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## **LONG-RANGE PLAN FOR CANADIAN MATHEMATICS AND STATISTICS: 2012 – 2017**

### **LONG-RANGE PLAN STEERING COMMITTEE**

#### **DRAFT - TERMS OF REFERENCE**

##### **I. CONTEXT**

At the request of NSERC, the Canadian mathematics and statistics communities will engage in a long range planning exercise over the next 15-18 months. A long-range plan (LRP) will allow the communities to identify areas of strength and establish a unified vision of priorities and directions for mathematics and statistics research in Canada. It will be used to inform NSERC and the Mathematics & Statistics Evaluation Group of the community's priorities for current and emerging areas, thereby allowing for the best use of resources to advance the work of the community as a whole.

The LRP exercise is a collaborative process and will reflect broad consultation with the community. Key partners in this process include the Canadian Mathematical Society (CMS), the Canadian Applied and Industrial Mathematics Society (CAIMS) and the Statistical Society of Canada (SSC), as well as of the three Mathematical Institutes (Pacific Institute for the Mathematical Sciences (PIMS), the Centre de recherches mathématiques (CRM) and the Fields Institute) and the Banff International Research Station (BIRS).

##### **II. PURPOSE**

The purpose of the Long-range Plan Steering Committee is to provide a framework for, and oversee the development of, the Long-range Plan for Canadian Mathematics and Statistics – a planning process to define a collective vision and identify a collaborative agenda for the future of mathematics and statistics research in Canada.

##### **III. GOVERNANCE, OPERATION AND FINANCIAL SUPPORT**

The LRP will be a process that is conducted by the mathematics and statistics communities and that is initiated by NSERC.

NSERC representatives will work closely with the Long-term Plan Steering Committee to provide Secretariat functions and logistical support to the Steering Committee.

NSERC will contribute towards the development of the LRP and will provide the Steering Committee and the Writing Panel with appropriate financial support for the purposes of organizing meetings, travel of Committee members to these meetings, collection of community input (e.g. online survey) and for the preparation of the LRP report.

#### **IV. STEERING COMMITTEE CHAIR**

The Steering Committee will be chaired by a senior member of the Canadian research community with extensive knowledge of the Canadian research environment in general and preferably with that of mathematics and statistics in particular. The selection of the Chair is a critical issue since the LRP process must be viewed as open and without bias. A Chair who is viewed favourably by the mathematics and statistics communities will thus bring goodwill toward the planning process.

#### **V. LONG-RANGE PLANNING STEERING COMMITTEE COMPOSITION**

The Long-range Plan Steering Committee will comprise representatives from the mathematics and statistics communities from within and outside of Canada as appropriate, who will provide their time without remuneration. The Long-range Plan Steering Committee, in conjunction with the Chair, is responsible for managing the planning; providing a framework; overseeing the development of the LRP; and in communicating the findings of the LRP to the broader communities.

The Mathematics and Statistics-NSERC Liaison Committee will propose the membership for the Long-range Plan Steering Committee that will oversee the development of the first five-year LRP. Its membership will be no less than eight and not more than ten individuals. In considering membership, there should be equal representation from the three main areas (i.e., pure math, applied math, statistics).

The Steering Committee will also include *ex officio* members:

- Group Chair of the Mathematics and Statistics Evaluation Group
- NSERC Director, Research Grants, Physical and Mathematical Sciences Division

#### **VI. MANDATE**

The mandate of the Long-range Plan Steering Committee is to provide advice and recommendations to ensure the LRP is representative, relevant and useful in the planning of long-term research and development for mathematics and statistics in Canada.

In carrying out this mandate, the Long-range Plan Steering Committee will:

- Provide overall direction for the management of the LRP process, including the budget and sources of funding, work plans and the research and development issues to be considered, ensuring that it is undertaken in a timely and effective manner;
- Provide guidance on emerging trends and developments;
- Appoint a Writing Panel;
- Elaborate a broad consultation strategy to solicit input; and
- Approve progress reports and the final Long-range Plan, and communications to the mathematics and statistics communities as appropriate.

### **Writing Panel**

The LRP itself will be formulated by a Writing Panel which will be composed of an appropriate number of experts who will cover the main sub-disciplines reviewed by NSERC's Mathematics & Statistics Evaluation Group. The membership of the Writing Panel will be determined by the Long-range Plan Steering Committee and there may be some overlap with that of the Steering Committee.

Members of the Writing Panel will carry out the consultation strategy to solicit input from the community and determine how this input will be reflected in the LRP. Primary input for the development of the LRP is expected to come from broad consultation with the Canadian mathematics and statistics communities, in part, through interaction with the Scientific Societies and Institutes. It is expected that input will be solicited through a series of sub-committees, open meetings, town hall meetings, surveys, etc. It is crucial that consultation and subsequent incorporation of the input into the LRP be achieved through a fair, transparent and rigorous process. These elements are critical to the overall success of the LRP.

### **Elements of the Long-range Plan**

The development of the LRP should be based on the assumption of stable funding. In addition, the recommendations that will be made via the LRP must take into account NSERC's policies.

The LRP should reflect the following elements:

- Current and future scientific priorities;
- How best to support the present program;
- The role of the Mathematical Institutes and BIRS as community resources; and
- How best to incorporate new initiatives into the program.

## **VII. PROCESS AND TIME LINE**

The Long-range Plan Steering Committee membership will be completed by the end of July 2010, and a kickoff meeting will be held shortly after to review the present Terms and Conditions and draw a work plan with specific objectives, activities and deliverables.

The Long-range Plan Steering Committee will meet as required for the duration of the planning exercise to provide oversight, approve work plans, and approve progress reports and the final LRP, with a goal of completion by January 2012.

## **VIII. CONFLICTS OF INTEREST AND CONFIDENTIALITY**

All members must strictly comply with the terms of the statement on ethics for NSERC selection committees and panels. Moreover, for the purpose of this exercise, a member will be considered to be in a situation of conflict of interest during a discussion on prioritization of a specific endeavour that would directly benefit the member or the member's organization.

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