

CALL FOR RESEARCH PROPOSALS

Year of Polar Prediction (YOPP)

In partnership with the Marine Environmental Observation Prediction and Response (MEOPAR) Network, Polar Knowledge Canada and the Arctic Research Foundation



Polar Knowledge
Canada

Savoir polaire
Canada



Call for Research Proposals: Year of Polar Prediction (YOPP) 2017 - 2020

A. Introduction

In this Call for Proposals (CFP), MEOPAR, in partnership with Polar Knowledge Canada (POLAR) and the Arctic Research Foundation (ARF), encourages project proposals that will strengthen Canada's participation in the Year of Polar Prediction (YOPP). This is an initiative of the World Meteorological Organization (WMO) that seeks to “*enable a significant improvement in environmental prediction capabilities for the polar regions and beyond, by coordinating a period of intensive observing, modeling, verification, user-engagement and education activities*”.

B. Structure of Research Call

The YOPP Call for Proposals is a joint initiative of MEOPAR, POLAR and ARF. Each partner is contributing to the YOPP CFP – funding from MEOPAR and POLAR, and in-kind support (described in further detail below) from ARF. Project proponents submit a single application to this call.

The evaluation of proposals will be conducted by the Research Management Committee of MEOPAR, with the participation of POLAR and ARF. Recommendations on project funding will be provided by this group to the Board of Directors of MEOPAR, and the decision-makers at POLAR and ARF. Successful projects will receive funds from both MEOPAR and POLAR; not all projects are expected to use ARF in-kind support. The funding award will be administered by the individual funding partner.

For the YOPP Call for Proposals 2017-2020, there is **\$2.3 million** available to support research projects over the period April, 2017 to March, 2020. Given the current funding allocation, the partners expect to fund **fewer than eight proposals** under this competition.

C. About MEOPAR

Established in 2012 through Canada's federal [Networks of Centres of Excellence](#) (NCE) Program, MEOPAR is a national network of academic researchers and students, government scientists, and partners in the private, NGO and community sectors working together to reduce vulnerability and strengthen opportunity in the marine environment.

MEOPAR's vision is to enable Canadian leadership in marine environmental observation, prediction and response, in close coordination with partners, and to deliver knowledge, technology, technique and highly-qualified people (HQP) to enhance resilience and optimize economic opportunity for Canada. This will be realized through the development and application of knowledge-based approaches to better anticipate and respond to the risk of the changing marine environment.

MEOPAR's second funding cycle (2017-2022) will build on the capacity established during its first cycle (2012-2017) and focus effort on strengthening pathways with partners and end-users. MEOPAR will continue to develop multi-sectoral and international partnerships to ensure the delivery of knowledge and technology to partners and end-users for the benefit of Canada.

MEOPAR's research plan, organized into two themes (Theme 1: Environmental Change; and Theme 2: Human Activity) is focused on providing research solutions to four Canadian socio-economic challenges. In partnership with government agencies, coastal communities, industry and not-for-profit organizations, MEOPAR will:

- a. Bridge the data coordination gap in ocean observation;
- b. Strengthen predictive capacity and environmental forecasts, particularly in the Arctic in support of the Year of Polar Prediction (YOPP);
- c. Provide knowledge-based and forecasting solutions to increase coastal community resilience;
- d. Provide technology and data solutions that minimize risk and maximize efficiency of marine industry operations, with emphasis on coastal and northern shipping.

More information about MEOPAR's Strategic Vision can be found in Appendix A.

D. About POLAR

[Polar Knowledge Canada](#) (POLAR) is a federal agency established with the coming into force of the *Canadian High Arctic Research Station Act* on June 1, 2015. The Act merged the mandate and functions of the Canadian Polar Commission and the pan-northern science and technology program associated with the Canadian High Arctic Research Station (CHARS) project of Indigenous and Northern Affairs Canada (INAC). Polar Knowledge Canada will eventually be headquartered in Cambridge Bay, Nunavut, once the station is operational in 2017.

The purpose of POLAR is to: advance knowledge of the Canadian Arctic in order to improve economic opportunities, environmental stewardship and the quality of life of its residents and all other Canadians; promote the development and dissemination of knowledge of the other circumpolar regions, including the Antarctic; strengthen Canada's leadership on Arctic issues; and establish a hub for scientific research in the Canadian Arctic. It will create an environment in which both traditional knowledge and science contribute to building solutions to challenges in the Arctic.

The Science and Technology Program's 2014-19 priorities relevant to this call are the following:

- Baseline information to prepare for northern sustainability - this priority is focused on ensuring that scientific considerations are inserted into decision-making and investment choices in order to improve decision support for sustainable communities and responsible development in the North.
- Predicting the impacts of changing ice, permafrost and snow on shipping, infrastructure and communities - this priority is focused on increasing knowledge of the frozen elements of the terrestrial cryosphere and marine environment to support adaptation and improve climate models. Collaboration with stakeholders will strengthen cryosphere research to understand changes in ice, snow, and permafrost across the Arctic and their impact on shipping, infrastructure and global processes.

E. About Arctic Research Foundation (ARF)

Understanding the implications of extreme changing ocean and climate in Canada's North is a national responsibility and priority. Involving communities and ensuring their support are crucial for the success of any such scientific operation in the North. The Arctic Research Foundation (ARF) bridges the gap between key sectors and communities in Canada's North. ARF has a mandate to ensure Canada's northern people and their communities benefit (through jobs, training, economic development, etc.) from the interest of private and public organizations working within Northern Canadian waters and/or land.

F. Glossary of Terms

- **Call Partner:** An organization partnering with MEOPAR to support the CFP (i.e. POLAR and ARF in this CFP).
- **Collaborator:** Researchers who do not receive funding but who are involved in the research project. They can be from an academic institution, government agency, industry partner, etc.
- **Co-Principal Investigator (Co-PI):** Multiple principal investigators on a research project. Co-PIs are responsible for the research grant/contribution as well as any reporting and performance agreements.
- **Deliverables/Outputs:** The product or results of a research project.
- **End-user:** The community with whom research is co-created and/or exchanged.
- **Highly Qualified Personnel (HQP):** Trainees and research staff such as undergraduate and graduate students, postdoctoral fellows, research associates, research assistants, technicians, and summer students.
- **Impact:** The long-term effect that the research-informed products, policies, and services have (e.g. job creation, safer maritime shipping regulations, more effective coastal community adaptation strategies, improved understanding of ecosystem services, etc.)
- **Investigator:** Researchers who are involved in the research project and receive funding.
- **Knowledge Mobilization:** The flow of knowledge leading to social, economic, or intellectual impact, or specific activities and tools designed to put available, evidence-based knowledge into active service by creating impacts that benefit society.
- **Not-for-profit organization (NFP):** An organization created and operated to contribute to the public's benefit, wherein all revenues that go beyond operating costs go back into the organization.
- **Non-governmental organization (NGO):** A category of NFP independent of government oversight.
- **Outcomes:** Changes or benefits to an end-user or partner organization's activities or procedures as a result of the research project.
- **Partner (contributor):** An organization providing cash and/or in-kind contributions in support of the activities of a project.
- **Principal Investigator (PI):** The lead investigator on a research project who has overall responsibility for the research grant/contribution as well as any reporting and performance

agreements.

- Research Management Committee (RMC): Reviews proposals, monitors the progress of the Network funded projects, and makes recommendations to the MEOPAR Board on the activities, budget allocations, and the activities or personnel involved in the Network.

G. Project Areas and Topics

Proposals should show strong connections to [the main objectives of YOPP](#). Endorsement of the proposed work by the YOPP secretariat is strongly encouraged for all projects, and we encourage PIs to [seek endorsement](#) prior to proposal submission. Proposals must align with the funding partners' objectives and ongoing activities of the partners; see evaluation criteria for further detail.

Proposals including the following elements are encouraged:

1. Projects that show meaningful engagement with end users including Northern people and their communities (if applicable) to help address specific knowledge/technology needs related to polar observation and prediction.
2. Activities that utilize the infrastructure assets managed by ARF (small research vessels, autonomous container laboratories). These proposals should be developed in consultation with ARF; a webinar outlining the organization's goals and capacities will be held (visit our website <http://www.meopar.ca> for further details). For those unavailable to attend the webinar, it will be recorded and posted.
3. Activities that establish connections to national and international YOPP projects, including those funded by the European Union "Horizon 2020" program.

Proposals addressing one or more of the following areas are encouraged:

1. Projects that use social science approaches to improve:
 - a. understanding of the requirements for enhanced prediction information and services in polar regions and/or
 - b. delivery of products and forecasts that are of most use to end-users.
2. Real time or near-real time (offshore or coastal) ocean observing systems that can be used for data assimilation into prediction systems, particularly during the YOPP special observing periods (February-March and July-September 2018).
3. Cost effective ways of enhancing observation capacities in support of modeling and forecasting, including (but not limited to) remote sensing and autonomous vehicles.
4. Innovative methods for verification and new parameterizations, which could enhance performance of coupled forecasting models for weather, sea ice and/or ocean conditions.
5. Development, including new verification methodologies, of coupled climate models to predict future weather, sea ice, or biogeochemical states of the Arctic on the scales of seasons to decades.
6. Interdisciplinary projects that bridge observations and/or predictions with the MEOPAR concept of "response" (i.e. decision-making, solutions, and impact).

H. Structure of Project Teams and Eligibility

In keeping with the nature of the NCE program, MEOPAR seeks to build multi-sectoral and interdisciplinary partnerships. Therefore, **proposals must integrate researchers from more than one discipline, as defined by their applicable granting council (NSERC, SSHRC and CIHR) and involve multiple sectors (i.e. academia, private sector, government, NGOs) working together to achieve joint research outcomes¹**. For multi-disciplinary projects, MEOPAR expects true interdisciplinary participation and this implies that any proposed integration of researchers from diverse disciplines be convincing to reviewers and tied clearly to the overall objectives of the proposal. All proposals must demonstrate end-user(s)/partner engagement in the project (beyond the Call Partner). Letters of support should clearly indicate the role of partner(s)/end-user(s) and level of engagement.

Financial support from partners (in-kind and/or cash) will be viewed as a major asset to proposals, but is not a requirement for application. Proposals and letters of support should clearly explain the nature of the participation and any financial commitments. Please review the [NSERC Guidelines on Eligibility and Value of In-Kind Contributions](#).

Investigators are limited to requesting funding in a maximum of two proposals (maximum of one as lead-PI) under this CFP. MEOPAR investigators are limited to holding concurrent funding from a maximum of two activities (projects or Core activities²).

Applicants are encouraged to establish links with existing or previous MEOPAR projects. This may be through formal cooperation with an existing MEOPAR research project or core activity or through a clear explanation of how a distinct research focus is relevant to, and might be integrated with other MEOPAR research activities. Descriptions of existing projects are available on www.meopar.ca/research and applicants are encouraged to contact MEOPAR's Theme Leads to discuss potential collaborations. Questions can be directed to alexa.reedman@meopar.ca.

Funding eligibility for recipients varies by the funding partner (MEOPAR, POLAR). Applicants must clearly state the institution or organization to whom the recipient belongs:

- Educational and academic institutions;
- Provincial, territorial, and municipal governments;
- Indigenous organizations;
- Northern communities;
- For-profit organizations; and,
- Not-for-profit and non-governmental organizations.

At least one funding recipient in the project must hold an academic or adjunct position at a Canadian institution.

¹ Where this is not possible (e.g. technology development project), the proposal must clearly articulate how the project deliverables will support research or knowledge mobilization activities that integrate other disciplines or end users/partners.

² An investigator who has funding in a Core to provide a service (as opposed to conducting his/her/their own research) may apply to the RMC for an exception to this rule.

I. Knowledge Mobilization

Knowledge mobilization, or the generating social and economic benefits by ensuring the rapid flow of ideas and innovations from researchers to Canadian end-users/partners, is a critical component of MEOPAR's strategic plan and an important concept in POLAR's mandate. The MEOPAR Network connects research with partners and end-users to:

- a. Inform policy;
- b. Improve government program and service delivery;
- c. Assist communities and industry to make informed choices about marine risk;
- d. Identify commercial and technology development opportunities.

In order to achieve this, it is important that research projects are co-designed with the partner/end-user in both the design of the project and in the research outcomes and deliverables.

Proposals must involve at least one end-user or partner from outside academia (i.e., private sector, government, NGOs/NFPs) in various roles, such as participating in project definition, providing data, participating as subjects in the research and/or as end-users for the project outcomes. **MEOPAR will only fund proposals that have clear evidence of end-user and partner involvement (beyond the Call Partner). Applicants must demonstrate the willingness of end-users and partners to participate in the research project and put research deliverables to use. This should be evidenced in the letters of support.** Possible end-users could include but are not limited to the marine transportation industry, professional fish harvesters, offshore oil and gas operators, coastal and/or northern communities, environmental organizations, government departments and agencies, ocean technology companies, and others.

A completed Knowledge Mobilization plan (see Appendix B) and commercialization strategy summary (if applicable) must be completed and attached to the proposal and should be based on the following principles:

1. Determine the outcome and impact the project is seeking to achieve and co-develop knowledge exchange activities with end-users/partners from the beginning;
2. Build long-term, trusting relationships based on a two-way dialogue with end-users/partners and co-generate new knowledge together;
3. Focus on delivering tangible results as soon as possible in a way that is accessible and valued by the project's end-users/partners;
4. Monitor and evaluate knowledge mobilization activities throughout the life of the project, change strategies along the way if the desired outcome is not being achieved, and consider how to sustain a legacy of knowledge exchange beyond project funding.

J. Intellectual Property (IP)

The ownership of IP supported by MEOPAR research grants/contributions shall be determined by the by-laws and the policies of the participating institutions (universities and Call Partners). The authority and responsibility for making decisions with regard to the legal protection and commercialization of IP shall rest with the owners of the IP and/or their institution. MEOPAR asserts no claim to any

intellectual property, however, it has a right to use the results of the research for reporting and promotional purposes.

This CFP is being co-funded by POLAR, which may have an impact on intellectual property generated as part of the research project. Applicants are requested to consult their own universities for further information in the case of proposals that may involve or generate protected intellectual property. In general, the Call Partners should have access to the research results for reporting and promotional purposes, which will not be unduly restricted by the investigator, the investigator's university, nor other project partners.

Successful applicants will be required to sort out any IP issues with partner organizations and provide a signed IP agreement to MEOPAR and/or a signed Contribution Agreement with POLAR which includes an IP clause within **12 weeks** of funding notification.

K. Data Management

Applicants will be required to submit a Data Management Plan (DMP), which summarizes their planned approach to manage the data generated or collected by the proposed research. Plans should include the types of data generated, the formats and metadata you expect to employ, how the data will be managed throughout its lifecycle, training and documentation plans for the research team, what resources are required (particularly if you have included a budgeted amount), how and when the data will be made available to others (including MEOPAR and Call Partners), and any special considerations impacting data management (e.g. confidentiality, ethics approvals, etc.). Applicants should ensure that DMPs are compliant with the funder(s)' data policy (see www.meopar.ca/research).

Note: If the proposal is successful, applicants will be required to submit a complete DMP prior to receiving project funds. MEOPAR recommends the Portage DMP Assistant, which has a [MEOPAR-approved template](#), but other formats are accepted if they include the same information.

L. Requirements of Funding

Each investigator receiving MEOPAR funding will enter into a performance and reporting agreement with the Network or with POLAR (for non-academic recipients), which will identify funding schedules as well as the reporting timeline for investigators. PIs will be required to submit an annual report which includes information such as: cash & in-kind funding from partners, a progress report, training and knowledge mobilization deliverables, explanation of any delays to the project's timeline etc.

It is the responsibility of the PI to ensure all necessary certifications, permits, licenses and other approvals have been obtained before any research is carried out in whole or in part (e.g. research involving human subjects, research with effects to the environment, aboriginal people, and animals).

M. Procedure

Proposals can be no more than 13 pages long, single-spaced (no more than six lines per inch), regular 12-point font, with margins of 0.75". This page limit excludes letters of support, CVs and appendices.

The Proposal include the following items:

1. **Cover Page (1 page maximum)**
 - Title and contact information for Principal Investigator;
2. **Plain-Language Summary (on 1 separate page but with 500 word maximum)**
 - The summary is intended to explain the proposal in language that the public can understand. Using simple terms, briefly describe the nature of the work to be done. Indicate why and to whom the research is important, the anticipated outcomes, and how your field, MEOPAR, and Canada will benefit. This plain language summary will be available to the public and used in MEOPAR communications, including the website, if the proposal is funded;
3. **Alignment with MEOPAR Strategic Objectives (1/2 page maximum)**
 - Specific contributions of the research to MEOPAR's Vision (see Appendix A);
 - How the project fits in MEOPAR's thematic structure;
 - How the project supports POLAR and/or ARF's vision and/or objectives;
 - How does the project support the YOPP objectives.
4. **Research Plan, Approach & Deliverables (5 pages maximum)**
 - Problem(s) to be addressed, including overview of the state-of-the-art developments in research topic;
 - Methodological approach;
 - Anticipated research deliverables;
 - Innovation and significance of research;
 - Timeline or Gantt chart;
 - Connections and perspectives, if applicable (e.g., connections to researcher's prior or current research activities, future perspectives beyond the funding duration).
5. **Linkages and Support (1 page maximum)**
 - Linkages to other MEOPAR activities and/or other existing projects;
 - End-user(s)/partner(s) involvement;
 - External partnerships (other academia, businesses, government, non-governmental organizations).
6. **HQP Focus (1/2 page maximum)**
 - Number and roles of highly-qualified people (HQP) to be engaged in the project;
 - Plan for innovative training of HQP to be involved in the project;
 - For postdoctoral proposals, career development plan for postdoctoral fellow.

7. Excellence of the Researcher(s) (2 pages maximum)

- Relevant qualifications of the PI, Co-PIs and investigators including expertise in the specific topic of this CFP, and selected relevant publications;
- Experience with interdisciplinary and collaborative research;
- Experience with engaging end-users/partners;
- Qualifications of collaborators, if relevant;

8. Budget (Appendices C & D)

- Detailed budget according to attached template (Appendix C);
- Budget notes and justification;
- Knowledge mobilization activities;
- Projects must include a line item for travel to the Annual Scientific Meeting and Training event (see schedule below); please budget for 1 PI and 1 HQP per project;
- Non-NCE contributions table (Appendix D).

9. Data Management Plan (1 page maximum)

- Plans must align with MEOPAR's Data Management Policy (available on our website: <http://www.meopar.ca/research> or POLAR's Data Policy (for non-academic recipients)
- Note: if the proposal is funded, the investigator will be required to submit a full data management plan (instructions will follow after the review process).

10. Knowledge Mobilization Plan (Appendix B)

- Table (Appendix B) filled out;
- Summary describing potential commercialization (if applicable).

11. References (1 page maximum)

- Citations to academic and other professional publications.

12. Curriculum Vitae

- CV for each funded investigator (in one of the Tri-Council granting agencies; Standard Formats);
- For non-academic applicants, a simple curriculum vitae for each funded investigator is acceptable.

13. Letter of Support (1 letter minimum, each letter maximum of 2 pages)

- Minimum of one, 2-page letter of support from end-user/partner organizations explaining their involvement in the research project and how the outcomes or deliverables will be used.

14. Official Languages

- Where a program supports activities that may be delivered to members of either official language community, access to services from the recipient will be provided in both official languages in Part IV of the Official Languages Act is applicable. In addition, POLAR will ensure that the design of the delivery of programs respect the obligations of the Government of Canada as set out in Part VII of the Official Languages Act. Provide (as an appendix) a brief description of how the *Official Languages Act* has been taken into account pertaining to your project, if applicable.

15. Gender Based Analysis

- The gender-based analysis recognizes that fewer women study science and technology at the high school and university levels than men. The capacity-building activities under POLAR's Science and Technology Program will be designed to encourage greater participation by women, and in particular, girls in education, outreach, and research opportunities in science and technology. Provide (as an appendix) a brief description of how Gender Based Analysis has been taken into account pertaining to your project, if applicable.

16. Total Canadian Government Funding and Stacking Limits

- The maximum level of total Canadian government funding (including the funding from POLAR) shall not exceed 100% for eligible programs and projects. Proposals for funding from each recipient shall address the requirement for the recipient to declare any and all prospective sources of funding for the program or project, inclusive of all federal, provincial, territorial, or municipal governments (total government assistance) and other sources that are expected to be received.

N. Notes to Procedure

Questions and Clarifications

All questions and clarifications regarding this CFP should be directed to alexa.reedman@meopar.ca. MEOPAR will post the response on the MEOPAR website for all applicants to view and will solicit response input from the Call Partners as necessary. Applicants are prohibited from any direct communications with the Call Partners (POLAR and ARF) regarding the proposed research project. Any such communication may result in an application being removed from the competition.

Budget

A detailed budget with specific breakdowns and justification for each category, as well as between PIs and Co-PIs, is required in the proposal. For example, in the "Personnel" section, please be specific about the number of people to be hired and their status (Masters student, PhD candidate, Postdoctoral Fellow, Research Associate etc.). If listing an "Equipment" category, please specify the type of equipment, approximate cost and rationale for purchase or rental. If listing a "Travel" category, please include information such as the intended destinations and number of people traveling. Please differentiate between travel required for the research activity, travel related to the Annual Scientific Meeting/Training Event, and knowledge mobilization activities (e.g., travel to conferences or to meet with end-users/partners).

As mentioned above in the Budget section, projects must allow for one PI and one HQP to attend the MEOPAR Annual Science Meeting and Training Event. These will be held jointly in the following locations (see table 1):

Table 1. The Annual Scientific Meeting (ASM) schedule for MEOPAR's Cycle II

Date	Location
June, 2017	Montreal, QC
June, 2018	Halifax, NS
June, 2019	Winnipeg, MB
June, 2020	Ottawa, ON
June, 2021	Victoria, BC

The budget should follow the format of the attached template (Appendix C). Please indicate whether partner contributions are in the form of cash or in-kind. Please review the [NSERC Guidelines on Eligibility and Value of In-Kind Contributions](#). Note that the timing of Year 1 is April 1, 2017 – March 31, 2018. MEOPAR's fiscal year closes on March 31 and funding will not be released until April 2017.

HQP

Applicants should provide a description of the main focus of each supported HQP, and when possible, specific names of those to be engaged. As an NCE, MEOPAR is mandated to assist in the training and development of the next generation of Canadian researchers. As such, MEOPAR has initiated a training network for those HQP involved in MEOPAR-funded projects to give them professional development opportunities they would not normally receive from their program of study. In addition to the training at the network level, each project is encouraged to provide creative training and professional development opportunities for their HQP, which can be described in the HQP section.

O. Submission Timeline

The application deadline for this Call for Proposals is 4:00 pm Atlantic Time, March 6, 2017. Proposals received after this deadline will not be accepted. Applications must be submitted electronically in PDF format to alex.reedman@meopar.ca.

An acknowledgement of receipt will be provided within 1 working day of MEOPAR receiving the proposal.

MEOPAR's Administrative Centre will receive proposals and provide an initial compliance screening. **Proposals that do not follow these requirements explicitly will be returned to the applicant(s) and given a 24-hour period to comply and resubmit. Proposals that still do not comply with these criteria will be removed from the competition and will not be considered.**

Proposals will be reviewed and assessed by MEOPAR's Research Management Committee (RMC) and additional outside expert reviewers as needed. The RMC's recommendations on the Proposals will be forwarded to MEOPAR's Board of Directors for final approval in April 2017. Financial awards will be in place by the end of April 2017, contingent on signing of Network Funding and Reporting Agreements and on signing of Contribution Agreements with POLAR (for non-academic recipients).

P. Evaluation Criteria

Proposals will be assessed based on the following evaluation criteria:

M=Mandatory

P=Preferred

1	Need and Impact
M	A non-academic stakeholder (other than the Call Partner) has clearly stated a need for the research project, and an intention to use the research outputs to address this need
P	The proposal addresses an issue with a clear knowledge, technology, and/or research gap in the scientific community
M	The proposal addresses an issue that is of critical importance to Canada, and that will benefit Canadian society, economy, and/or environment
2	Alignment with Funders' Vision/Mandate
M	The proposal links strongly and convincingly to MEOPAR's strategic objectives
P	The proposal links to current MEOPAR research and Core activities
M	The proposal links strongly and convincingly to POLAR's strategic objectives
3	Alignment with CFP Objectives
M	The proposal addresses the CFP's objectives (see section G)
4	Excellence of the Research
M	The research is excellent and state-of-the-art
P	The proposed project is highly innovative and/or original and has the potential to produce significant advances
M	The proposal deliverables, timelines, and methodologies are clear and realistic
5	Research Team
M	The research team has the commitment and capacity to integrate the scientific disciplines.
M	The research team includes multi-sectoral expertise
M	The research team has the appropriate research expertise with no deficiencies
P	The team includes international participation with clear relevance/utility to Canada (Note: MEOPAR funds cannot be transferred to international collaborators)
6	Knowledge Mobilization
M	The proposal shows clear end-user/partner involvement in the project/question formulation, the research activities, and in the uptake of the research outcomes/deliverables (beyond the Call Partner)
M	The proposal's knowledge mobilization plan is feasible and realistic (e.g. budget is appropriate)

P	The proposal shows promising commercialization potential (e.g. application or development of new and novel technologies, methods, or solutions)
7	HQP/Training
M	The proposal has extensive involvement and well-defined responsibilities and opportunities for the integration of HQP
M	There is a clear plan for training of HQP including opportunities for interdisciplinary learning, cross-sector engagement, and professional development
P	The training plan includes involvement from non-academic partners
8	Data Management
M	The proposal's data management plan is consistent with the funder(s)' data management policy.
9	Budget
M	The budget has the appropriate resources assigned to accomplish research, training, and knowledge mobilization activities
M	The budget includes travel to the Annual Scientific Meeting and Annual Training Session for investigators and HQP
10	Letters of Support
M	Partners and end-users have demonstrated a keen and strong commitment to their participation in the project, and their roles are clearly articulated
P	There is a significant and quantifiable cash and/or in-kind contributions from partners/end-users
P	There are letters from a wide range of partners and end-users in various sectors (e.g. academic, government, NFPs, municipalities, etc.)

Application Checklist

- ✓ Cover Page (with project title and contact information of PIs, Co-PIs and investigators)
- ✓ Plain Language Summary
- ✓ Research Proposal (items 3-9 in Section L)
- ✓ Knowledge Mobilization & Commercialization Plan (using Appendix B)
- ✓ Budget (using attached template in Appendix C)
- ✓ Research Team CVs
- ✓ Letters of Support
- ✓ Official Languages
- ✓ Gender-Based Analysis

Questions?

Questions about the YOPP CFP can be referred to: alexa.reedman@meopar.ca. Proponents are prohibited from contacting POLAR or ARF directly about this CFP. MEOPAR will consult with Call Partners where necessary and post responses to questions on MEOPAR's "Call for Proposals" webpage, under "FAQs".

Appendix A

Additional Information about MEOPAR

There are new and altered risks and opportunities in the changing marine environment. They are driven by natural systems and phenomena, including the effects of climate change, and occur as a result of humankind's rapidly changing use of the ocean. We can be passive and react as best we can, or we can proactively respond and better position the Canadian economy and society using knowledge-based solutions. MEOPAR's premise is that our future depends on an informed relationship with the changing ocean and coastal zone.

MEOPAR's vision and strategic outcome is to provide Canadian leadership in marine environmental observation, prediction and response in close coordination with partners and to deliver knowledge, technology, and people that enhance resilience and economic opportunity.

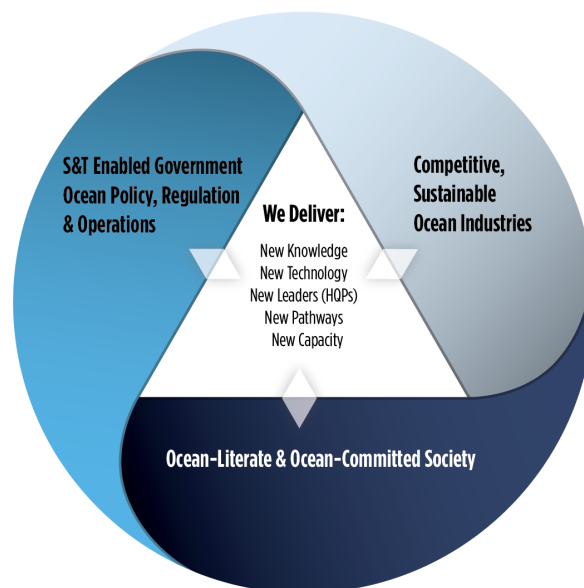
MEOPAR's first cycle established new national and multi-sectoral partnerships and structures, developed new tools and regional nodes for observation, prediction and response, created expert capacity, and integrated social and natural sciences in knowledge-based approaches to anticipate and respond to marine risk and opportunities. In Cycle II, MEOPAR's research, training and knowledge transfer activities will build stronger national and international partnerships and deploy capacity towards three main areas of impact:

Competitive, sustainable ocean industries: Canada's changing, and often dangerous marine operating environment can compromise operations, complicate infrastructure planning and affect efficiency. MEOPAR generates knowledge, tools and best practices to enable industry to be safe, competitive, environmentally responsible and efficient when operating in the ocean environment.

Science and technology-enabled government ocean policy, regulation and operations: Informed decisions based on sound science leads to safe, equitable and sustainable practices that minimise negative impacts on the marine environment. MEOPAR provides pathways for the engagement of researchers with government and industry in the generation and transfer of knowledge, approaches and qualified people.

Ocean-literate and ocean-committed society: Canada's coastal communities, from cities to villages, are disproportionately affected by changing environmental conditions. MEOPAR facilitates informed planning and adaptation to climate and ecosystem changes, and preparedness for marine hazards for governments, industry and civil society. Canadian society can manage risks and opportunities only when the profound influence the changing ocean has on the environment and climate is better understood.

During Cycle II, MEOPAR will: lead and participate in interdisciplinary research of benefit to Canada; build the human resource capacity required to meet the future challenges of Canada's marine environment, and; mobilize scientific knowledge, technology and people through cross-sector engagement.



MEOPAR will produce measureable results by addressed four socio-economic challenges:

1. A national, multisectoral approach to ocean observation to address Canada's coordination gap;
2. Our ability to predict change of ocean and atmospheric conditions, especially in Canada's North;
3. Our understanding of the vulnerability of Canada's coastal communities and industries; and
4. Technology and data solutions that minimise risk and maximise efficiency of marine industry operations, with special emphasis on coastal and northern shipping as well as offshore operations.