

CANADA FOUNDATION FOR INNOVATION

Major Science Initiatives

Oversight framework
March 2019

INNOVATION.CA



TABLE OF CONTENTS

CONTEXT AND INTRODUCTION 2

SCOPE..... 2

PURPOSE..... 3

GUIDING PRINCIPLES OF THE OVERSIGHT FRAMEWORK: MANAGING FOR SUCCESS..... 3

OVERSIGHT ACTIVITIES AND REPORTING REQUIREMENTS..... 4

 Selection of indicators 4

 Annual performance report..... 6

 Annual financial reporting 6

 Midterm review 7

 Individual MSI oversight 7

 Annual workshop 8

 Final performance report 8

 Final financial report 10

GOOD PRACTICES IN THE GOVERNANCE AND MANAGEMENT OF NATIONAL RESEARCH FACILITIES..... 10

 Governance 10

 Board committee structure and roles 11

 Management..... 12

APPENDIX A – FUNDED FACILITIES AND MSI ELIGIBILITY CRITERIA..... 13

 Funded facilities 13

 MSI eligibility criteria 14

APPENDIX B – ELIGIBLE AND NON-ELIGIBLE COSTS AND ELIGIBLE PARTNER FUNDING 15

CONTEXT AND INTRODUCTION

In 2010, the Canada Foundation for Innovation was given the mandate to design a more systematic approach for both evaluating and addressing the operating and maintenance (O&M) funding needs and scientific performance of large national science facilities, and for overseeing their management and governance policies and practices. The CFI created a funding mechanism for this purpose called the Major Science Initiatives (MSI) Fund. The MSI Fund has three objectives:

- Secure and strengthen state-of-the-art national research facilities that enable Canadian researchers to undertake world-class research and technology development that leads 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 Canadian funding system is such that these facilities typically have multiple funding partners and stakeholders from various sectors and academic institutions. The different mandates of the various funding partners — who support capital, O&M or direct costs of the research — make for a complex funding model. Until recently, much of the funding for the O&M of these facilities was obtained through ad-hoc mechanisms and in the absence of general oversight and performance reviews.

The ultimate objective of the MSI Fund is to stabilize these unique national research facilities through the development of robust strategic and management (or business) plans tailored to the Canadian funding landscape and the adoption of state-of-the-art management and governance practices.

SCOPE

This framework is intended for Canadian national research facilities funded through the CFI's MSI Fund as listed in Appendix A and hereafter referred to more simply as a facility, or facilities. These facilities address the needs of a **community of Canadian researchers representing a critical mass of users distributed across the country** by providing shared access to substantial and advanced specialized equipment, services, resources, and scientific and technical personnel. They support leading-edge research and technology development, and promote the mobilization of knowledge and transfer of technology to society. They require resource commitments well beyond the capacity of any one institution. Whether single-sited, distributed or virtual, they are specifically identified or recognized as serving pan-Canadian needs and their governance and management structures reflect this mandate.

The CFI consulted internationally to develop the initial framework. In order to implement a continuous improvement process, this framework is meant to be an evergreen document that will be periodically updated to reflect lessons learned and good practices in the management of large science facilities.

The CFI has adopted a funding and oversight approach that balances general principles of scientific excellence, responsible stewardship and accountability tailored to the particular situation of each facility.

PURPOSE

The purpose of this oversight framework is to promote the responsible stewardship of facilities. Consequently this framework:

- Outlines the CFI policies, procedures and requirements for the oversight of the facility;
- Sets out CFI's expectations regarding the governance and management of the facility including performance measurements;
- Promotes the sharing of good practices on governance and management to assist the facility in meeting their objectives against established milestones and indicators, aiming for the optimal performance of the facility;
- Ensures that realistic decommissioning plans are developed in the eventuality of a shut-down of the facility;
- Serves as a guide to funding partners on effective project management and oversight of large scientific facilities to ensure responsible stewardship of public investments; and,
- Helps multiple funding partners align oversight requirements to reduce both the duplication of efforts and the reporting burden on the facilities.

GUIDING PRINCIPLES OF THE OVERSIGHT FRAMEWORK: MANAGING FOR SUCCESS

This framework must accommodate the fact that national research facilities differ in many ways such as mandate and mission, stakeholders, culture of the research community and the stage in the lifecycle of the facility. It is also important to recognize that a facility's governance and management approach will be different as it matures through the different stages of its lifecycle. These differences will be taken into consideration when developing the oversight plan for each facility. Each plan will be customized within the structure of this framework through discussions to be held between the CFI, the facility, the administrative institution and other funding partners interested in a common oversight approach.

Through an ongoing, systematic process of collecting, analyzing and using performance metrics, the facility will assess and report on its use of resources and progress in meeting its management and operational objectives. The performance measurement process will guide decision making of the facility's internal governing bodies, allowing them to identify variances from targets or risks and make, where needed, the necessary adjustments to ensure expected results are achieved. Further, performance monitoring and reporting will support accountability and transparency at the levels of both the facility, and the CFI and its other funding partners.

Performance measures provide useful information on the soundness and efficiency of the operational and functional components of an R&D organization including financial ratios, user base, and knowledge development and transfer. Measures can include percentage of operational funds from particular funding partners, downtime, number of new users and access cycle time, user satisfaction, diversity of staff expertise and turnover rate, papers published, and strategic partnership and collaboration agreements. When combined, they can provide a useful and telling composite picture of the performance of a science facility.

OVERSIGHT ACTIVITIES AND REPORTING REQUIREMENTS

It is expected that the facilities have established oversight and reporting activities as part of their existing management plan. In order to reduce the burden on the facility and the institution, these activities will be reviewed by an integrated CFI team composed of representatives from programs, finance and evaluation and outcome assessment. This will serve as a basis to establish a customized oversight plan for each facility. Several factors will be taken into account to establish the nature and extent of these monitoring and reporting activities, including the complexity of the operation, the maturity of the facility and the experience of its staff in managing a national research facility. A risk-based approach will be used to determine the appropriate monitoring and reporting activities.

All facilities will need a performance measurement strategy at the outset to assess progress toward achieving its mission and objectives. Key performance indicators (KPI) help an organization define and measure progress toward organizational goals. Creating these measures is typically a crucial part of the strategic planning process. Although the facility may have already developed its own performance measurement strategy, it may need to be expanded to allow a fulsome assessment of both the fund objectives and broader CFI objectives and expected results.

Although oversight activities for each facility will be tailored to its specific situation, at a minimum the CFI will require an annual performance report and financial report; and a final performance report and final financial report at the end of the CFI funding period. The CFI will conduct oversight activities throughout the funding period of the award. The minimal frequency and type of these activities are summarized in Table 1.

Table 1: Minimal MSI reporting, monitoring and review requirements during the course of funding

Minimal frequency	Oversight activities & reporting requirements
Several times/year	Meetings, phone calls and information exchange between the CFI, the facility and the institution
Annual	Financial report* Performance report* MSI workshop
Mid-funding cycle	Midterm review by an external panel of experts
Ad hoc basis	Contribution audits (if applicable) On-site visits

* N.B. The financial and performance reports for the year including the midterm review and the final year of funding will differ in nature and scope from other years of the funding cycle

Selection of indicators

The ongoing monitoring of indicators will be an essential part of the performance measurement strategy under the MSI Fund. Because of the diverse nature and functions of national research facilities it is expected that performance monitoring will include standard and facility-specific indicators. The standard

KPIs will be of great use to the CFI and other funding partners by capturing data needed for accountability purposes, while the facility-specific indicators will reflect other critical success factors of each facility. Not all facility-specific indicators need to be reported to the CFI. By measuring indicators on a regular basis, and by comparing the results to expectations, the facility will be able to assess progress against objectives and actions/strategies, detect problems or variances, and identify opportunities for continuous improvement. The CFI also expects performance measurement to be an additional tool for the long-term strategy of the facility in measuring its own accomplishments and managing for success.

As part of CFI basic requirements, national research facilities will need to report on a limited set of standard indicators of program results related to the objectives and accountability requirements of the CFI. These standard indicators should demonstrate how the CFI funding ensures that the facility does the following: enables researchers to undertake world-class research and technology development; is being accessed and used optimally by the research community; enhances training for highly qualified personnel; and creates the necessary conditions for innovation and long-term socio-economic benefits. The standard indicators to monitor CFI objectives are listed below.

Table 2: Standard indicators for performance measurement

Indicator category	Data requested (annually)
Advancement of research /knowledge transfer	Key knowledge transfer activities, including the dissemination of research knowledge linked to the use of the facility (i.e. number of scientific contributions including peer-reviewed publications, conference proceedings, presentations, posters, books/chapters, etc.).
Contribution to the training of highly qualified personnel (HQP)	Number of HQP (i.e. undergraduate and graduate students, postdoctoral fellows, technical and professional personnel) trained at the facility or who used data from the facility for their training
Technology transfer	Key technology transfer activities linked to the use of the facility (i.e. technical reports, licenses, patents, spin-offs, etc.)
Access to the facility	Number of users of the facility (i.e. on site, remote and data users) and their distribution (i.e. geographic and sector)
Optimal use	The level of use of the facility as a function of total capacity excluding required maintenance periods (e.g. percentage of time being used versus availability, percentage of use requests fulfilled etc.)
Level of user satisfaction	Of those using the facility in the past year, how many were very satisfied, satisfied, neutral, dissatisfied or very dissatisfied? (i.e. average level of satisfaction)

Recognizing the importance of the input of the facilities and their stakeholder communities into the identification of appropriate indicators, the CFI will collaborate with each one to develop and select the set of KPIs to form the basis of the performance measurement strategy. All facilities must include the indicators listed in Table 2, but may also include a limited number of additional facility-specific indicators. These could be used in response to requirements by other key funders of the facility, for example, or to better monitor the achievement of the CFI objectives in light of critical success factors of the facility in question. The final set of key indicators selected for reporting to the CFI would be limited to 12. While

some facilities may monitor additional facility-specific key performance indicators as required by their management and governance bodies, it is not necessary to share these with the CFI on an annual basis.

Facilities must ensure that their management plans include the agreed-upon indicators once they are identified. For the indicators identified, each facility will be expected to provide the CFI with baseline data. The baseline data will be the starting point against which progress will be systematically tracked over time.

Annual performance report

On an annual basis, each facility must provide information on the status, progress, outcomes and upcoming activities including the latest performance measures for the selected indicators. This will allow the CFI and key funding partners (e.g. provincial or others) to annually review the progress and achievements of the facility. The release of funds for a subsequent year will depend on the submission of a satisfactory annual performance report.

Annual performance reports must be presented to, and approved by, the facility's Board of Directors. A cover letter signed by the Chair of the Board will confirm approval of the report and attest that it has met the reporting requirements of the MSI award agreement.

The annual performance report will use a standard template. This template will include:

- The achievements and progress against planned objectives and activities from the previous year's annual report and/or business plan;
- The achievements and progress against selected key performance indicators and CFI objectives;
- The remaining challenges and mitigation strategies with reference to planned objectives and activities from the previous year's annual report and/or business plan;
- The planned scientific and operational activities for the upcoming year, including KPI targets;
- Updates to the strategies or plans of the facility (e.g. risk assessment, performance monitoring strategies, decommissioning plans); and,
- Updates on CFI conditions (if any).

Facilities must submit their annual performance by June 15 of every year. The information collected through this report will be used and disclosed in accordance with the CFI's policy around the Access to Information and Privacy Acts. It may also be shared with CFI's key funding partners and be used for program evaluation.

Annual financial reporting

Annual financial reports of actual expenses and projections for the future period will be required of all facilities. Depending on the situation, more frequent financial reporting may also be required. The management body of each facility must have approved the reports prior to submission by the recipient institution.

The financial report must include:

- Actual and forecasted eligible costs;
- Actual and forecasted contributions to eligible costs from eligible partners, including assurance that funds have been received and spent (or will be received during the forecast period); and,
- Explanation of any significant actual or forecasted variances.

For this fund, eligible costs are defined as the costs related to the O&M of the national research facility. Please refer to Appendix B for a list of eligible and non-eligible costs. In the financial reports, institutions must disclose their various funding sources and the full actual eligible cost of all budget categories, even if the cost exceeds the estimated cost reported upon award finalization.

The financial report is due annually by June 15. It must be submitted in the CFI Awards Management System (CAMS) and the MSI Excel financial report submitted by email.

Midterm review

Facilities funded for five years through the 2017–22 competition will undergo an external review at or near the midpoint of the award cycle. The MSI midterm review will assess the facility's ability to maximize its scientific and technological capabilities as a result of the MSI funding. Accordingly, the midterm review will provide an assessment of the overall impact of MSI funding on the scientific excellence of the research program(s), the research outcomes and impacts, and on the governance, management and operations. The future management plan and the need for O&M funds for the remaining period will also be assessed. The CFI contribution to the O&M costs for the remaining period will depend on the outcome of the midterm review.

Facilities will be provided with a template for preparation of the review document. This document, prepared by the facility and the institution, will be a key element of the review process as it will provide the expert panel with relevant information (quantitative and qualitative) to effectively address the areas of the review and afford a reasonable basis for its conclusions and recommendations. The midterm review will be done in conjunction with other funding partners. Careful consideration will be given to the selection of independent reviewers. The review panels will generally have representation from the academic and broader national/international research community, as well as experts in governance and in the management and operation of national research facilities.

Individual MSI oversight

To assist with the identification of risks and to establish an appropriate level of oversight for each facility, the CFI has developed a Tool for Risk Assessment and Management (TRAAM) tailored to the MSI Fund. This tool has two components: the CFI's risk assessment and a summary of the CFI's oversight activities commensurate with the identified risks. Oversight activities may include, for example, project-implementation meetings, more frequent financial reporting, project status reports, site visits, contribution audits and other ad hoc activities. These activities are tailored to each facility to help ensure that the risks identified are being managed adequately. The TRAAM is, above all, a tool for the CFI and may differ in scope and extent from the risk assessment performed by the administrative institution and the facility.

The CFI works collaboratively with each facility and administrative institution in the management of risks. Input from the institution and the facility on its management and oversight activities will be incorporated in the TRAAM; this may influence the CFI's risk assessment and its level of oversight activities. As such, the

CFI shares its risk assessment with the institution and the facility. Over the course of the funding cycle, the CFI risk assessment will be revisited at least annually, or more frequently based on need. The CFI will also modify its oversight activities to reflect any changes in risks for the facility.

A risk-based audit approach is also used for the selection of CFI facilities to be audited. Various risk factors are considered, such as the value of the CFI contribution and the in-kind contributions, the complexity of the facility, and the CFI's experience with both the project and the institution. The institution will be notified if the facility is selected for an audit. However, for facilities receiving a CFI contribution greater than \$10 million, they will be subject to a contribution audit to ensure that the funding received has been used in accordance with agreed-upon terms and conditions of the award agreement, and with applicable policies and guidelines.

The CFI should be notified if the facility prepares annual financial statements that are audited by external auditors or if the O&M costs will be subject to an audit by another stakeholder. In some cases, the CFI can coordinate additional audit procedure to be done concurrently in order to gain efficiencies and reduce burden.

If the CFI funds will be transferred to the facility and/or other CFI-eligible institutions, a formal agreement between the administrative institution, the other institutions and the facility must be in place to specify the roles and responsibilities of each party in the management of the funds. Good communication between the facility and the institution(s) is essential.

When appropriate, the CFI can request that the facility share relevant documentation approved by the facility's governing body and/or committees. The CFI also reserves the right, when necessary, to meet with the facility's Board of Directors and/or any committees of the Board.

An initial visit may be performed at the start of the funding cycle to gain knowledge of the operations and share good practices. The use of teleconferences, meetings and annual scientific workshops are other ways in which the CFI can provide advice and guidance to facilities.

Annual workshop

An annual workshop will bring together all MSI-funded facilities and will provide a forum for discussion on achieving excellence in governance, management and operations; identifying gaps or challenges; and sharing of good practices. The CFI, in consultation with the facilities, will organize the workshop and identify key topics to be addressed.

These workshops may be exclusive to MSI-funded facilities, be co-hosted with other national or international funders of major science facilities, or be open to other national research facilities. Ultimately, it is expected that the group of MSI-funded facilities will nurture and strengthen linkages with other similar facilities in Canada and elsewhere.

Final performance report

The final performance report will be different than the annual report. The objective of the final performance report is to obtain a summary of the facility's progress and key achievements during the

period of funding. As such the report will contain both annual and cumulative information related to the facility's achievements and meeting the fund objectives. The report is to be prepared using a reporting template to be provided by the CFI. It is due six months after the project's end date.

Final financial report

A final financial report is due six months after the project's end date. This must be submitted in CAMS and the MSI Excel financial report sent by email.

GOOD PRACTICES IN THE GOVERNANCE AND MANAGEMENT OF NATIONAL RESEARCH FACILITIES

The purpose of this section is to outline some good practices in governance and management that will serve as guidance as facilities mature and evolve over time. It is not meant to be prescriptive since much depends on the nature of each facility, its legal/administrative structures and the phase of its operational status (R&D design, construction, commissioning, utilization, decommissioning). While a "one-size-fits-all" approach is not appropriate in this context, governance and management structures that are flexible and adaptable will help ensure the facilities are governed, managed and operated for success throughout the lifetime of the facility. Future documents, tools or repository of MSI good practices will be developed by the CFI in consultation with the MSIs. The institution may also wish to refer to the "Sharing of good practices" page of the CFI's corporate website as it contains several good practices for managing large initiatives or facilities.

The CFI's governance principles for large projects should be used as a starting point to help inform good practices in governance and management structures.

Governance

The governing body (herein Board) must be the principal decision-making body for the facility. Its mandate and its fundamental structure and procedures must be clearly identified within its legal, financial, and administrative structures (and institution) and its composition must be reflective of a national research facility. Typically, the Board develops and implements policy and strategy and defines approaches for assessing Board and management performance including performance measures.

It is important that the facility clearly define, and elaborate on, the role of the Board with respect to:

- Accountability
- Strategic planning
- Legal duties and responsibilities
- Financial controls
- Relationship with management
- Policy formulation and strategic planning (including stakeholder communications)
- Management of organizational performance and risk
- Monitor the overall performance of the MSI

Good practices indicate that effective Boards include members who are knowledgeable, effective and independent and who can act in the best interests of the facility. Avoiding conflict of interest or perceived conflict of interest is essential in choosing Board members. In addition to being familiar with the facility and its environment, they should be willing and able to commit the necessary time to engage in and

contribute to its sound governance and management. Good practices suggest that developing a skills/competency matrix can help identify key competencies and potential gaps in Board membership experience and skills.

An experienced, knowledgeable and skilled Chair to both lead the Board and interface with management is critical to the long-term success of the facility. This is particularly critical during a transition phase, such as progressing from construction to operations, and every effort should be made to attract a Chair who has sufficient time to dedicate to this role.

It is also critical for the facility to develop a strategy and approach to ensure that representation on the Board continues to support the facility as it transitions from construction to commissioning to full operational status.

A number of key structures and processes are also essential to the effective operations of a Board. Consideration should be given to the following:

- An appropriate number of Board meetings each year with at least one to be attended in person;
- Agendas focused on finances, strategic issues and risks, and management plans to address them;
- Effective communications between management and Board members (e.g. orientation for new members, communication between meetings, meeting material provided sufficiently in advance);
- Regular in-camera sessions without management in order to maintain Board independence; and,
- An effective Board secretary to assist with agenda preparation, briefing material preparation and distribution, record of meetings, logistics etc.

As a good practice, annual Board self-assessment is also a good tool to help increase the Board's effectiveness.

Board committee structure and roles

Good practices suggest that effective governance often includes the delegation of some Board functions to a standing committee which acts in an advisory capacity to the Board. Appropriate standing committees of the Board with clear roles and skilled membership enhance good governance as well as augment key skills and expertise through the appointment of members who are independent of the Board and the facility's partners and collaborators.

Examples of such committees are:

- **Audit Committee:** typically responsible for oversight and stewardship of the facility's financial information, control systems and reporting, internal and external audit and risk management.
- **Governance Committee:** generally deals with governance and internal Board operations, such as Board and committee structures and appointments and Board performance and processes.

Another key responsibility and best practice of this committee is to develop and implement a plan for the succession of the Chair and Board members.

Finally, good practices suggest that ethical responsibilities for code of conduct and conflict of interest for Board members be clearly identified and followed.

Management

In order to operate at an optimal level, facilities should implement the concept of simultaneous excellence. This includes: 1) scientific and technical excellence 2) operational excellence that includes cost controls, financial integrity, risk management, responsible stewardship of the resource, environmental impacts and health and safety issues, and 3) excellent community relations.

Good practices suggest that a project management framework be integrated into the planning processes. An annual management plan must be developed to help the facility attain the objectives of the strategic plan. This plan should include activities around funded research projects but also the development of new areas that could create opportunities for the community of users. Directly tied to this plan must be: definitions of results, impacts and outcomes for the facility as a whole; measures of performance and benchmarks for success in achieving goals and objectives; and, progress reporting.

The following are recognized as good practices in establishing effective performance measures:

- Indicators must define the keys to success. As such indicators should be defined following consultations with users, stakeholders, and staff to find out their needs, expectations and requirements;
- Indicators must be specific, realistic, measurable and time-based;
- Indicators must allow adequate and timely assessment of the progress, performance and results (e.g. outputs and outcomes) of the organization including its governance, operations and R&D activities; and,
- Indicators are not exclusively quantitative, they may include qualitative information.

The performance indicators must be included in the facility's management plan which describes how it will operationalize its strategic objectives over the next one- to five-year period.

A key component of the planning process described above is identifying and addressing all aspects of risk, immediate and long-term as well as financial and non-financial. The Board must be provided with regular reports from management on risks and actions taken (or to be taken) to mitigate them.

The planning around the facility's operations must reflect its entire life cycle. In essence, it must not only plan for the implementation and the operations but also for the decommissioning of the facility. Determining the process to identify the time and the manner in which a facility ends its operations must be considered in advance and should be accompanied by a clear decision matrix. This includes ongoing planning for the costs of decommissioning; robust estimates are essential even if the sources of funding have not yet been identified.

Regular reports must be provided to the Board on the facility's performance relative to the annual operations plan and budget, as well as the strategic and management plans, along with management's response to address any variances or issues in performance. Reports typically sent to the Board include financial updates, operational updates, and risk issues. The format of this reporting can take various forms (e.g. dashboards or scorecards). A benchmark against other similar facilities can be established.

Appendix A – Funded facilities and MSI eligibility criteria

MSI-funded facility	Administrative institution
The Andre E. Lalonde Accelerator Mass Spectrometry Facility for Environmental Radionuclides	University of Ottawa
Canada's Genomics Enterprise	The Hospital for Sick Children
Canada's National Design Network	Queen's University
Canadian Cancer Trials Group	Queen's University
Canadian Centre for Electron Microscopy	McMaster University
Canadian Light Source	University of Saskatchewan
Canadian Research Data Centre Network (CRDCN)	McMaster University
Canadian Research Icebreaker <i>Amundsen</i>	Université Laval
The Centre for Phenogenomics	Sinai Health System
Compute Canada	University of Western Ontario
Érudit	Université de Montréal
International Vaccine Centre (InterVac)	University of Saskatchewan
The Metabolomics Innovation Centre	University of Alberta
Ocean Networks Canada	University of Victoria
Ocean Tracking Network	Dalhousie University
SNOLAB	Queen's University
SuperDARN Canada	University of Saskatchewan

MSI eligibility criteria

1. The facility enables research by providing an environment encompassing highly specialized equipment, services, resources, and scientific and technical personnel. No alternatives exist in Canada.
2. The facility is fully operational and is owned by one or more CFI-eligible institutions.
3. There is demonstrated demand by the Canadian research community for the equipment, services, resources, and scientific and technical personnel offered by the facility. This community represents a critical mass of users distributed across the country, in areas of research strength for Canada.
4. The facility has an established user access policy that is publicly available such that any interested potential user is able to request access to the facility.
5. The facility has demonstrated annual eligible O&M costs exceeding \$500,000 to support significant human and operational resources beyond what is standard in Canadian research institutions.
6. The facility has as an established governance model appropriate to the size and complexity of the facility, with a clearly defined mandate, structure and procedures to address:
 - Accountability, legal duties and responsibilities
 - Financial controls
 - Policy formulation and strategic planning including stakeholder communications
 - Oversight of facility performance
7. The facility has a management structure and practices appropriate to the size and complexity of the facility to address:
 - Operation and maintenance of the facility
 - Human resources and succession planning
 - Risks and risk mitigation
 - Monitoring of performance

Appendix B – Eligible and non-eligible costs and eligible partner funding

Eligible costs are defined as the costs relating to the O&M of the national research facility. The table below provides a list of eligible and non-eligible costs including some examples. As this list is not exhaustive, facilities should consult with their CFI Senior Programs Officer to determine the eligibility of a specific item not on this list.

Categories (as per the CFI CAMS online system)	Descriptions and examples	
	Eligible costs	Non-eligible costs
Administrative personnel/scientific and technical support personnel	<p>Salaries of non-academic managers, professionals, administrative personnel, consultants and trainees (undergraduates, graduates and postdoctoral fellows) directly involved in the governance, management, operation and maintenance of the facility who provide services which benefit the pan-Canadian user community</p> <p>Examples of such costs include:</p> <ul style="list-style-type: none"> • Salary cost for personnel related to human resources, financial (including auditing), data management, procurement, legal, contracts management, accounting (even if provided by the host institution to the facility; this is a contribution towards matching fund requirement) • Salaries of scientific and technical personnel employed by the facility (who are not also faculty members) for eligible O&M activities including technology development for improving facility services or enhancing core platforms (i.e. development of new protocols, integration of new tools, methodologies, optimization) • Portion of the salary of students (e.g., summer or co-op) for eligible O&M activities, for example, skilled trades or technology development for improving 	<p>Administrative personnel not directly related to the governance, management, operation and maintenance of the facility (e.g., institutional research office, library and finance services)</p> <p>Examples of such costs include:</p> <ul style="list-style-type: none"> • Portion of the salary of trainees (undergraduate, graduate, postdoctoral fellows) for conducting research activities not related to the facility's general O&M • Faculty members' salaries • Scientific internships and exchanges for research activities • Costs associated with teaching release • Remuneration of Board members

	<p>facility services or enhancing core platforms</p> <ul style="list-style-type: none"> • Portion of the salary of students (e.g., summer or co-op) for tasks related to the administration of the facility (e.g., accounting) • Hiring consultants for strategic planning purposes 	
Extended warranties/service contracts	Extended warranties and/or service contracts and extensions to warranty coverage and software upgrades	
Replacement parts and minor upgrades	<ul style="list-style-type: none"> • Replacement parts and replacement of an item (including taxes and shipping) needing repair if the replacement is more cost-effective than the repair (the replacement item must have similar functionality) • Minor upgrades to maintain the operational capacity of the facility. This could also include add-ons, minor tools or components required for the improvement of existing technologies at the facility or for technology and service development activities that lead to enhanced facility services for researchers. 	
Services	<p>Services that directly support the facility</p> <p>Examples of such costs include:</p> <ul style="list-style-type: none"> • Electricity, security, cleaning, telephone, internet, license fees for delivery of facility's services, permits etc. 	
Supplies and consumables	Supplies and consumables required to keep the facility in a state of readiness for research, independent of the number of researchers actually using the resource, and not associated with specific research projects	
Communications and outreach activities	<ul style="list-style-type: none"> • Strategic planning costs (e.g., hosting meetings to consult stakeholders/planning sessions etc.) 	

	<ul style="list-style-type: none"> • Hosting regional/national networking events for users • Communication products for the facility • Development of website to book facility resources or for data access 	
Administrative costs (excluding personnel)	<ul style="list-style-type: none"> • Insurance directly related to the facility • Audit fees • Regulatory compliance costs (e.g., certification, compliance audits, etc.) • Incorporation cost (e.g., legal/incorporation cost) and strategic planning cost • Board of Director and facility governance committee meetings, such as for the finance committee, nominating committee, international advisory committee, user committee, etc., and related travel. 	
Training¹	<ul style="list-style-type: none"> • Training for the main operators of the facility infrastructure • Group training sessions for facility personnel and/or users of the facility infrastructure • Statutory training, regulatory specified training (e.g., environment, health and safety) and associated certification costs for facility personnel • Travel to attend conferences or visit other facilities for training purposes of facility personnel • Other professional development activities for facility personnel 	
Contingency	An amount not to exceed 10 percent of a facility's annual MSI-eligible expenses can be included in the budget as contingency. This contingency fund will be retained at the CFI, and can only be claimed to cover eligible expenses arising from unforeseen events. Use of these funds will require prior CFI approval.	The contingency fund may not be used to cover cost overruns in other budget categories.

¹ Will appear in the CFI online system as Initial training of infrastructure personnel.

	The unused contingency fund can be carried forward from year to year, but will lapse at the end of the funding cycle.	
Other costs	<p>Ramp down of facility activities towards the final decommissioning of the facility</p> <p>Examples of such costs include:</p> <ul style="list-style-type: none"> • Facility staff severance packages, legal fees, audit fees, etc. 	<ul style="list-style-type: none"> • Decommissioning costs of the facility infrastructure • Equipment and major construction/renovation costs deemed eligible under an infrastructure award • Buying or leasing of real property • Any cost to conduct research activities • Expenses related to intellectual property • Housing and rental fees (e.g., facility-run lodging for users) • Transportation to and from the facility for users

Eligible partner funding

Any partner 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), and international sources of funding.