

Major Science Initiatives Fund

**Application for an extension of
funding**

**Guidelines for expert committee
members**

May 2019

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Mandate of the Canada Foundation for Innovation

The Canada Foundation for Innovation (CFI) makes financial contributions to Canada's universities, colleges, research hospitals and non-profit research organizations to increase their capability to carry out high quality research. Read more at innovation.ca.

Major Science Initiatives Fund

Since its inception, the CFI has supported a select number of key national research facilities. Owned by one or more institutions, these facilities serve communities of researchers from across the country and internationally. Such facilities are increasingly complex and international in scope and require robust governance, management and stewardship mechanisms to ensure that they are funded, managed and operated for success, and ultimately contribute to the Canadian economy and society at large.

The Major Science Initiatives (MSI) Fund was designed to provide a systematic approach for evaluating and addressing the operating and maintenance (O&M) funding needs of such national research facilities as well as their scientific performance, and to ensure they have robust management and governance policies and practices in place.

The 2017 MSI Fund competition was designed to provide support toward the O&M needs of a limited number of national research facilities for the period of 2017–2018 through 2022–2023¹. Funding decisions were reached following a rigorous merit-review process, which included review by an Expert Committee and a Multidisciplinary Assessment Committee. Funding provided by the CFI complements existing O&M resources to address the operational needs of the successful national research facilities.

The Canadian Light Source, SNOLAB and the Canada's Design Network were awarded funds through 2017 competition for the first half of the 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. These facilities were therefore invited to reapply to the MSI fund for a three-year extension covering fiscal years 2020–21 through 2022–23.

Review 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 (see Appendix A) 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 2021–23. 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;

¹ In March 2019, the CFI extended the MSI award cycle from the initial five-year period to six years.

- 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.

Committee membership

An Expert Committee is typically comprised of a Chair and four to seven members, depending on the breadth of the facility in its purview.

A single Chair will be responsible for the three facilities invited to apply for an extension of funding. Members are subject matter experts in the research or technology development enabled by the facility and professionals familiar with key areas of activities such as the governance and administration of large-scale facilities, and knowledge translation and transfer.

The Chair ensures that the Expert Committee functions effectively and objectively in accordance with CFI policies. Members evaluate the facility based on how well it meets the MSI fund objectives.

Governing principles for committee members

Expert Committee members are expected to maintain the highest ethical standards in fulfilling their role. They are appointed as individuals — not as advocates or representatives of their discipline or of any organization. They must also adhere to CFI's [conflict of interest and confidentiality agreement](#).

The CFI expects institutions and researchers not to contact committee members for information on committee deliberations. Members are instructed not to discuss any matters related to the review process or specific proposals with the applicants or outside the Expert Committee meeting. Please refer any questions from institutions or other parties to the CFI for response.

Equity in the merit-review process

Merit review is a subjective process by nature. Bias can manifest in several ways and could be based on a school of thought, fundamental versus applied or translational research, areas of research, sub-disciplines or approaches (including emerging ones), size or reputation of a participating institution, age, language, personal factors or gender of the applicant.

To sensitize committee members to unconscious biases they may hold, the CFI cautions them against any judgment of an application based on such factors, and asks them to constantly guard against the possibility of implicit bias influencing the decision-making process. This is essential in order to ensure that all participants in the merit-review process have the same base knowledge of the processes and policies in order to conduct an effective and fair merit review. Members are strongly encouraged to refer to an [online training module](#) as a guide for preventing unconscious bias in merit review. The short module was developed by the Canadian Institutes for Health Research, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council, and promotes understanding of unconscious bias, how it can affect merit review, and ways to mitigate biases of different kinds.

Timeline

Dates	Activities
Deadline for facilities to submit: June 25, 2019	Final document submission deadline for facilities
Pre-meeting: July, August, September 2019*	<p>Access documentation and start evaluating facility</p> <ul style="list-style-type: none"> ▪ Activate access to the CFI Awards Management System (CAMS). ▪ Access the competition materials in the reviewer dashboard in CAMS. ▪ Evaluate the facility against the fund's assessment criteria. ▪ Prepare a preliminary assessment using the <i>Expert reviewer preliminary report</i> template and email it to the CFI three working days prior to the meeting.
Expert Committee meeting: September 2019*	<p>Expert Committee meets to discuss and evaluate the facility</p> <ul style="list-style-type: none"> ▪ The committee assesses the facility against each criterion and identifies strengths and weaknesses for each. ▪ The committee assesses the facility's response to concerns raised in the initial review. ▪ The committee makes a funding recommendation for the 2020–23 period.
Post-meeting: September/October 2019	<p>Finalize Expert Committee report</p> <ul style="list-style-type: none"> ▪ Review and approve the consensus report in the weeks following the meeting.
Decisions: November 2019	Funding decisions by CFI Board of Directors
Communication: December 2019	Communication of results to administrative institutions

* Depends on the Expert Committee meeting date.

Pre-meeting activities

Documentation and review material

The administrative institution must submit a proposal to the CFI that addresses the assessment criteria of this competition. This proposal, along with the strategic plan 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 three 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. Additional documentation may be requested by the CFI as required.

This information will be shared with committee members through the [CFI Awards Management System \(CAMS\)](#).

CFI Awards Management System

Members will be sent an email to activate their access to CAMS. All the documents pertaining to the committee meeting and necessary to conduct the evaluation are available through the reviewer dashboard on CAMS.

To access the review materials, members must log into CAMS and click on the name of the committee. This will bring them to the *Review and documentation* page. On this page are:

- Relevant reference materials (e.g. *Guidelines for Expert Committee members* and the template for the *Expert reviewer preliminary report*);
- Key details about the meeting (e.g. meeting agenda); and,
- The documentation for review by the Expert Committee.

For more information on how to use the CFI reviewer portal consult the following document: [Getting started with the CFI Awards Management System \(CAMS\): An overview document for reviewers.](#)

Preliminary review process

In preparation for the Expert Committee meeting, members must read all of the materials provided in order to engage fully in the discussion. To assist with the preliminary review, an *Expert reviewer preliminary report* template is available on the reviewer dashboard in CAMS.

The committee will assess the facilities on the basis of five assessment criteria (see below) that reflect the MSI Fund's objectives. It will also assess whether the facility's responses to the concerns raised in the initial review are satisfactory or not.

Members must rate the degree to which the facility meets each criterion standard using an assessment scale. The ratings must be substantiated in the preliminary report by explaining (in point form or short sentences) the perceived strengths and weaknesses of the facility in each criterion and should reflect the member's assessment of both the past performance and future potential of the facility.

Finally, the appropriateness of the budget and cost estimates should also form part of the preliminary assessment under the budget section of the report. The budget evaluation should identify any items not adequately justified in view of the planned activities.

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.

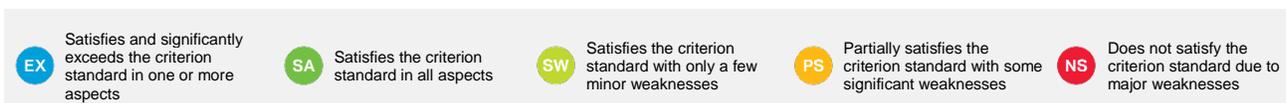
Excellence in governance

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.

Assessment scale



Preliminary reports

The expert reviewer preliminary report should be sent by email to the CFI three working days in advance of the meeting. These reports are essential to identify areas of focus for the discussion at the time of the meeting and to help inform the Expert Committee report. They will not be shared with the applicants.

Expert Committee meeting

The Expert Committee will meet in person over one day (refer to the template agenda found in Appendix A). The meeting will include face-to-face sessions with representatives of the facility, its Board of Directors and the administrative institution. These representatives should normally include:

- the project leader and facility director,
- 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.

Prior to the face-to-face sessions, the committee will meet to discuss the review documents and identify questions to be raised with the representatives.

The meeting will be conducted in two parts: the first part of the meeting will involve an assessment of the performance of the facility and progress towards addressing the reviewer concerns in the first half of the MSI funding period (2017–19). The second part will consist of an assessment of the plans and O&M needs for the remainder of the MSI funding period (2020–23).

Both parts will begin with short presentations from facility representatives, followed by a question and answer (Q&A) period. The Q&A sessions are facilitated by the Chair of the committee.

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.

The committee will also have the opportunity to meet separately with the Chair of the Board (or delegate) from the facility.

Following the discussion, the committee must reach a consensus on the degree to which the proposal satisfies each of the assessment criteria. The committee must also formulate a detailed assessment on: the overall impact of MSI funding on the scientific excellence of the research program(s); the outcomes and impacts of the research; the governance, management and operations of the facility; and, the extent to which the facility has addressed the concerns raised in the previous review and progressed on the initial Expert Committee recommendations.

The committee is also asked to provide both an evaluation of the budget as well as a funding recommendation that takes into account the above assessment and needs of the facility for the 2020–23 period. The committee must 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 as reflected by the five assessment criteria. 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.

A CFI Senior Programs Officer will be present to act as secretary to the Chair and as a resource for the committee. Other CFI staff and representatives from funding partners may be present as observers, both during the Q&A and in camera sessions.

Expert Committee report

Following the Expert Committee meeting, CFI staff will draft a report to summarize the committee's assessment of the facility and to provide feedback to the administrative institution. The report will include the committee's assessment of the degree to which CFI funding has enabled the facility to meet the competition objectives to date and the recommended level of CFI funding for the 2020–23 period.

Committee reports are drafted by CFI staff shortly after the meeting and finalized in consultation with the Chair of the committee. In some cases, further input may be sought from committee members on the draft report.

Collaboration with funding partners

To coordinate 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.

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.

Appendix A – Agenda template

MAJOR SCIENCE INITIATIVES FUND

Review of “facility name”

DATE

MEMBERSHIP

Chair

Members and CFI staff

Committee members are asked to read the following supporting document before the meeting (available on the [CFI Reviewer Portal](#)):

- Guidelines for expert committee members
- Review package

Day before the review meeting

6:30 – 8:30 pm Committee briefing dinner (or briefing at breakfast)

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Day of the review meeting

8:00 am Breakfast

8:30 am In camera committee discussion/preparation

Part I: Performance in years 1-3 regarding fund objectives and progress towards addressing reviewer concerns

9:15 am Face-to-face meeting

15 min | Presentation by *Facility/institutional* representatives

60 min | Question period

10:30 am Break

Part II: Future plans and O&M needs for the remainder of the MSI period

10:45 am 30-min in camera committee preparation

11:15 am Face-to-face meeting

15 min | Presentation *by Facility/institutional* representatives

45 min | Question period

12:30 pm Working lunch (committee in camera)

1:30 pm In camera meeting with the MSI Board Chair

2:15 pm Committee report outline (committee in camera)

3:30 pm Wrap-up and meeting adjournment

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