



Natural Resources
Canada

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World Class Tanker Safety System
Operational Science
Oil Spill Response Science (OSRS) Program

**Call for Letters of Expression of Interest (LOIs) for
Research, Development and Demonstration (RD&D) Projects**

Applicant's Guide

Natural Resources Canada

July 2015

1. Background

On May 13, 2014, the Government of Canada announced new measures that, once implemented, will help achieve a World-Class Tanker Safety System in Canada. These measures build on recommendations from the Tanker Safety Expert Panel and other studies, and have been informed by engagement with provincial governments, Aboriginal groups, marine stakeholders and internal analysis by federal departments and agencies. Together, these investments demonstrate the Government of Canada's ongoing commitment to strengthen marine safety measures to protect the public and the environment.

The World Class Tanker Safety System initiative targets three key areas:

- **Prevention:** The goal is to ensure the system is safe by taking action to reduce risk and prevent accidents from happening.
- **Preparedness and response:** The focus is on making the necessary investments to ensure that a spill is contained quickly, in the unlikely event of an incident.
- **Liability and compensation:** The Government is clarifying the rules so that industry is responsible for the costs of clean up — not taxpayers or local communities — in the unlikely event of a spill.

The actions being taken to strengthen prevention, such as more advanced navigation systems and increased tanker inspections, are reducing the already low risk of an incident. In the unlikely event of a spill, as part of the measures outlined above, the Government is undertaking research to understand the behavior of diluted bitumen in a marine environment and to look at new response measures for cleanup.

1.1 The Oil Spill Response Science (OSRS) Program

The OSRS Program is a conditionally repayable, contribution program, led by Natural Resources Canada (NRCan), to support the Government of Canada's initiative to implement a World-Class Tanker Safety System. It will provide \$5 million over three years (2016-2019) for research, development and demonstration (RD&D) projects **focused on improving current mechanical recovery technologies and processes for the cleanup of heavy oil products spilled in marine environments.**

The focus of the OSRS Program is on development work and demonstration of new and improved mechanical recovery technologies and methods. Development is systematic work, drawing on existing knowledge gained from research and/or practical experience that is directed to producing new materials, products or devices, to installing new processes, systems and services, or to improving substantially those already produced or installed. Demonstration projects involve the design, construction, and operation of a prototype of a technology at or near commercial scale with the purpose of providing technical, economic and environmental information to industrialists, financiers, regulators and policy makers (OECD Frascati Manual 2002).

The expected outcomes of the OSRS Program are:

- an improved suite of technologies and methodologies to recover spilled heavy oil products in marine environments, with new and improved technologies tested and demonstrated, and available for deployment, ideally within the timeframe of the OSRS Program (ending in March 2019) or as soon as possible after the end of the program;
- increased involvement and collaboration of the research community and key stakeholders such as oil spill response organizations, oil companies, pipeline companies, etc.;
- increased awareness and understanding of new and improved technologies and methodologies for recovering or removing the spilled heavy oil products from marine environments; and
- increased capability to develop new and improved technologies that contribute to clean energy objectives.

1.2 Request for LOIs for RD&D Projects

NRCan invites eligible entities (see section 1.4) to submit RD&D projects through a Letter of Expression of Interest (LOI) process. Projects could be up to three years in duration, terminating no later than March 31, 2019. Following the review and selection process, applicants of selected LOIs will be invited to prepare and submit a more detailed full project proposal. This two-staged approach allows applicants to focus initially on formulating novel project ideas and time to develop collaborations and consortia.

Please note an LOI is not a complete project proposal but rather an outline of what a complete project would be, with preliminary cost estimates and timelines.

1.3 LOI Eligible Areas

Eligible RD&D projects would support new/enhanced mechanical recovery technologies or protocols applicable to a wide range of heavy oil product spills such as diluted bitumen, that exhibit behaviours from floating to neutrally buoyant (submerged or suspended) to sunken products. Adverse conditions such as turbid water, wave action, sediment and other debris, strong currents and changing temperatures should be considered. Spill locations of heavy oil products could be offshore, nearshore, near freshwater sources (brackish water) and/or shoreline.

RD&D projects could include, but is not limited to work in one or more of the following areas:

- **Containment:** Improve existing containment methods or development of new technology for floating, submerged or sunken heavy oil products to limit further spreading and concentrate the heavy oil products for recovery.
- **Recovery & Transfer:** Improve current mechanical recovery technologies or develop new mechanical removal technologies for floating, submerged or sunken heavy oil products. As well as improve existing transfer technologies such as pumps, or develop new technologies to handle weathered or higher viscosity oils.

- **Separation Treatment:** Improve current separation and decanting systems or development of new separation systems that is scalable to varying spill volumes, site conditions, and able to handle weathered or higher viscosity oils.

RD&D objectives, activities, outputs, among others, in the subsequent full project proposals must be consistent with the eligible areas described previously.

1.4 Who is Eligible to Submit an LOI?

Natural Resources Canada invites LOIs for RD&D projects from legal entities validly incorporated or registered in Canada, including:

- companies involved in the development and production of oil spill recovery equipment and methodologies
- consulting firms specializing in oil spill recovery
- oil spill response organizations
- oil companies
- pipeline companies
- shipping companies
- industry associations
- research associations
- standards organizations
- academic institutions
- aboriginal and community groups and
- provincial, territorial, regional and municipal governments and their departments and agencies

Note: Participation in international projects is permitted, but OSRS funding is restricted to activities carried out in Canada.

1.5 Timeframe for Funding (Eligible Expenditure Period)

The timeframe for funding support under this Program is from April 1, 2016 until March 31, 2019. Any expenses incurred prior to the signing of a Contribution Agreement by Canada will not count towards Eligible Expenditures of the project considered by the Program. The Eligible Expenditure Period means the period starting from the signature of the Contribution Agreement by Canada and ending on the earlier of the date the project is completed by the Proponent or March 31, 2019. Expenditures made outside of the Eligible Expenditure Period will not count towards the Total Project Cost¹.

1.6. Maximum Amount Payable

The maximum amount payable by the OSRS Program over the entire course of a project will be \$1 million.

¹ “Total Project Cost” means the Contribution and other verifiable cash or in-kind contributions directly attributable to the Project either received or contributed by the Proponent within the Eligible Expenditure Period.

1.7 Maximum Contribution from the OSRS Program

The amount of funding to be provided from the OSRS Program will be determined based on the proponent's cash flow requirements – up to the maximum reimbursement of 50% of Total Project Costs or 100% of Eligible Expenditures, whichever is lower.

The maximum level of total Canadian government funding (municipal, provincial, territorial and federal) will be seventy five percent (75%) of Total Project Costs, except in the case where the recipient is a provincial, territorial, regional and municipal government or their departments and agencies, in which case the total Canadian government funding authorized will not exceed one hundred percent (100%) of Total Project Costs. The balance of the project costs must be provided by the applicant and its partners from any of the eligible entities identified in section 1.4.

1.8 Partnerships and Funding Leveraging

Applicants are encouraged to develop partnerships and consortia to leverage funding. Project proposals with higher funding leveraging will be favored.

2. Review and Assessment of LOIs

Each LOI received by the closing date will be rigorously evaluated by a federal technical expert committee, chaired by NRCan. The following are basic eligibility requirements for LOIs. Any proposal not meeting these basic eligibility requirements will be rejected.

- Applicants must be eligible entities;
- Proposals must identify the co-funding offered by the applicant and its potential partners;
- Proposals must be in one or more of the LOI eligible areas,
- Proposals must be submitted on the OSRS Program LOI form, with all the requested information provided, and submitted by e-mail by the due time and date.

Those LOI proposals that meet the basic eligibility requirements will then be assessed based on the following criteria:

- The degree to which the project addresses the objectives of the OSRS Program, including the availability of new and/or improved oil spill recovery technologies, tested, demonstrated, and available for deployment by the end of the program, or as soon as possible after the end of the program.
- Whether the project addresses a technology or knowledge gap.
- Whether the RD&D is innovative or novel.
- How the project will contribute to safeguarding Canada's marine environment from the effects of ship-source oil spills.
- Whether the project complements work being done elsewhere (including outside Canada)?
- The receptor capacity of the work is (capacity within Canada to take up and use the results of the project).

- The degree to which the project extends recovery capabilities for heavy oils in marine environments (e.g. ability to handle sediment-laden, submerged oil or tar balls, or highly viscous oil, etc.).
- The development capacity and capabilities of the project team, including whether it includes the participation of parties that are directly involved in oil spill recovery such as companies involved in the development and production of oil spill recovery equipment and methodologies, oil spill response organizations and responders, oil companies, pipeline companies, and others directly involved in oil spill recovery.
- The level of co-funding provided by the proponent and project partners.
- Project feasibility.

Note that at the LOI stage only an overview of these criteria is required. More detail will be required for those LOIs that are selected to proceed to a full project proposal

Once the final assessments of LOIs are completed by NRCan, successful and unsuccessful applicants will be informed.

NRCan reserves the right to alter or cancel the currently envisaged process and deadlines at its sole discretion. Any changes will be communicated to applicants via e-mail.

3. Commitment to Fairness and Transparency

NRCan is committed to a fair and transparent process for managing the OSRS Program. All assessments and decisions made by NRCan will be done in accordance with this commitment. Decisions made will be final, and no appeals process will be allowed.

NRCan staff responsible for managing this call for LOIs will not provide any *specific* guidance or advice on preparing a proposal, such as how to address the assessment criteria for a particular project. This does not preclude the provision of *general* guidance and advice, such as guiding an applicant to determining for himself/ herself whether or not a proposed project would be within the scope of the call.

No meetings on the OSRS Program will be held between any applicant and program staff involved with the project selection process.

4. Full Project Proposals

Applicants of LOIs that are accepted for consideration for funding from the OSRS Program will be asked to prepare a full project proposal that will:

- Provide greater details on the project, including the project team and its experience; a detailed work plan, including timelines and milestones; identification of risks associated with the project and a mitigation strategy to address them; and identification of an appropriate dissemination strategy to demonstrate how the product(s) of the project will be made available to stakeholders;
- Formally confirm the ability of the proponent and partners/collaborators to undertake the project, both in terms of capacity and capability; and
- Formally confirm financial commitment of the proponent and partners to the project.

Full proposals will be assessed against a more detailed response to the assessment criteria previously addressed in the LOI by technical experts appointed by NRCan. NRCan will provide the necessary documentation for developing the full project proposal, including the assessment criteria. Please note that a request for a full project proposal will not represent a funding commitment from the OSRS Program.

5. Intellectual Property

All Intellectual Property (IP) that arises in the course of a project funded through a contribution agreement shall vest in, or be licensed to, the proponent. The proponent will grant to Canada a nonexclusive, irrevocable, world-wide, royalty-free licence in perpetuity to use project reports and modify such reports and documents for non-commercial governmental purposes.

6. Important Information

6.1 Transfer of Funds

Proposals accepted for funding consideration under the OSRS Program will be subject to the parties (NRCan and the external/non-federal recipient) successfully negotiating and signing a written Contribution Agreement.

Until a written Contribution Agreement is signed by both parties, no liability and no commitment or obligation exists on the part of NRCan to make a financial contribution to the proposed project. As a result, any costs or expenses incurred or paid by the intended proponent prior to the execution of a written Contribution Agreement by both parties are the sole responsibility of the intended proponent, and no liability exists on the part of NRCan.

6.2 Eligible Expenditures

Contributions will be made towards eligible expenditures directly attributable to the project, including:

- salaries and benefits for employees on the recipient's payroll for actual time spent by the employees on the project;
- professional, scientific, technical and contracting services;
- reasonable travel costs, including meals and accommodation;
- printing services;
- data collection services, including processing, analysis and management;
- licence fees and permits;
- field testing services;
- rental or leasing of land or facilities for the duration of the Project;
- purchase, installation, testing and commissioning of qualifying equipment, materials and products equipment and products, including diagnostic and testing tools and instruments;
- laboratory and field supplies and materials; and

- overhead expenditures provided they are directly related to the conduct of the project and can be attributed to it. Overhead expenses are to be included in the total project costs to a maximum of 15% of eligible expenditure (calculated as overhead divided by eligible expenditure less overhead). Overhead expenditures include:
 - administrative support provided directly to the project by the recipient's employee(s), valued on the same basis as professional staff time;
 - routine laboratory and field equipment maintenance, based on the actual cost to the recipient;
 - heat, hydro, and office operating costs (e.g. faxes, telephone).

In-kind contributions cannot be reimbursed but can count towards the Total Project Costs and therefore count towards meeting the Proponent's contribution for stacking limit purposes, this includes in-kind support provided by a Proponent and/or Proponent's Collaborator, provided that i) they are from the list of Eligible Expenditures and ii) a fair and justifiable value can be attributed to them.

In-kind support is a cash-equivalent contribution in the form of a service or an asset for which no cash is exchanged but that is essential to the project and that would otherwise have to be purchased by the Proponent on the open market, or through negotiation with the provider. Its value must be determinable and verifiable as though it were actually being invoiced by the provider to the Proponent. Its value would be determined as the fair market value the provider could get for a contributed service or asset at its most favored customer rate (i.e., the customer given the deepest discount from the normal selling price for a good or service).

6.3 Ineligible Expenditures

The following expenditures cannot be reimbursed, nor can they count towards Total Project Costs:

- Foreign taxes
- Federal and provincial sales taxes
- The purchase of land and costs associated with the purchase
- Legal costs
- Depreciation expenses associated with existing equipment
- All expenditures associated with the protection of Intellectual Property (IP)
- Expenditures made outside of the Eligible Expenditure Period (the period starting from the signature of the Contribution Agreement by Canada and ending on the earlier of the date the Project is completed by the Proponent or March 31, 2019)

6.4 Repayability

Contributions would be conditionally repayable where a funded project is profitable beyond the level of cost recovery. The requirements that may trigger repayments would be detailed in the contribution agreement, along with the process for repayment. Repayment schedules will be established to initiate repayments after the completion of the project for a period of 5 years following the completion of the funded project.

6.5 Confidentiality

Subject to the *Access to Information Act* and *Privacy Act*, all LOIs and full project proposals received will be treated as confidential and will not be provided to any non-federal government third party without the express written consent of the project applicant (designated principal applicant in the case of multi-partner proposals). Federal government employees are bound by the requirements of the *Access to Information Act* and the *Privacy Act* regarding the treatment of confidential information.

7. Submitting LOI(s) and Deadline

LOIs must be submitted by e-mail on the LOI form provided to osrs@NRCan.gc.ca by 23:59 EDT August 19, 2015. NRCan will not accept any LOIs submitted after that deadline. NRCan recommends that proponents keep a record of the date and time their LOI was submitted as proof in case of any dispute.

Submitted LOIs can be withdrawn at any time. Please advise NRCan through the program email osrs@NRCan.gc.ca address if an LOI will be withdrawn.

8. To Contact the OSRS Program

For general inquiries, please e-mail osrs@NRCan.gc.ca.

9. Service Standards

Natural Resources Canada will:

- Acknowledge receipt of LOIs within two business days;
- Respond to requests for information through the email address within five business days;
- Inform applicants whether or not they are invited to prepare a full project proposal within 12 weeks of receipt of their LOI.