

8. Review of Major Resources Support Grant Applications

8.1 Contact Points

- For eligibility: Program Officer
- For missing documents: Program Assistant
- For application assignments: GSC Chair

8.2 Objective

The objective of the Major Resources Support (MRS) program is to facilitate the effective access of Canadian academic researchers to **major** regional, national, or international (based in Canada) experimental or thematic research resources by financially assisting these resources to remain in a state of readiness for researchers to use. MRS grants are not intended to support resources that are standard in a discipline or commonly available in Canadian universities. The MRS program also aims to facilitate access by Canadian researchers to **major** international resources located outside Canada, excluding any direct financial support towards the operating and maintenance costs of such resources.

Research resources are defined as experimental research facilities or thematic research organizations such as institutes. An institute is defined as a research resource that promotes and triggers national, and possibly international, interactions within a given research community and provides a place where researchers meet, collaborate, and exchange ideas. Institutes are infrastructures that provide an environment that serves to accelerate research within disciplines, as well as to promote links between different disciplines, thus fostering interdisciplinary research.

8.3 Description

MRS grants assist major experimental and thematic research resources located in *Canada in covering their operating and maintenance costs. Supported resources are* those that cannot fully cover such costs using other sources of funding or through user fees, or those where user fees cannot be leveraged. The grants assist resources that are significant in size, value or importance, and that are not customary in a discipline or commonly available in Canadian universities. Supported resources must be used by researchers from several institutions, which can include universities, government laboratories, or companies, within a region, across Canada, or from abroad.

Major resources supported by this program may include:

specialized experimental facilities







- research institutes that promote and trigger interactions within the constituents of relevant communities;
- *field research stations;*
- a core of highly skilled technical or professional research support staff essential to the research activities of a group;
- large specialized items of research equipment; or
- a collection of specialized samples or objects, as defined in the <u>Framework for</u> <u>Researchers Working with University-Based Collections</u>.

RS grants also assist Canadian researchers who come together as Canadian user consortia to access major resources located abroad and whose equivalent is **not available** in Canada. Such support excludes any direct contribution towards the operating and maintenance costs of foreign resources. The support is not given to individual researchers, but rather to the user consortia, which must be composed of researchers from several institutions that could include universities, government laboratories, or companies.

8.4 Conflict of Interest

See Section <u>6.6</u> and Appendix <u>3</u> for the guidelines on conflict of interest.

8.5 Criteria for Evaluation

Any application to the MRS grant program must be assessed on the basis of the eight selection criteria listed below. For each criterion, factors that must be considered are given. To be recommended for MRS funding, a resource must be meritorious in **all eight** criteria.

- Uniqueness of the resource
 - *Research resource not standard in a discipline and not commonly available in Canadian universities.*
 - *Regional, national, or international nature of the resource.*

The regional nature of a resource is directly tied to the size and diversity of the user base from outside the host institution, without restrictive geographical boundaries. The onus is on the applicant to demonstrate to the selection committee that the resource is needed and **significantly** used by a sufficiently large number of users, including academic and nonacademic ones, from outside the host institution.

• Uniqueness compared to other Canadian resources that may be providing similar services.







Does the resource complement or duplicate other regional or national resources? Where applicable, is duplication necessary and justified?

- Use of the resource by the research community
 - *Past (if applicable), current, and projected levels of use of the resource.*
 - Accessibility of the resource to, and actual use by, researchers beyond the host institution, including both academic and non-academic users.
 - Potential for collaboration with complementary Canadian or, if applicable, international resources.
 - *Extent to which the resource can accommodate the specialized needs of the users.*
 - Demonstrated outreach to the potential Canadian or, if applicable, international academic and non-academic user communities.
- Need for access to the resource for the research programs
 - Impact of the resource on the advancement of the research programs of current and projected users and, when applicable, on the dissemination and use of the generated knowledge in the supported area(s) of research.
 - Consequence of the loss of access to the resource on the users' research programs.
- Merit of the research programs that rely on access to the resource and excellence of the user community
 - In the case of experimental resources, quality, significance, and pertinence of ongoing research programs of the users.
 - In the case of thematic resources, quality, pertinence, and impact of the past (if applicable), current, and planned scientific activities, and significance of the research themes to the related communities.

This factor, as the previous one, can be assessed by answering the questions given in Section <u>6.8.2</u>, Merit of the Proposal.

• Excellence of the users and, in the case of thematic resources, excellence of activity organizers and users, and their level of commitment to the activities within the resource.





This factor can be assessed in a similar way to the Scientific or Engineering Excellence of the Researcher(s) in *Section* <u>6.8.1</u>.

Co-applicants are major users of the resource. The principal investigator and every co-applicant are allowed to include one page each in the application to describe their individual research programs, their use of the resource, the importance of the latter to their research programs and to the training of their highly qualified personnel, and to list relevant contributions.

- *Scientific (knowledge and technology) return on the investment in the resource.*
- Demonstrated need for support through an MRS grant
 - Demonstrated need for, and effectiveness of, support through an MRS grant as opposed to other NSERC grants (e.g. Discovery Grants) and contributions from other sources.
 - Nature and extent of the commitment and support from universities and other organizations.
 - Justification of the requested funds from NSERC.
 - Proposed sharing of costs among NSERC, universities, and other sources, including user fees (if applicable).
 - *Rationale for the proposed user fees (if applicable).*
- Management of the resource
 - Effectiveness of the management structure.
 - Administration and allocation of access to the resource to different users (internal and external, from universities, government, or industry).
 - Is there a process to ensure accessibility of the resource to users from outside the host institution? Is the resource active in reaching out to potential user communities in order to increase their awareness of the activities and opportunities offered by the resource? Are outside users part of the resource's governing body or user committees?
 - Plan and budget for maintenance and operation of the resource.







- Plan of the resource to keep abreast of scientific and technical advances, as well as to sustain well coordinated and leading-edge research activities.
- Contribution of the resource to the training of highly qualified personnel
 - Importance of the resource for training, including unique training opportunities offered by the resource.
 - Extent and excellence of training.
 - Opportunity for hands-on training.

Refer to the Section <u>6.8.4</u>, *Contribution to Training of Highly Qualified Personnel, in order to assess this criterion.*

Note that the use of or the need for the resource with respect to the completion of student projects and theses should be addressed under the third criterion above, "Need for access to the resource for the research programs."

Synergy

Defined as the extent to which a grouping of equipment, staff, or participants enhances the value and capability of a resource and enables researchers to obtain results or carry out studies that would otherwise be very difficult or impossible.

8.6 Eligible Expenses

Support of Resources Located in Canada

MRS grants provide funding to assist in covering the following costs:

- Salaries of technical and professional research support staff employed to operate and maintain the resource, as well as to provide assistance to users
- Operating and maintenance of the resource
- *Materials, supplies, and minor equipment essential to the operation and maintenance of the resource*
- Travel expenses to attend conferences as part of the resource's plan to keep abreast of scientific and technical advances
- Dissemination costs as part of the resource's outreach activities towards the relevant communities
- Operation of scientific review panels and governing bodies

Furthermore, in the case of thematic resources, MRS grants also provide funding to assist in paying the following costs, which should be listed as part of the operating costs:







- Remuneration of graduate students and postdoctoral fellows involved in a context of thematic or collaborative program
- Visitor expenses, including travel and local support
- Honoraria for distinguished speakers

In the case of experimental resources, the costs of running the facilities should be split into two major components: non-recoverable and recoverable. **Only non-recoverable** costs are **eligible** for MRS funding.

- Non-recoverable costs are those expenses necessary to keep the experimental resource in a state of readiness for researchers to use, and to increase the awareness of the potential user communities of the activities and opportunities offered by the resource. They are independent of the number of researchers actually using the resource, and are not associated with specific research projects.
- Recoverable costs comprise expenses directly incurred when researchers and their highly qualified personnel use the experimental resource. Examples of such costs are those for consumables that are used for specific projects, sample preparation and analysis in the case of analytical facilities, and food, fuel, and staff salaries for specific projects in the case of field stations. Recoverable costs should be charged as user fees against the users' Discovery Grants or other funding sources, and they should **not** be included in the amount requested from the MRS program. Regarding user fees, NSERC recommends that holders of MRS grants adhere to the guidelines given in Table I. In some cases, a moderate differential between internal and external academic users may be accepted, provided that a case is made to justify it and to demonstrate that its impact on the accessibility to the resource would be minimal.

Due to the nature and purpose of **thematic resources**, costs directly incurred when researchers and their highly qualified personnel use such resources are **eligible** for MRS funding. This is in addition to the expenses necessary to keep the resource in a state of readiness for researchers to use, and to increase the awareness of the potential user communities of the activities and opportunities offered by the resource.

Type of User	Appropriate Fee
Academic researchers (internal and external) and their students	Lowest rate
Non-academic users from organizations contributing to the resource	One step above the lowest rate
Non-academic users from non- participating organizations	Highest rate

Table I – Guidelines on user fees for experimental resources







Support of Access to Resources Located Outside Canada

MRS grants assist Canadian user groups in accessing major resources located abroad, whose equivalent is not available in Canada. Such support **excludes** any direct contribution towards the operating and maintenance costs of such resources. The following costs are eligible for MRS funding:

- Membership or access/user fees
- Minor equipment needed to accommodate the specific needs of the Canadian users
- Travel related to the use of the foreign resource, i.e., field work
- Salaries of **Canadian** technical and professional research support staff employed to assist in the use of the resource by the Canadian users

8.7 Ineligible Expenses

MRS grants **cannot** be used to pay for any indirect costs of research or expenses that are central or departmental institutional costs. Examples of such indirect costs include, but are not limited to, those for the renovation of research spaces and buildings, leasing costs of spaces and equipment, utilities, general technical support to laboratories, security and occupational safety, or insurance. Other ineligible costs could be found in the Use of Grant Funds section of the NSERC Program Guide for Professors.

8.8 Application Procedures

The MRS competition is held annually. The first step in applying to the MRS program is to submit a Notification of Intent to Apply for a Major Resources Support Grant (*Form 181*) to NSERC. The purpose of such a Notification of Intent to Apply is to provide *NSERC* with information to determine the most appropriate review mechanism for the application. Starting in the summer of 2007, and for grants that will be awarded in April 2008, the Notification of Intent to Apply will be used for screening purposes. For any prospective application, the Notification of Intent to Apply will undergo a review process to ensure that the resource meets the program's objectives and guidelines. Only resources whose Notifications of Intent to Apply are accepted will be invited to put forward grant applications by a set deadline.

The Notification of Intent to Apply will **not** be used for screening purposes in the **first** year of the program, i.e., for applications to be submitted in the summer/fall of 2006 for grants to be awarded in April 2007.

For the competition to be held in spring 2007, the deadline for submitting the Notification of Intent to Apply is August 15, 2006, while the deadline for putting forward an application is October 1, 2006.





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8.9 Review Procedures

The applications to the MRS program are reviewed by a multidisciplinary selection committee. This committee is composed of distinguished members who have extensive expertise in and broad practical knowledge of experimental and thematic resources in the various disciplines that NSERC serves.

For each application, the MRS Selection Committee receives input from the disciplinebased Grant Selection Committees (GSCs). Current or past individual members of the discipline-based GSCs may be chosen instead to provide formal consultations on behalf of their GSC. The use of a subcommittee may also be adopted by the discipline-based GSCs to review the applications requiring input from them. Alternatively, a disciplinebased ad hoc committee, comprising previous GSC members and possibly other distinguished scientists in the discipline, may be used to review the applications. For any application requesting more than \$500,000 per year, the MRS Selection Committee may also receive input from an expert ad hoc committee that would perform an on-site evaluation and review of the resource. NSERC reserves the right to perform an on-site evaluation and review of any resource that applies to the MRS program, even for requests that are less than \$500,000 per year. The conclusive recommendation to NSERC on any application is that made by the MRS Selection Committee.

8.10 Duration and Conditions

MRS grants can be awarded for up to five years. For a given proposal, the selection committee can recommend any duration it considers appropriate on the basis of the evaluation of the application.

It is important to remember that when a one-year award is recommended, the applicant will only have about five months to address any problems noted by the committee, since comments are sent in April and applications are due by October 1.

For grants that are \$500,000 per year or higher, the payment of the second and any of the subsequent yearly instalments (up to year 5) is conditional on the submission of an annual activity report to NSERC. The deadline for the submission of such a report is February 1.

8.11 Guidelines for Reduced Funding Recommendations

The selection committee may reduce or discontinue funding of a resource when:

- budgetary constraints only permit the support of more meritorious proposals;
- an application does not contain sufficient information, in the opinion of the committee, to allow adequate assessment of each selection criterion; or
- the resource no longer satisfies the selection criteria.





Such an action cannot, however, be taken lightly. In order to ensure an orderly transition for resources receiving funding above \$100,000 per year, the following guidelines should be considered for the reduction or termination of grants:

- For resources receiving a grant of over \$250,000 per year, funding may be reduced by up to 20 per cent.
- For resources receiving a grant between \$100,000 and \$250,000 per year, funding may be reduced by up to 50 per cent.
- For resources that hold separate grants and that apply jointly in a single application, the sum of the current individual grants should be considered as the present funding level and the above guidelines should apply.

Regardless of the current level of support, when a recommendation for a reduction or termination of funding is considered, the committee is asked to carefully review the resource's budget and consider the impact of such a recommendation on the resource's current commitments. On the basis of this analysis, the committee is asked to recommend a funding level that would permit an orderly transition. Written comments **must** accompany all recommendations for reduction or termination.

The Committee may request to deviate from the above guidelines by making a case to the *Program Officer and Team Leader*.

The onus is on the applicant to provide sufficient details to allow the selection committee to recommend the appropriate level of funding. In situations where insufficient details are provided, either as part of an Application for a Grant (Form 101) or a Personal Data Form (Form 100), the Committee can recommend a reduced duration, reduced funding, or no funding.

8.12 Deliverables

Committee members should review the applications assigned to them according to the selection criteria mentioned above. Reviews and formal consultations will be supplied to the Committee members as soon as they are received by NSERC. These reviews and consultations help provide deeper overall assessments of the applications. The members of the MRS Selection Committee should consider the reviews and consultations as key tools in the evaluation process. The members must, however, ultimately base their recommendations on their own assessments. The reviews and consultations contribute to these assessments, but they must not be used on their own to either accept or reject a proposal.





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8.13 Use of Rating Form

An excellent aid for reviewing MRS applications is the Report on a Major Resources Support Grant Application that is provided by NSERC. This report is used by the discipline-based review committees or consultants. The report focuses on the evaluation criteria and integrates all relevant information. Using this report helps to ensure that all criteria are taken into account when formulating a recommendation. Once completed, the report should be treated as containing protected information.

8.14 *Preparing Comments to Applicants*

Comments from the MRS Selection Committee are required for all applicants. The internal reviewers of the committee must prepare such comments for the applications they were assigned. The comments must be circulated within the committee and be carefully reviewed to ensure that they represent the committee discussion and consensus. The final version of the comments must reflect the opinion of the entire committee. Constructive comments to applicants are of vital importance to enable them to improve future applications. The committee is encouraged to provide constructive, specific, and helpful comments to applicants. Both strengths and weaknesses are appropriate for comment. The comments must be in accordance with NSERC guidelines and appropriate for transmission to the applicant. If at all possible, the committee should write the comments in the applicant's preferred language.

8.15 <u>Rating Form – Major Resources Support Grant</u>

