CANADA FOUNDATION FOR INNOVATION

Major Science Initiatives

Guidelines for applying for an extension of funding

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Table of contents

Intended audience	1
Competition process	1
Timeline	2
Available funding	2
Documentation required	2
Proposal	2
Assessment criteria	3
Updated budget and request for funding for 2020–23	3
Suggested reviewers	4
Submitting documentation to the CFI	4
Merit review	4
Expert Committee	5
Expert Committee report	5
Collaboration with funding partners	5
Ensuring funding recommendations do not exceed available budget	6
Funding decisions	6
Transitional funding	6
Appendix A - Cover letter template	7

Intended audience

In 2017, the Canadian Light Source, SNOLAB and the Canada's Design Network were awarded funds through the Major Science Initiatives (MSI) 2017 competition for three of the five-year funding period. The Multidisciplinary Assessment Committee recommended that these facilities be invited to submit a full proposal at the three-year mark as opposed to undergoing a midterm review. In March 2019, the CFI extended the MSI award cycle from the initial five-year period to six years. These facilities are therefore invited to reapply to the MSI fund for a three-year extension covering fiscal years 2020–21 through 2022–23. Note that the CFI will entertain proposals exclusively from these three facilities:

Project title	Project leader	Administrative institution
SNOLAB	Nigel Smith	Queen's University
Canadian Light Source	Robert Lamb	University of Saskatchewan
Canada's National Design Network	Gordon Harling	Queen's University

Facilities funded for five years through the MSI 2017 competition should refer to the document "Major Science Initiatives Midterm review guidelines."

Competition process

The competition process will entail, for each facility, an assessment by an independent committee of experts recruited for their experience and knowledge of comparable international facilities. The Expert Committee will review documentation prepared by the facility and will meet to formulate recommendations to the CFI. The agenda will include a face-to-face meeting with representatives from the facility and the administrative institution to allow committee members to ask questions and clarify their understanding of the facility and the progress achieved to date on the facility's areas for improvement as identified by the initial merit-review committees. The committee will recommend to the CFI the level of funding for the facility for 2020–21 through 2022–23. The outcome of the review process could result in either stable or increased funding to reflect the appropriate level of contribution to the total operating and maintenance (O&M) costs of the facilities. Conversely, if the facility fails to demonstrate satisfactory performance, a reduction or even termination of funding could result.

CFI support through the MSI fund is intended to:

- Secure and strengthen state-of-the-art national research facilities that enable Canadian researchers
 to undertake world-class research and technology development that lead to social, health,
 economic, or environmental benefits to Canadians;
- Enable funded facilities to operate at an optimal level and to have their scientific and technical capabilities fully exploited; and,
- Promote the adoption of best practices in governance and management, including long-term strategic and operational planning in keeping with the scale and complexity of the facility.

The Expert Committee will be tasked with determining the degree to which the MSI funding for the facility has supported, and how the requested funding will further support, the achievement of these objectives.

Timeline

Dates	Activities
June 25, 2019	Proposal submission deadline
July to September 2019	Expert Committee meetings
November 2019	CFI Board of Directors meeting – funding decision
December 2019	Communication of results to administrative institutions

Available funding

The CFI has set aside approximately \$183.5 million to allow facilities that have been recommended for funding for three years to reapply in 2019–20 for funding and to allow for potential adjustments to other national research facilities following the midterm review, including extending the MSI award cycle to six years.

The total CFI funding, including Infrastructure Operating Funds (IOF) must not exceed 40 percent of a facility's total eligible O&M costs for 2017–18 and 60 percent for 2018–2023.

While the margin for flexibility is limited, the CFI has sufficient funds available to accommodate modest adjustments in the facilities' budgets. However, facilities should not see the review process as an opportunity to develop a new request but as a means to make minor changes to their O&M budget to meet their evolving needs for 2020–23.

Documentation required

The administrative institution must submit a proposal to the CFI that addresses the assessment criteria of this competition. This proposal, along with the strategic plan¹ of the facility and a budget request for 2020–2023 will form the basis of the documentation used to assess the facility's performance to date and the request to extend the CFI funding for an additional two years.

In addition to the documents requested above, the CFI will share the review materials from the previous review (i.e. the Expert Committee and Multidisciplinary Assessment Committee reports from the 2017 competition) with the Expert Committee to inform its assessment. Note that the annual performance reports will not be shared.

Additional documentation may be requested by the CFI as required.

Proposal

The proposal (up to 32 pages, including the list of publications) should clearly present the merits of the national research facility by addressing the five assessment criteria below. The Expert Committee will assess the performance of the facility to date and future plans including the budget request for 2020–23. Sufficient information should be provided to enable reviewers to evaluate the proposal in accordance with the assessment criteria and the objectives of the MSI Fund.

When addressing the assessment criteria, describe the facility's current activities, the achievements realized since April 1, 2017 and the planned activities for the 2020–23 period. Where appropriate, the

Note that the CFI will include the strategic plan of the facility as submitted in April 2016 as part of the 2017 MSI proposal. If the strategic plan has been updated since then, please ensure that the CFI has received the updated version.

proposal should include the key performance indicators as per the annual performance report to support these achievements and future activities. Describe the actions taken in response to the 2017 Expert Committee and Multidisciplinary Assessment Committee concerns within the criteria to which they apply.

When addressing the scientific excellence criterion, include a selected list of publications since 2017 (up to 2 pages) that showcases the quality and reach of the research and/or technology development enabled by the facility.

The proposal should be prepared as a PDF document using the standard US letter format (8.5 x 11 inches). The font and layout should be chosen to maximize legibility both on-screen and in printed form.

Assessment criteria

Scientific excellence

The facility is used by researchers and highly qualified personnel (HQP) of the highest calibre and enables innovative and leading-edge research that leads to social, health, economic, or environmental benefits to Canadians.

International competitiveness

The facility's highly specialized equipment, services, resources, and scientific and technical personnel are internationally-competitive and are a high priority for the user community.

Need for CFI funding

There is a demonstrated need for the requested funding to allow the facility's scientific and technical capabilities to be fully exploited and to operate at an optimal level to address the needs of the user community.

Excellence in governance

The facility adopts best practices in governance, including long-term strategic planning, as appropriate to its size and complexity. The facility defines its future needs in consultation with the user community.

Excellence in management and operations

To realize the strategic objectives, the facility is effectively and efficiently operated and has established mechanisms to ensure optimal use by the user community.

Updated budget and request for funding for 2020–23

To simplify the application process, the proposal budget will be submitted as an amendment to the existing MSI 2017 project using the Amendment module in the <u>CFI Awards Management System</u> (<u>CAMS</u>). Select "Midterm review" as the reason for the amendment. Institutions must provide actuals for 2017–18 (Year 1) and 2018–19 (Year 2) and forecasts for 2019–20 through 2022–23 (years three to six). The forecast for 2019–20 must not exceed the amount approved at finalization or in the most recently approved amendment for the project.

As noted previously, the CFI will entertain modest adjustments to the current O&M budget, however, facilities should not see the review process as an opportunity to develop a new request but as a means to make minor changes to their O&M budget to meet their evolving needs for 2020–23.

A budget justification, not to exceed 10 pages, must be attached to the amendment module. The budget justification should clearly describe the costs and sources of funding for the facility, as well as justify the need for the funds requested from the CFI. If an increase in funding from the CFI is requested, a compelling rationale for the increase must be provided.

Eliqible costs

Eligible costs are defined as costs related to the operations and maintenance of the national research facility. If a particular item is not clearly defined as eligible or non-eligible, the CFI will consider the request

on a case-by-case basis. For examples of eligible and ineligible costs, refer to Appendix 2 of the MSI oversight framework.

Eligible partners

Any partner from Canada or abroad may contribute to the facility's eligible O&M costs, including the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada, the Social Sciences and Humanities Research Council, departments and agencies of the federal, provincial, territorial and municipal governments, firms and corporations, institutions and other users (e.g. through user fees).

Suggested reviewers

Identify a minimum of ten potential reviewers and provide their names and contact information to the CFI by January 31, 2019. Suggested reviewers should be well-qualified to review the facility but must not be in a position of conflict of interest (refer to the CFI's conflict of interest and confidentiality agreement).

The list of suggested reviewers must collectively include individuals with the expertise to evaluate the governance, management and financial oversight of the facility in addition to the quality of the research enabled by the facility. Preference should be given to individuals from comparable research facilities. In accordance with its equity, diversity and inclusion statement, the CFI encourages the suggestion of a diverse cross-section of potential reviewers (diversity may include gender, culture, career stage, sector, etc.)

The final choice of committee members rests with the CFI.

Submitting documentation to the CFI

The proposal (PDF), a signed cover letter and the list of suggested reviewers must be submitted to the CFI by email to MSI-ISM@innovation.ca. The updated budget and budget justification must be submitted in CAMS through the amendment module.

Deadline	Document(s)
January 31, 2019	List of suggested reviewers
June 25, 2019	Proposal (PDF) and cover letter
	Updated budget and request for funding for 2020–23
	Updated strategic plan of the facility (if applicable)

Merit review

Each facility will be reviewed by an independent committee of experts recruited for their knowledge and experience of comparable facilities. In order to ensure consistency of the review process for all three facilities eligible to apply in this competition, each Expert Committee will be chaired by the same individual. Each committee will be tasked with determining whether the proposal meets the standard of excellence for the competition and with recommending the amount that should be awarded. Each proposal will be assessed on the basis of the five assessment criteria outlined above. To be considered for funding, the proposal will need to satisfy all five criteria to a degree commensurate with the size and complexity of the facility. During the review, an emphasis will also be placed on the actions and responses to the 2017 committees' comments and recommendations that led to the 3-year funding decision. The meeting agenda will include a face-to-face meeting with representatives from the facility and the administrative institution to allow committee members to ask questions and clarify their understanding of the facility and the progress achieved in the first half of the funding period.

Expert Committee

The CFI will recruit a committee of experts normally made up of five to eight individuals. These individuals are: subject matter experts in the research or technology development enabled by the facility; and/or professionals familiar with key areas of activities such as the governance and administration of large-scale facilities, or knowledge translation and transfer (i.e. use of the research findings in areas such as industry, policy etc.). Expert Committee members are invited several months in advance of the review meeting.

The Expert Committee will meet in person to review the facility's progress and make budget recommendations to the CFI for 2020–23. The meeting will include question and answer (Q&A) sessions with representatives from the facility and administrative institution. Up to five representatives may participate. These representatives should normally include:

- the project leader,
- the chair of the facility's Board of Directors (or equivalent governance body),
- a representative from the administrative institution, and
- up to two other representatives of the facility's choice

Facility representatives should be chosen based on their ability to address the assessment criteria and progress toward meeting the conditions that were imposed in the initial review (if applicable).

The Q&A sessions are facilitated by the committee Chair. All members of the Expert Committee, including the Chair, ask questions with the purpose of getting a better understanding of the operational realities, features, and outcomes and impacts of the facility. The insight gained from these discussions will assist the Expert Committee in its assessment and during *in camera* discussions.

The in camera sessions are dedicated to the discussion and rating of the assessment criteria and the preparation of feedback for the CFI and the facility. Facility representatives may not attend these sessions.

CFI staff and observers from funding partners may be present, both during the Q&A and in camera sessions.

Expert Committee report

Following the Expert Committee meeting, a report will be prepared to summarize the committee's assessment of the facility and provide feedback. The report will include the committee's assessment of the degree to which the CFI funding has enabled the facility to meet the competition objectives to date and the recommended level of CFI funding for the 2020-2023 period. If the overall demand for CFI funds exceeds the resources available, the CFI will ask Expert Committees to provide options to fit within the overall fund envelope.

Collaboration with funding partners

To coordinate the review processes and avoid duplication of review efforts, the CFI may provide committee reports, along with the names and affiliations of committee members, to relevant funding partners named in the proposal. In addition, representatives from the relevant funding partners will be invited, where appropriate, to participate as observers in the expert review process.

The CFI encourages institutions to work with all current and potential federal, provincial and territorial funding authorities and other funding partners at an early stage in the planning and development of proposals.

Ensuring funding recommendations do not exceed available budget

Expert Committees will be instructed to carefully review the 2020–23 budget requests and only recommend funding that is fully justified and necessary to meet the objectives of the MSI Fund. If the funding recommendations exceed the available budget for the MSI Fund, the CFI will consider a number of options to reduce the total recommended amount. This could include choosing from options for reduced funding provided by the Expert Committees, applying a percentage-based reduction to all funding recommendations, convening a multidisciplinary advisory committee, or other approaches as necessary.

Funding decisions

Funding decisions will be made by the CFI Board of Directors at its November 2019 meeting. Following this meeting, the review materials for each proposal will be provided to the administrative institution.

Transitional funding

In the event that funding is not renewed for one or more of the facilities, the CFI may provide short-term transitional funding to assist these facilities. They will be permitted to make a one-time request for funding that may be used over a maximum of two years (2020–21 and 2021–22) and may not exceed a total of 75 percent of the facility's current annual CFI funding (e.g. the facility may plan on using the full 75 percent in a single year, or 50 percent in the first year and 25 percent in the second year).

If applicable, the CFI will follow up with the administrative institution to determine whether transitional funding is required. Should this be the case, the administrative institution will be given instruction on how to submit a request.

Appendix A - Cover letter template

To the CFI,

Re: Major Science Initiatives Fund - 2019 MSI review

We are pleased to submit the proposal for extension of funding for the < name of installation>.

By signing below, we acknowledge having received and read the proposal for the extension of funding, as well as the MSI budget and justification, and further certify that all information incorporated in these documents is true, accurate, and complete, and that MSI Board members have seen and approved the report.

Chair of the facility's Board
Name:
Signature:
Date:
President or authorized signatory of the lead institution
Name:
Signature:
Date:

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