



## **Evaluation of the Reallocations Exercise NSERC Management Response**

### **Introduction**

NSERC accepted the evaluation's recommendation to terminate the Reallocations Exercise. Furthermore, it was also decided that future reallocation or allocation mechanisms would be done on the basis of Grant Selection Committee population dynamics (discipline dynamics) and on the basis of cost of research. These measures were considered appropriate and relevant for the Discovery Grants program, a demand-driven program that focuses on supporting ongoing programs of research and promoting a diversified research base. The purpose of this document is to provide the details under which these factors will be considered in the Grant Selection Committees' (GSCs') budget allocation process.

In the past four years, NSERC has injected over \$60 million into the Discovery Grants Program budget, in order to provide first-time applicants (FTAs) with funds to build or start up their research programs in Canada. This additional funding was crucial in order to avoid imposing severe "taxes" on renewing awards for the purpose of funding FTAs. The allocation of this additional funding was done parallel to the implementation of the results of the 2002 Reallocations Exercise. Therefore, NSERC had two different allocation mechanisms, one that was responding to various needs and priorities identified by the GSC constituencies (the Reallocations Exercise<sup>1</sup>), and another that was allocating money in response to pressures from FTAs (the FTA Formula). NSERC will now merge the Reallocations Exercise and the FTA Formula into one GSC allocation mechanism.

### **GSC Population Dynamics (Discipline Dynamics)**

Discipline dynamics is usually defined as the variation in the number of individuals applying to and receiving grants through the Discovery Grants program over time. However, discipline dynamics could be defined in other ways, such as the variation in student enrolments (HQP supply), graduation rates, and demand for trained personnel in certain disciplines over time. Whatever measures NSERC uses to quantify discipline dynamics, it is essential that the appropriate data be easily accessible and fairly simple to analyze. NSERC considers that the number of FTAs applying to the Discovery Grants program, together with the number of grantees that are leaving the system (i.e., retirements, etc.) represent the simplest and most valid means of assessing discipline dynamics. Furthermore, this method will facilitate the integration of the reallocations mechanism into the allocation process for new applicants. Given that the GSC constituency is often made up of researchers in different areas, a more proper terminology for what is referred to as discipline dynamics would be "GSC population

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<sup>1</sup> Some of the initiatives funded through the Reallocations Exercise were in fact earmarked for first-time applicants.



dynamics.” This is the terminology that will be used in the future to describe this aspect of the allocation process.

### **Cost of Research**

The cost of research will be the second factor that will serve as a basis for the allocation or reallocation of funds. For the allocation of funding to FTAs in the Discovery Grants program, NSERC has recently proposed a cost-based methodology to be used in conjunction with the demand affecting each of the Grant Selection Committees. This methodology would be used to establish a cost factor for each GSC. The factor would be multiplied by the number of new applicants in each GSC, and the result would in turn be used to proportionally allocate funding among GSCs. It is important to mention that the calculation of this cost factor takes into account several components, including the supply of highly qualified personnel through the support of students and the inclusion of enrolment data, as well as the expenditures related to equipment, materials, field trips, and other travel. This type of process would assume equal FTA success rates amongst the GSCs, but with different average grants based on the cost analysis.

### **Amounts to Be Reallocated**

Previous Reallocations Exercises stipulated that up to 10 per cent of the Discovery Grants budget would be reallocated every four years. The proportion of 10 per cent was considered by Council as reasonable in order to address some priorities while continuing to support a diversified research base. If NSERC were to continue reallocating the same proportion of funds, it would reassign between 2 and 2.5 per cent of the Discovery Grants budget every year. This would mean about \$8 million for 2006-07. However, it is already known that the amount needed in order to fund FTAs every year is in the range of \$15 million; therefore, reallocating on the basis of the 10 per cent that was used previously would be insufficient to address the needs of the FTAs, especially if the numbers of the last several years continue.

The FTA Funding Formula in the past four years has represented a positive sum allocation exercise in the Discovery Grants Program. Therefore, in the presence of additional funds, there is no need to perform a reallocation exercise parallel to the FTA allocation process (because the two are carried out according to the same criteria). If, for example, the amount of new funding is more than what is required for FTAs, then the balance could be distributed among the GSCs according to the same methodology.

In years when there is no new funding for FTAs, the allocation mechanism would become a reallocation exercise. As a starting point, the amount to be reallocated could be commensurate with the amount needed for FTAs. The new allocations mechanism will therefore be flexible and able to respond to multiple budget scenarios.



## Priority Setting

The evaluation of the Reallocations Exercise recommended that its strategic planning and priority setting components be done at a corporate level rather than through the Discovery Grants program. This recommendation has been accepted. Recent examples of NSERC strategic decisions in basic research include the funding of initiatives related to the International Polar Year through the Special Research Opportunity program as well as the approval of an NSERC Innovation Platform in Quantum Computing. Furthermore, NSERC also approved and announced new strategic research themes that will guide the Strategic Project Grants program for the next five years. These higher level decisions are considered to be more effective than initiatives funded through the previous Reallocations Exercises, where impact was limited. NSERC will develop a cohesive mechanism for priority setting, which may include, among other things, the support of strategic initiatives in basic research.

## Evolution of Research within Grant Selection Committees' Purviews

One of the components of the previous Reallocations Exercise was the preparation of documents and briefs outlining the vision and emerging trends within each GSC's purview. Given that these submissions will no longer be required, it would be useful to collect some of the information in some other ways. After each competition, GSC chairs prepare an annual report which represents the formal record of the GSC's feedback on the competition. This report is distributed to members of NSERC staff, standing committees and sometimes to groups in the research community. It is a key source document for policy discussions of COGS and serves as a historical document describing the context of a given competition. These reports often contain information on how the research evolves within a given GSC's purview and NSERC will work with the GSCs to place a higher emphasis on this aspect.

NSERC is also looking at the evolution of research and at emerging trends when it appoints members to GSCs. NSERC's program officers perform a detailed annual analysis of areas covered by GSCs, and are well positioned to identify any change in the areas covered by GSCs. NSERC needs to document this process better. This could help in informing various audiences with respect to the directions that some disciplines are taking over time. In addition, it could help in preparing public relations documents to promote the value of research in Canada's knowledge-based economy. NSERC will further consider how it can capture and use this kind of information more efficiently.