

Call for Expressions of Interest:
*Monitoring Technologies for
Northern & Oil Sands Applications*

Application Deadline: 14-November 2011

LOOKNorth is soliciting Expressions of Interest (EOIs) from small and medium sized enterprises (SMEs) based in Newfoundland & Labrador who have developed remote sensing and other monitoring technologies that can provide significant positive impacts for the sustainable development of Canada's Northern and oil sands resources.

About LOOKNorth

LOOKNorth is a Centre of Excellence for Commercialization and Research (CECR) under the Government of Canada's Network of Centres of Excellence program (www.nce-rce.gc.ca). LOOKNorth supports sustainable development of Canada's Northern natural resources through deployment of monitoring technologies.

Funding for LOOKNorth is provided by the Government of Canada (through the CECR Program) and by the Province of Newfoundland & Labrador (through the Department of Innovation, Trade and Rural Development and the Research & Development Corporation).

Program Description

LOOKNorth's Technology Validation Program (TVP) promotes deployment of monitoring technologies to provide breakthroughs in the sustainable development of Canada's Northern natural resources and oil sands. The TVP demonstrates and validates remote sensing and other monitoring technologies for use in the North and oil sands, and is intended as a precursor to long-term implementation of these technologies to support resource development. Sectors of interest are oil & gas, mining, hydro-power and marine transportation.

Validation projects are identified through a proposal process. LOOKNorth solicits EOIs from Canadian Small and Medium Sized Enterprises (SMEs) on a defined theme or technical area of interest addressing the information needs of the resource sector. Successful EOIs will be invited to submit a proposal. Proposals should demonstrate remote sensing technologies that are at Technology Readiness Level (TRL) 7¹ or higher. R&D activities are not eligible for funding.

Funding for successful proposals will be administered through a non-repayable contribution agreement.

¹http://esto.nasa.gov/files/TRL_definitions.pdf



Fall-2011 Call for Expressions of Interest

Overview

This EOI call will lead to a maximum of three (3) validation projects with environmental themes, including those identified in the Priority Development Areas below.

Due to the Provincial co-funding on the Fall 2011 Call, organizations eligible to respond to this call are SMEs based in Newfoundland & Labrador.

Priority Development Areas

- **Theme 1: Land Applications**
 - Environmental monitoring and base-lining:
 - Wildlife populations and habitat (*e.g.* impacts on caribou herds, migration patterns or populations)
 - Land cover changes (*e.g.* deforestation, unexpected species variation, disease)
 - Water quality Permafrost integrity

- **Theme 2: Marine Applications**
 - Environmental baseline and change monitoring:
 - In-shore water quality (*e.g.* effluent outflow, run-off impacts)
 - Impacts on wildlife and fish population (*e.g.* marine mammal population monitoring, biomass estimates)
 - Mapping and Monitoring:
 - Shoreline mapping (*e.g.* hazard identification)
 - Coastal erosion
 - Crew Safety:
 - Marine transportation safety (*e.g.* crew evacuation and rescue from ships and platforms, emergency response)
 - Transportation efficiency:
 - Reduced costs of operations (*e.g.* methods of efficient operations in Northern regions)

- **Other:**
 - Proposals outside of these thematic areas will be evaluated based on their impacts on the resource sector and small business.



Mandatory Requirements

This section describes the mandatory requirements for the EOI. Submissions must meet all mandatory requirements to be considered for proposal submission.

- **Technology readiness:**
The project must employ a pre-commercial technology or service, or the application of a technology that has not been demonstrated in the Northern environment and is ready for commercial validation or demonstration to industry.
- **Application area:**
The technology or application must be applicable to or directly related to Northern resource development in one of the following sectors:
 - Oil and Gas
 - Mining
 - Hydro-power
 - Marine transportationFor this EOI, the North refers to Canadian Arctic to the southern extent of discontinuous permafrost, including Labrador.
- **Remote sensing technology:**
The project must employ a remote sensing technology or remote sensing based data product which provides a positive impact to industry.
- **Duration:**
The project should be less than two years.
- **Eligible organizations:**
The submitter must be an SME (*i.e.* having 500 full-time employees or fewer and revenue less than \$50M per annum) based in Newfoundland & Labrador.
- **Location:**
 - The project location may be in Canada's North or oil sands locations.
- **Industry sponsor:**
 - the submitter must have a Canadian industry sponsor from one of the following sectors:
 - Oil & Gas
 - Mining
 - Hydro-power
 - Marine Transportation
 - a letter of support is required at the proposal stage, indicating the following:
 - the anticipated impact of the technology or service
 - readiness to adopt a successfully demonstrated technology or service
 - co-funding commitment to the project
- **Environmental Assessment Checklist:**
The Environmental Assessment Checklist included in the Environmental Assessment Process (dated May 2011) must be filled out and submitted with the EOI.
- **Co-Funding Requirement:**
 - at least 50% cash or in-kind co-funding must be provided from the industry sponsor and/or the submitter. In-kind co-funding is limited to incremental activities directly associated with the project. LOOKNorth reserves the right to determine the reasonableness of the in-kind contributions based on the project details.

Evaluation Criteria

The EOI must address the mandatory requirements stated above.

EOIs meeting the mandatory requirements will be assessed and ranked according to their Technical and Business & Industry merit criteria described below. For a more detailed description of the criteria, please refer to the EOI submission form 'LN-EOI Submission Form Fall 2011.pdf'. *Note that this fillable PDF form limits the amount of space for each response. Additional material outside of the space given on the form or appended to it will not be considered.*

LOOKNorth is seeking projects that have significant positive impacts on sustainable resource development, SMEs and Northern communities. Demonstrable impacts are the leading criteria for the selection of projects for funding.

Projects must also show technical and business feasibility. The level of support contributed by the industry sponsor is an evaluation criterion of business feasibility.

TECHNICAL CRITERIA		
Description	Point Criteria	Max.
1. <i>Information Gap</i>	Describe what challenge exists for the industry and why.	30pts
2. <i>Suitability of the Proposed Solution</i>	a) <i>Technical solution</i> : Describe how the proposed technology/data product solution or service will overcome the challenge.	15pts
	b) <i>Technology limitations</i> : Describe any limitations of the base technology or the proposed solution in addressing the challenge.	10pts
2. <i>Industry Gap</i>	Describe any current solutions or sources of information and indicate why these are inadequate to meet industry needs.	20pts

BUSINESS CASE CRITERIA		
Description	Point Criteria	Max.
1. <i>Impact of a Successful TVP</i>	Contribution to: a) sustainable resource development b) benefits to SME c) benefits to northern communities	60pts
2. <i>Industry Sponsor Support</i>	A commitment of 50% or more co-funding from the industry sponsor achieves the maximum points. A combination from the industry sponsor and project proponent is the acceptable but achieves a lower number of points.	30pts
	In addition to funding, the industry sponsor should informally commit to the future adoption of the technology, as well as future commercial potential.	20pts
3. <i>Corporate Experience</i>	The proponent demonstrates a track record of successfully completing complex and/or remote sensing projects over the past 5 years.	20pts

Intellectual Property

Any intellectual property that will be developed during the course of projects arising from this solicitation will remain with the originator.

Eligible Costs

LOOKNorth will co-fund a maximum of \$200,000 of eligible costs. Eligible costs are defined in the Tri-Agency Financial Administration Guide which can be found at:

http://www.nserc-crsng.gc.ca/Professors-Professeurs/FinancialAdminGuide-GuideAdminFinancier/FundsUse-UtilisationSubventions_eng.asp.

As an example, eligible costs include reasonable costs associated with performing the Project, such as: salaries for technical and professional staff (payroll costs plus a maximum of 20% burden); materials and supplies; and travel and accommodations for on-site demonstrations/validations. Please note that costs related to R&D are NOT considered eligible.

Schedule

<i>24-Oct-2011</i>	Expression of Interest (EOI) Publication
<i>14-Nov-2011</i>	Deadline for EOI submission
<i>21-Nov-2011</i>	Invitation of full proposals
<i>23-Jan-2012</i>	Deadline for proposal submission
<i>07-Mar-2012</i>	Notification of results and funding agreement negotiation

Submission Instructions

Interested proponents should fill in the EOI template and Environmental Assessment Checklist located at the LOOKNorth website. Instructions are included with the EOI template located at www.looknorth.org/tvp



Submissions are accepted until 23:59 hrs, November 14th, 2011, Newfoundland Time via proposals@LOOKNorth.org or fax to 709-864-4021.

Clarifications

Please submit any requests for clarifications to proposals@LOOKNorth.org. LOOKNorth will respond to all questions, however, only clarifications relevant to other submitters will be published on the website at the address above.



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