

INOVAIT Pilot Fund, Fall 2022 Call for Applications (CFA) Guide for Applicants

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1. SUMMARY

INOVAIT is a pan-Canadian network funded by the Government of Canada and hosted at the Sunnybrook Research Institute with the objective of building a truly integrated image-guided therapy (IGT) ecosystem, fueling continuous innovation that revolutionizes healthcare globally. Through connecting, educating, and investing in the industry's brightest minds and most promising ventures, INOVAIT will support and encourage collaborative development and the integration of artificial intelligence (AI) into medical technologies.

The Pilot Fund will support collaborative research and development (R&D) projects in IGT and AI technologies that help us achieve our mission to improve patient outcomes and fuel economic development in Canada. In this current Call for Applications (CFA), we will evaluate and award funding for **short-term pilot projects** (which will end no later than June 30, 2024) **from a minimum of \$100,000 up to a maximum of \$125,000 in matching funds**. Following pilot funding, eligible projects will be provided an opportunity to apply for further funding of up to \$2 million for a three-year follow-on project in our Focus Fund program.

Who?

This competition is open to Canadian corporations, academic institutions, and not-for-profit organizations.

Each project must involve two to four Canadian collaborators and must actively involve at least one Canadian small and medium enterprise (SME).

What?

Funding will support industrial research, including activities related to the discovery of new knowledge that aim to support the development of new technology-driven products or services and large-scale technology demonstration, including the advancement and development of new technologies into product-specific applications.

How much?

Projects may request between \$100,000 to \$125,000, with INOVAIT contributing up to one-third of total eligible supported costs in the form of reimbursement funding. See the **Funding Mechanism** section below for details.

Where?

Register for the INOVAIT Funding Portal at http://inovait.smartsimple.ca. Proposals can be submitted through this portal between October 24, 2022 and December 20, 2022.

Deadline?

Your full application must be received via the INOVAIT Funding Portal by 11:59 pm Pacific Standard Time on December 20, 2022.



2. ABOUT INOVAIT

INOVAIT is a pan-Canadian network funded by the Government of Canada and hosted at the Sunnybrook Research Institute with the objective of building a truly integrated image-guided therapy (IGT) ecosystem, fueling continuous innovation that revolutionizes healthcare globally. Through connecting, educating, and investing in the industry's brightest minds and most promising ventures, INOVAIT will support and encourage collaborative development and the integration of artificial intelligence (AI) into medical technologies.

Our **vision** is for Canada to be home to a truly integrated image-guided therapy ecosystem, fueling continuous innovation that revolutionizes healthcare globally.

Our **mission** is to connect, educate, and invest in the industry's brightest minds and most promising ventures in order to improve patient outcomes and fuel economic development in Canada.

The INOVAIT Management Board has set the following short-term objectives for the INOVAIT Program:

- Integrate Al advances into IGT devices.
- Grow the IGT industry in Canada, as measured by the number of companies, employment and value of sales.
- Strengthen research and development (R&D) collaborations in Canada between world class research laboratories, new start-up companies, SMEs with a small foothold, and MNEs;
- Leverage leading edge R&D infrastructure.
- Increase the value of private sector investment in IGT.
- Develop intellectual property (IP).
- Train highly skilled personnel.

They have also set the following long-term objectives:

- Grow the industry, as measured by increased number and size of companies, employment and sales.
- Strengthen Canada's scientific, clinical and commercial reputation in IGT.
- Achieve measurable change in patient outcomes.
- Drive down the public costs of healthcare.

To help achieve these objectives, we are releasing this Call for Applications (CFA) to seek to support certain collaborative R&D projects with the specific objectives of:

- Advancement of technology towards commercial outcomes.
- Integrate AI advances into IGT technologies.

The Strategic Innovation Fund

Funding for INOVAIT was provided in part through the Government of Canada's Strategic Innovation Fund (SIF).

3. APPLYING TO THE INOVAIT PILOT FUND

This is a competitive application process, and we anticipate receiving many submissions. INOVAIT cannot guarantee funding to all submissions, nor can it ensure that the total amount requested by



successful applicants will be granted. Applications will be assessed on the basis of the information provided by the applicant within the completed application forms against the evaluation criteria detailed within this *Guide for Applicants*.

INOVAIT reserves the right, in its sole discretion, to fund or not fund any particular project for which an application is submitted. The decision to fund all or part on an applicant request will depend on its fit to the program priorities, assessment criteria and the overall demand of funds.

To give you the best possible chance of success, please read this *Guide for Applicants* carefully and follow all instructions.

Application Period

Applications will be accepted between October 24, 2022 and the deadline at 11:59 pm Pacific Standard Time on December 20, 2022.

INOVAIT Funding Portal

All applications must be submitted through the INOVAIT Funding Portal at inovait.smartsimple.ca. You will be required to register for an account and answer a short eligibility quiz before you will be granted access to the application form. Applications received on paper or by email or by any other means will not be accepted.

You will not be able to submit applications through the funding portal after the end of the application period. Late applications cannot be accepted for any reason.

Application Questions

To assist with the preparation of your application, we have prepared an *Application Questions* document in Microsoft Word format containing the questions you will encounter on the application form. The format of the *Application Questions* document will be different from the format you will see on the funding portal, but the content will be the same.

Budget Workbook

To assist with the preparation of your project budget, we have prepared a *Budget Workbook* spreadsheet in Microsoft Excel format that you can upload onto the funding portal.

4. GLOSSARY OF KEY TERMS

Project Lead: The lead Canadian organization that is applying for this funding request. The Project Lead will be the primary contact for INOVAIT staff during the application and review process. Should the project be selected for funding, the Project Lead will have the responsibilities of coordinating the project, ensuring that project spending is in line with the project budget, and reporting on behalf of all Ultimate Recipients.

Collaborator or **Ultimate Recipient**: The Project Lead and the other Canadian organization(s) collaborating on project activities who will receive a part of the INOVAIT Contribution (they are known as Collaborators during the application process and Ultimate Recipients after project selection). These include:

 Academic Collaborators: Universities, colleges and publicly-assisted postsecondary institutions located in Canada which grant degrees or diplomas and Academic Affiliated Institutions, research institutions wholly owned or controlled by a Canadian university or



college.

 Industry Collaborators: Corporations, including not-for-profit organizations, incorporated and operating in Canada or any province or territory of Canada that are not Academic Collaborators.

Small and Medium Enterprise (SME): A corporation employing fewer than 500 paid employees.

Multinational Enterprise (MNE): Any large-sized enterprise, with 500 or more paid employees.

Total Eligible Supported Costs: The costs of project expenditures that are eligible supported direct or indirect costs, per SIF Cost Principles.

INOVAIT Contributions: The portion of the Total Eligible Supported Costs that will be reimbursed to Ultimate Recipients by INOVAIT.

Contribution Ratio: The Contribution Ratio indicates the percentage of Total Eligible Supported Costs will be reimbursed through INOVAIT Contributions.

Technology Readiness Level (TRL): A measure of technology readiness according to the scale in **APPENDIX A**.

5. ELIGIBILITY AND PROJECT REQUIREMENTS

Basic Eligibility Requirements

Applications submitted for a funding request must:

- describe a project that looks to integrate artificial intelligence or advanced data capabilities into an image-guided therapy application;
- involve two to four Canadian organizations, at least one of which is an SME based in Canada;
- include Collaborators that have the technological, commercial, and financial capability to conduct the project as outlined:
- include technology development at TRL 1–7. This can include the integration of technologies developed at TRL 1–7 into products that are already at TRL 8 or TRL 9;
- request at least \$100,000 but no more than \$125,000 in contributions from INOVAIT; and
- include exclusively activities that are to be carried out in Canada.

Project Limits

- Funding will be provided to a maximum of one project per Industry Collaborator when not partnering with other Industry Collaborators. This includes any previous Pilot Fund or Focus Fund projects.
 - For example, if Alice Corp. partners with Bob University on a funded project, Alice Corp. cannot be funded on a project where they work exclusively with another university.
 - However, Alice Corp. can partner with Carol Inc. and David Research Institute on a separate project.
- Each individual investigator at an Academic Collaborator may only be the Project Lead or lead academic partner on a maximum of two funded projects. This includes any previous Pilot Fund or Focus Fund projects.



Additional Project Aspects

Projects should include:

- strong engagement with and commitment from all Collaborators,
- potential for commercial impact and clear pathway to commercialization, and
- potential to impact the Canadian medical technology and healthcare landscape.

Additional consideration will be given to projects that are:

- inclusive of organizations in disparate regions in Canada,
- planning to share data within the INOVAIT Network,
- attracting, retaining and providing training to highly qualified personnel, and/or
- strengthening domestic collaboration and ensuring that benefits spill over to a wide array of firms, organizations and sectors beyond project Collaborators.

We are seeking to fund a broad range of Industry and Academic Collaborators; therefore, we will strongly discourage Industry Collaborators or individual academic researchers from playing major roles on multiple project applications.

Location of Collaborators

Globally, across all projects, INOVAIT must ensure that at least 50% of the projects have one-third of its expenditures be incurred from outside of Ontario. We encourage all applicants in Ontario to strive to collaborate with Canadian entities based outside of Ontario.

FUNDING MECHANISM, ELIGIBLE PROJECT COSTS, AND FEES

Funding Mechanism

The INOVAIT Pilot Fund is a reimbursement program, not a disbursement fund. A month after each quarter end, the Project Lead must submit a short progress report and reimbursement claims form to INOVAIT with details of that quarter's expenditures. Subject to verification from both INOVAIT and the government, we expect reimbursements to be paid out within 90 business days of the quarterly report deadline.

Eligible project costs requested for reimbursement must be **real**, **reasonable**, and **related** to eligible project activities. "Real" means project costs may only include actual expenditures that are incurred and traceable (i.e., proof of spending provided by timesheets, invoices, receipts, bank statements etc.) and related to project activities. "Reasonable" means that the amount claimed for a particular expenditure does not exceed what an ordinary prudent person would incur to conduct in a similar business context.

- "In-kind" support like discounts for equipment or cloud computing credits are not considered to be actual expenditures.
- Compensation in equity, stock options, future considerations, and similar instruments are not considered to be actual expenditures.

Project Period

Projects can begin no earlier than January 1, 2023 and end no later than June 30, 2024. Projects must be nine to 15 months in length.

Eligible Cost Categories

For full details on eligible costs, see Appendix B: Project Cost Principles. The French version of



the Project Cost Principles can be made available upon request to inovait@sunnybrook.ca.

All budgeted costs should be reported net of sales taxes (that is, do not include any sales taxes in the budget table as sales taxes are ineligible). The *Budget Workbook* indicates the following eligible cost categories, that when summed is the **Total Eligible Supported Costs**:

Direct Labour (Salaries and Wages)

- This category includes gross wages and salaries incurred and paid by Ultimate Recipients for project activities.
- Note: Expenditures such as employee benefits (including CPP, EI, medical benefits), wages and salaries paid out for sick days, vacation and statutory holidays, and other fringe benefits are not included in this category but is considered as part of Indirect Costs (Overhead).
- A timesheet (or equivalent cost accounting system) is required to indicate the allocation of an employee's hours worked on project activities.
- In an audit, the government may request to see bank statements, pay stubs, T4 forms, etc. to ensure the wages and salaries were paid.
- o Costs related to the preparation of this application are not eligible to be claimed.
- Costs related to administration, including but not limited to the preparation of reports, financial documentation, and claim forms to INOVAIT are accounted for as part of Indirect Costs (Overhead) and not Direct Labour.

Subcontractors and Consultants

- Costs of subcontracts or consultants incurred and paid by Ultimate Recipients for project activities.
- o Ultimate Recipients cannot be a subcontractor or consultant on the same project.

Direct Materials

- Materials essentially include any raw material that is "used up" by completing project activities, like circuit boards, lab consumables, cables, and metals.
- Net laid down costs of materials that are purchased solely for the purposes of project activities, after discounts.
- Costs from an Ultimate Recipients' general stocks should be measured in accordance with the material pricing method consistently used by the Ultimate Recipient.

Equipment

- Capital costs of equipment that can be specifically identified as having been purchased for project activities. This includes purchasing new or used equipment, costs to alter or modernize existing equipment, costs to repair equipment, and shipping costs.
- o If equipment is purchased outright, include the costs in this category.
- If equipment is built by Ultimate Recipients themselves, link the costs to other appropriate categories (Direct Material, Direct Labour, etc.).
- If equipment is built by a third party, allocate costs to this category if readily identifiable, otherwise allocate to Subcontractors and Consultants.

Land, Building, and Building Improvement

o Capital costs of land, building, and building improvements that are necessary to



carry out project activities. Costs in this category require further approval.

Other Direct Costs

- Other eligible costs that do not fit into the categories above but that are required for project activities.
- This may include costs such as incremental costs for project-specific software, fees for accessing high-performance computing, and costs related to filing patents.
- Laboratory fees for *in-vivo* testing (animal, human) can be entered here. This
 includes imaging-related costs. However, if an Ultimate Recipient is directly
 conducting the testing, costs should be split between Direct Labour and Direct
 Materials.
- Travel costs and fees to attend conferences and trade shows are **not** considered eligible.

• Indirect Costs (Overhead)

- Any costs which are incurred and paid by the Ultimate Recipients for the conduct of business in general, but cannot be identified and measured as directly applicable to the carrying out of project activities.
- o This amount is automatically calculated by the *Budget Workbook*.
- This category includes employee benefits (including CPP, EI, medical benefits), wages and salaries paid out for vacation and statutory holidays, stationery, office supplies, computer monitors and other peripherals, administrative expenses, general building costs, general software and licenses.
- Proof of spending is not required for this category.

INOVAIT Contribution to Total Eligible Supported Costs

For this CFA, the maximum amount INOVAIT will contribute to your project must be at least \$100,000 but no more than \$125,000 (Indirect Costs included).

Contribution Ratio

The Contribution Ratio is the percentage of expenditures incurred that INOVAIT will reimburse for your project. The maximum overall Contribution Ratio for your project is 1/3 (33.33%); you may elect to exceed it with additional Ultimate Recipient contributions.

The minimum Contribution Ratio for any Ultimate Recipient is 10%. The maximum Contribution Ratio for Industry Collaborators is 50%, the maximum for Academic Collaborators is 100%.

Stacking Rule

Other government funds may be used to pay for part of your Eligible Supported Costs provided that the combined level of financial assistance from all government (federal, provincial, territorial, municipal) sources does not exceed 75% of Eligible Supported Costs incurred by any Industry Collaborator and 100% of Eligible Supported Costs incurred by any Academic Collaborator.

Goods & Services from Affiliated Persons

Expenditures for goods and services procured from Affiliated Person(s) of any Ultimate Recipient as defined in the *Income Tax Act* must: a) not exceed fair market value, b) when there is no fair market value, it must not exceed fair market value of similar goods or services, or b) in the case where there is neither of the above, it must not exceed the sum of the applicable direct costs of goods with the indirect costs (overhead) at the rate stipulated above plus 5% profit.



You must identify any related parties or Affiliated Person(s) who will be contracted to provide goods or services for project activities on the budget table. For example, if part of your project budget is for the purchase of a piece of equipment form one of the project collaborators, make a note of it in the budget table.

Administration Fee

An administration fee of 5% of the INOVAIT Contribution to each project will be charged to recipients. The maximum fee charged will be \$6,250, 5% of the maximum INOVAIT ask of \$125,000. This funding will be used exclusively to support the activities of the INOVAIT Network. There is no fee for applications that are not funded.

7. GUIDE TO COMPLETING THE APPLICATION

General Guidance

The application form contains questions to be answered with strict character limits that must be followed. The challenge is to convey the key aspects of your project in enough detail to convince the reviewers that the project will have a good chance of succeeding and creating impact in Canada while remaining brief.

Successful applicants will have:

- presented a project plan detailing how and what types of artificial intelligence technologies
 will be integrated into an image-guided therapy technology (or how this pilot project will
 prepare for future integration) and why the use of AI is needed;
- discussed the difficulties and potential risks associated with the project and how the risks can be mitigated;
- detailed how data required for Al algorithms will be collected;
- recruited a strong team (partnerships, collaborators, researchers) who has the capacity and capability to complete the project;
- proven that there is strong commitment for the project from all collaborators;
- established a good understanding of the commercialization path and included specific insights into the target market;
- included reasonable project objectives, milestones, and budget for a short-term pilot project; and
- demonstrated that, if successful, the pilot project can lead to the advancement of the IGT and/or AI sector(s) and create economic benefits for Canada.

While drafting up answers to the application questions, be aware of the evaluation criteria that the reviewers will be using to score your answers and strive to help the reviewers answer the questions asked of them.

8. GUIDE TO COMPLETING THE BUDGET WORKBOOK

The budget to be attached to your application is drawn up using the *Budget Workbook* Excel spreadsheet document. The spreadsheet contains cells that you can fill out (blue) and cells that are pre-filled or automatically calculated. The spreadsheet is designed to be protected so you can only edit cells that are in blue.



Project Information Tab Table A1

In the Project Information tab, select your desired project start and end dates using the dropdown options in Table A1. Available project start dates are January 1, 2023, April 1, 2023, and July 1, 2023. Available project end dates are September 30, 2023, December 31, 2023, March 31, 2024, and June 30, 2024. The end date must not be less than nine months or more than 15 months from the start date.

When you start your application on the INOVAIT Funding Portal on SmartSimple you will be assigned an eight-digit project # that starts with 2022-4XXX. Enter that number here.

Table A2

Under Table A2, enter the names of the organizations involved in your project under "Ultimate Recipient Organization Name": please enter the full, formal legal name of each organization here. Then, select the type of organization, and the province and territory where they are primarily based (for the purposes of this project). The Project Lead is the first organization that is listed in Table A2. For definitions of the different types of organizations, please see the **Glossary** in this document.

All other fields in this tab will be populated automatically.

INOVAIT Project Budget Tab Table B1

Under "Details of Expenditures" on Table B1 (in the INOVAIT Project Budget tab), enter a brief description of the goods or services under the appropriate cost category then use the dropdown selections in column B to indicate the Ultimate Recipient who will be incurring the cost of that expenditure. Expenses that are shared by more than one Ultimate Recipient must be separated into multiple rows; you can insert additional rows if needed. When you feel necessary and especially for high-cost items, provide a short explanation under the Budget Justification column.

The eligible Indirect Costs (Overhead) amount for each recipient is calculated automatically based on the type and amount of Direct Costs you indicate.

Table B2

This table is automatically filled in and indicates the Total Eligible Supported Costs associated with each Ultimate Recipient.

Table B3

In this table, indicate the desired Contribution Ratio for each Ultimate Recipient. The resulting INOVAIT Contribution (ie. funding) for each Ultimate Recipient is displayed in column D. Academic Collaborators can request up to a 100% Contribution Ratio and Industry Collaborators can request up to a 50% Contribution Ratio. However, the Overall Project Contribution Ratio must not exceed 1/3 (33.33%), and the Total INOVAIT Contribution must be between \$100,000 and \$125,000 (inclusive).

Table B4

Once you have completed all the other tables, you can indicate which Ultimate Recipient(s) will pay for the INOVAIT Administration Fee (calculated as 5% of the INOVAIT Contribution). Enter the amount each Ultimate Recipient will pay; once that sum equals to the indicated Total INOVAIT Administration Fee Due, the Balance Check row should read "OK!".



Table B5

A quick validation of your budget is conducted in this table. When you do not see any errors under the "Check" column (and only see "OK!") your budget has passed this validation check.

Calculations Tab

We use this tab to do all the complicated calculations needed to calculate various values, including the project's Indirect Cost (Overhead) allowance. There are no applicant modifiable cells in this tab.

9. REVIEW PROCESS AND EVALUATION CRITERIA

Review Process

Upon submission of the application, INOVAIT staff will check it for basic eligibility criteria (see Section 5 above). An application that fails this check (for example, not including an SME partner or not proposing a project in IGT and AI) may not be sent for further review.

Applications to this CFA will be reviewed by a panel of the INOVAIT Eligible Projects Review Committee according to the *INOVAIT Network Project Selection Policy*. Each eligible application will be scored as outlined below by at least two reviewers.

The average scores and ranking from the reviewers, as well as the recommendations from each reviewer to fund, or not to fund, a particular proposal will be presented to the INOVAIT Management Board. Notwithstanding the average score computed, a proposal with a critical flaw in any of the following aspects (ie. scored as "Poor") may result in a "not to fund" recommendation from the review panel to the Management Board.

The INOVAIT Management Board are in charge of certifying the recommendations from the review panels and make the final funding decisions. The directors will communicate, in writing, the funding decisions to all eligible applicants at the end of the review period.

INOVAIT Evaluation Scale

Reviewers are presented with several criteria, each to be scored between 0 and 5.

Numeric Score	Adjectival Descriptor	Intended Meaning
5.0	Outstanding	 The proposal demonstrates outstanding strengths in all stated aspects with very few, if any, weaknesses. The reviewer has very high confidence that the strengths in this criterion will drive the project to be successful. If applicable, very convincing and high-quality evidence is used to substantiate claims and explain decisions.
4.0	Excellent	 The proposal demonstrates excellent strengths in most of the stated aspects and addresses any weaknesses. The reviewer has high confidence that, with slight improvements, the strengths in this criterion could drive the project to be successful. If applicable, convincing and high-quality evidence is used to substantiate claims and explain decisions.



3.0	Very Good	 The proposal demonstrates major strengths in many stated aspects and reasonably addresses some of the weaknesses. The reviewer has confidence that, with reasonable improvements, the strengths in this criterion could drive the project to be successful. If applicable, convincing evidence is used to substantiate
		claims and explain decisions.
2.0	Good	 The proposal demonstrates major strengths in some stated aspects but also has some significant weaknesses that are not addressed.
		 The reviewer has some confidence that, with some necessary improvements, the strengths in this criterion could be enough to drive the project to be successful.
		 If applicable, convincing evidence is sometimes presented to substantiate claims and explain decisions.
		 The proposal broadly addresses some of the aspects and does not demonstrate major strengths.
1.0	Fair	 The reviewer is not confident that the strengths in this criterion would be enough to drive the project to be successful.
		 If applicable, the evidence presented to substantiate claims and explain decisions is low-quality or absent.
0.0	Poor	 The proposal does not address the aspects in this criterion, does not demonstrate strengths needed for success, and/or shows uncorrectable flaws and weaknesses.
		 Based on this criterion, the reviewer believes this proposal is not fundable.

Evaluation Criteria

Need and Solution [20%]

- o Does the proposed project solve a real problem?
- o Is the rationale behind the proposed project sound?
- How well does the project integrate AI into imaging and/or image-guided therapy?
 Are the AI and IGT elements both integral to the project?
- How relevant is the proposed project to the AI and IGT discipline/sector? If successful, how significantly will this project advance the discipline?

• Research, Development and Commercialization Plan [25%]

- Are the milestones, timeline, and key performance indicators feasible and appropriate?
- How well has the applicant thought through risk factors and how effective is their plan to mitigate these risks?
- Do the budget items represent justified, efficient spending of resources and are they allocated in an appropriate manner?
- Is it feasible to complete the short-term objectives of the project with the allocated budget?



• Ability to Deliver [20%]

- Do the Project Lead and their Collaborators have sufficient skill, experience, resources, and capacity to carry out the proposed project?
- o Have they provided evidence of past success in delivering successful projects?
- O How strong is the commitment to this project from the applicant and collaborators? Is there evidence of real engagement and commitment (of time, funds, access to equipment, etc.) from the other project collaborators?
- o How confident are you in the applicant's ability to fund their portion of project costs?

Impact [20%]

- Does the project have the potential to lead the applicant to make a disruptive market impact at scale?
- Do the expected key performance indicators represent a good value for INOVAIT investment? How likely is it for the proposed project to actually deliver on the KPIs?
- How likely will the proposed project lead to the leveraging further funding for the company?
- How significant are the economic benefits for Canadians, Canadian SMEs, and the Canadian IGT sector created by the expected long-term outcomes of this proposed project?
- How closely does the project align with INOVAIT's goals?
- Will the applicants strengthen and promote the sustainability of the INOVAIT network?

Overall Impressions of the Project [15%]

What is your overall impression of the project proposal (including aspects not covered by the above evaluation criteria)?

Data Sharing

 Has the proposed project committed to sharing clinical and other relevant data with other INOVAIT network members? If so, how appropriate is their data sharing plan?
 If not, how appropriate is the reason for not sharing data?

10. CONTACT

Should any questions arise throughout your application process, you can contact us by email at inovait@sunnybrook.ca.

We anticipate high email volume close to the application due date so please attempt to go through the writing and budgeting process as early as possible. While we strive to assist all applicants, we cannot guarantee that all emails received within two weeks of the due date will receive a response.



APPENDIX A: TECHNOLOGY READINESS LEVELS (TRL)

The following definitions of the nine technology readiness levels (TRLs) is provided by <u>Innovation</u> Canada.

• TRL 1: Basic principles of concept are observed and reported

Scientific research begins to be translated into applied research and development.
 Activities might include paper studies of a technology's basic properties.

TRL 2: Technology concept and/or application formulated

 Invention begins. Once basic principles are observed, practical applications can be invented. Activities are limited to analytic studies.

TRL 3: Analytical and experimental critical function and/or proof of concept

 Active research and development is initiated. This includes analytical studies and/or laboratory studies. Activities might include components that are not yet integrated or representative.

• TRL 4: Component and/or validation in a laboratory environment

 Basic technological components are integrated to establish that they will work together. Activities include integration of "ad hoc" hardware in the 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.

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 7: Prototype ready for demonstration in an appropriate operational environment

 Prototype at planned operational level and is ready for demonstration in an operational environment. Activities include prototype field testing.

TRL 8: Actual technology completed and qualified through tests and demonstrations

 Technology has been proven to work in its final form and under expected conditions. Activities include developmental testing and evaluation of whether it will meet operational requirements.

• TRL 9: Actual technology proven through successful deployment in an operational setting

 Actual application of the technology in its final form and under real-life conditions, such as those encountered in operational tests and evaluations. Activities include using the innovation under operational conditions.



APPENDIX B: PROJECT COST PRINCIPLES

1. Eligible Costs

Eligible Costs incurred and paid by an Ultimate Recipient are those, which are necessary to carry out the Project. These costs are generally non-recurring and incremental to the ordinary business activities of the Ultimate Recipient. Eligible costs shall be reasonable, such that the nature and the amounts do not exceed what an ordinary prudent person would conduct in a similar business context, and can be directly attributable to the completion of the Project included in the Project Schedule. These costs must be determined in accordance with the Ultimate Recipient's cost accounting practices as accepted by the Minister and applied consistently over time. The cost accounting system should clearly establish an audit trail that supports all costs claimed.

2. Affiliated Person(s) Clause

Affiliated Person(s) are to be understood and treated as defined in the *Income Tax Act*, which includes but is not limited to; two or more entities that have similar ownership personnel; or entities that have a working business relationship. In the case of Eligible Costs for goods or services incurred and paid with an Affiliated Person(s), the amount of the costs incurred and paid must:

- a. not exceed their Fair Market Value;
- 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 the sum of the applicable Direct Costs with Indirect Costs (Overhead) at the rate stipulated by this Agreement, plus 5% profit.

*Note: It is important for Ultimate Recipient's, from the outset, to self-identify any related parties or Affiliated Person(s) who will be contracted to provide goods or perform services for completion of the Project. For wholly owned subsidiaries of an Ultimate Recipient completing conducting work on the Project, its Eligible Costs incurred and paid will be claimed by the Ultimate Recipient on their behalf and costs are to be treated as if the wholly owned subsidiary is the Ultimate Recipient.

3. Reporting Responsibility

It is the Project Participant's responsibility to provide financial records, costing methods, management estimates and legitimate business cases to support the claimed costs to the satisfaction of the Project Lead. It is the Project Lead's responsibility to provide financial records, costing methods, management estimates and legitimate business cases to support the claimed costs to the satisfaction of Sunnybrook.

4. Eligible Cost Activities

Eligible Costs will generally include expenditures related to the following activities:

- Industrial research, including activities related to the discovery of new knowledge that aim to support the development of new technology-driven products, processes or services at early-stage TRLs; and
- Large-scale technology demonstration, including the advancement and development of new technologies into product-specific applications at mid-to-late stage TRLs.

5. Eligible Cost Categories

In performing the Project included in the Project Schedule, Eligible Cost categories may include the following:

5.1. Direct Labour

The portion of gross wages or salaries incurred and paid by an Ultimate Recipient for Eligible Activities which can be specifically identified and measured as having been performed for the Project and which is so identified and measured consistently by the Ultimate Recipient's cost accounting system. The cost accounting system should clearly indicate the allocation of an employee's hours worked on the Project.

5.2. Subcontractors and Consultants

The costs of subcontracts or consultants incurred and paid for the Project are the costs for work or services performed by an external third party or affiliate (except a wholly-owned subsidiary), which can be specifically identified and measured as having been incurred and paid to conduct the Project. Neither the Project Lead nor the Project Participant can be an Ultimate Recipient and a Subcontractor on the same Project.

The Indirect Cost (Overhead) rate calculation for Ultimate Recipient(s) does not apply to bona fide Subcontractors and Consultants.

In the case of Ultimate Recipient(s) with high Subcontractors and Consultants costs or low Direct Labour costs: Indirect



Costs (Overhead) thresholds calculated to a maximum of 5% on eligible Subcontractors and Consultants costs, but no more than 15% of total Eligible Costs may apply. Such thresholds would be calculated for each Ultimate Recipient(s) and each individual project if the Ultimate Recipient(s) are selected to participate in more than one project as part of the Network.

5.3. Direct Materials

The cost of materials which are incurred and paid and can be specifically identified and measured as having been processed, manufactured and used in the performance of the Network Activities, which are measured consistently by the Ultimate Recipient's cost accounting system.

- a. Materials purchased solely for Project activities shall be at the net laid down cost to the Ultimate Recipient, net of any sale taxes and after any discounts offered by the suppliers.
- b. Materials issued from an Ultimate Recipient's general stocks shall be measured in accordance with the material pricing method consistently used by the Ultimate Recipient.
- c. Direct Materials include, but are not limited to, items such as circuit boards, cables and metals, essentially any raw material that is "used up" by completing Project activities.

5.4. Equipment

The capital cost of Equipment, which are incurred and paid and can be specifically identified as having been purchased for the Project and measured consistently by the Ultimate Recipient's costing system. Significant Equipment required to complete the Project should be detailed in the Project Schedule. See below scenarios for clarification of costs related to equipment:

- a. If an Ultimate Recipient has built the equipment themselves, the costs would be allocated to the appropriate cost categories (Direct Material, Direct Labour, etc.);
- b. If an Ultimate Recipient has equipment built by a third party, the costs would be allocated to the Equipment category if readily identifiable, otherwise the equipment could be reported in Subcontractors category; and
- c. If an Ultimate Recipient outright purchases a piece of equipment, the costs would be allocated to the Equipment category.

Equipment costs include but are not limited to, the purchase of equipment necessary for the Network activities, costs to alter or modernize the equipment, costs to get the equipment into working order, and shipping costs.

5.5. Land, Building and Building Improvement

The capital cost of land, buildings or building improvement that are incurred and paid, and are necessary to carry out the Project and have been approved by the Minister. Eligible building costs may include the acquisition costs, construction of new or the expansion of existing facilities, the development of testing facilities, investments in modern buildings, building and land leases (the incremental cost of leasing land during the Term of this Agreement), and permanent building improvement. See below scenarios for clarification of costs related to buildings:

- a. If an Ultimate Recipient has built the facility themselves, the costs would be allocated to the appropriate cost categories (Direct Material, Direct Labour, etc.);
- b. If an Ultimate Recipient has a facility built by a third party, the costs would be allocated to the Subcontractors category; and
- c. If an Ultimate Recipient outright purchases an already existing building, the costs would be allocated to the building category.

5.6. Other Direct Costs

Those eligible Direct Costs, not falling within the categories of direct cost mentioned above, but which are incurred and paid, and can be specifically identified and measured as having been incurred and paid by the Ultimate Recipient for the Project and which are so identified and measured consistently by the Ultimate Recipient's costing system.

5.7. Indirect Costs (Overhead)

Indirect Costs (Overhead) are those costs which, though necessarily having been incurred and paid by the Ultimate Recipient for the conduct of the business in general, cannot be identified and measured as directly applicable to the carrying out of the Project included in the Statement of Work.

Indirect Costs (Overhead) include, but are not limited to:

- a. Indirect materials and supplies including but not limited to, supplies of low-value, high-usage and consumable items, such as paintbrushes and safety supplies, which meet the definition of Direct Material costs but for which it is commercially unreasonable, in the context of the activities of the Network, to account for their costs in the manner prescribed for Direct Costs. Costs such as stationery, office supplies, postage and other necessary administration and management expenses, small tools, such as ladders, drills, paint sprayer, and general inventory build-up;
- b. Indirect labour, Network management, and administrative support, including but not limited to the



remuneration of executive and corporate officers, general office wages and salaries, clerical expenses, HR, Accounting/Finance staff, overtime premiums, bonuses, all types of benefits paid by employer, for example, CPP, EI, fringe benefits, medical benefits, dental benefits, pension benefits and other taxable benefits.

Administration costs spent on the following activities is considered an indirect cost:

- i. review and approval of documents,
- ii. oversight,
- iii. quality review,
- iv. strategic guidance,
- v. participation in all-staff meetings,
- vi. professional development,
- vii. performance reviews and any costs associated with interactions with government including application,
- viii. claims.
- ix. amendment, and
- x. audit and reporting communications.
- Indirect building costs including, but not limited to, snowplowing costs, 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;
- d. Expenses such as property taxes, rentals of equipment and building (not covered as part of direct costs) and depreciation costs:
- e. Indirect equipment costs including, but not limited to, maintenance cost of assets, office equipment, office furniture, etc.; and
- f. Other indirect costs including, but not limited to, daily commutes, unreasonable modes of transportation, general software and licenses, and travel insurance.
- xi. Indirect Costs (Overhead) thresholds of 55% on eligible direct labour but no more than 15% of total Eligible Costs will apply for each Ultimate Recipient (and for each individual project) an Ultimate Recipient is selected to participate in more than one project as part of the Network.

*In the case of an Ultimate Recipient with high Subcontractors and Consultants costs or low Direct Labour costs: Indirect Costs (Overhead) thresholds calculated to a maximum of 5% on eligible Subcontractors and Consultants costs, but no more than 15% of total Eligible Costs may apply. Such thresholds would be calculated for each Recipient and each individual project if the Ultimate Recipient are selected to participate in more than one project as part of the Network.

6. Ineligible Costs.

Ineligible Costs incurred and paid by an Ultimate Recipient are not eligible for reimbursement, regardless of whether they are reasonably and properly incurred and paid in the carrying out the Project. Ineligible Costs include:

- a. any form of interest paid or payable on invested capital, bonds, debentures, bank or other loans together with related bond discounts and finance charges; the interest portion of the lease cost that is attributable to cost of borrowing regardless of types of lease;
- b. legal, accounting and consulting fees in connection with financial reorganization (including the set-up of new not-for-profit organizations), security issues, capital stock issues, obtaining of licenses, establishment and management of agreements with Sunnybrook or any other Ultimate Recipient and prosecution of claims against the Minister. Such legal costs associated with developing the agreement template and in connection with obtaining patents or other statutory protection for Network intellectual property are considered eligible;
- 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, value added taxes, excess profit taxes or surtaxes and/or special expenses in connection with those taxes, except duty taxes paid for importing is Eligible Cost;
- f. provisions for contingencies;
- g. premiums for life insurance on the lives of officers and/or directors where proceeds accrue to an Ultimate Recipient:
- 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:
- I. unreasonable compensation for officers and employees;
- m. product development or improvement expenses not associated with the work being performed under the Network;



- 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 (including but not limited to, catering, alcohol, non-travel expenses);
- p. donations;
- q. dues and other memberships, including Network membership fees, 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. selling and marketing expenses associated with the products or services or both being developed under the Agreement;
- t. in-kind costs; and
- u. recruiting fees.