will be used, this should be described as appropriate.

Question 10
As appropriate, the described risks may be short or long term and in addition to their applicability to market entry, can also include in-market risks related to maintaining market position and market share. As directly related to technology issues for development and/or implementation, risk associated with commercialization activities, market risks, financial risks and competition risks can be referenced. If there are outstanding certifications, licenses, and approvals that could present a barrier to market entry, these should be detailed, along with the nature and degree of any related technical issues that need to be addressed. The mitigation strategy for each of the described risks and any residual risk should be described.