National Science Board Committee on Strategy and Budget

Request for NSF Advisory Committee Input Proposal Submission Limits

Advisory Committee response on Proposal Limits is requested by Friday, May 19, 2008

Background

The August 2007 America COMPETES Act directed the National Science Board (Board) to review and assess the impacts on institutions of National Science Foundation practices that limit the number of proposals that can be submitted by a single institution for specific NSF programs. The Board was specifically instructed to evaluate whether current NSF practices are well justified and appropriate for the types of programs that limit the number of proposal submissions. A report to Congress is required by August 9, 2008.

NSF uses limits on proposals submitted by a single institution as a management mechanism to mitigate workload concerns heard from NSF and the research community. These concerns focus on the increasing number of NSF proposals, declining NSF funding rates, the time and effort required from principal investigators to develop NSF proposals, and the time and effort required from qualified and non-conflicted external reviewers. Limits on proposal submissions are primarily employed in three categories of NSF programs: infrastructure and instrumentation, centers and facilities, and education and training. Desired outcomes of implementing limits on proposal submissions for these types of programs include strengthening institutional commitment to projects to ensure their sustainability beyond the life of the NSF award, ensuring that programs fit within institutional goals and strategic plans, and broadening participation by ensuring that programs with broad appeal attract diverse, non-traditional institutions.

Limiting proposal submissions by an institution is a practice used in less than ten percent of recent NSF solicitations. In FY 2007, NSF had 294 active solicitations; 28 of these limited proposal submissions by institution. Proposal limitations are not an established NSF-wide policy and the practice is not addressed in the Grant Proposal Guide. When proposal submission limits are used, they apply only to a specific funding opportunity and do not prohibit submissions by the institution of proposals in response to other solicitations, announcements, or to other NSF programs. NSF does not limit the number of awards that an institution can receive over time through a particular program.

The practice of implementing limits on proposal submissions was standardized somewhat in August 2007. The Proposal and Award Manual (NSF's internal process manual) was revised to include a requirement that any draft solicitation that limits proposal submissions must provide a rationale for the limit in its Management Plan and that limit must be approved as part of the internal NSF solicitation clearance process.

The attached questions are meant to stimulate your thinking about issues involved with limits on proposal submissions by institution. Feel free to comment on additional issues and questions you feel are important.

Proposal Submission Limits

Questions

(1) Impact on Institutional Commitment to Proposals

NSF programs that limit the number of proposal submissions by institution are typically institution-level awards that focus on building infrastructure, establishing research centers, broadening participation, and/or expanding educational opportunities. These are types of programs that require significant institutional commitment, and the institution's decision to participate must be made in the context of long-term strategic priorities, institutional goals, and a desire to achieve sustainability beyond NSF funding. What impact do limits on proposal submissions by institution have on institutional commitment to proposals that they submit for NSF consideration?

(2) Impact on Institutional Workload

Limits on proposal submissions have been implemented as an NSF management practice largely in response to internal NSF and external research community concerns (e.g. about the increasing number of NSF proposals, declining NSF funding rates, time and effort required in developing NSF proposals, and time and effort required from qualified and non-conflicted external reviewers). What impact does the practice of limiting proposal submissions have on institutional workload? Include consideration of PI time and effort to conceive and write proposals and sponsored research office personnel time and effort in your response.

(3) <u>Institutional Review Processes for Limited Competitions</u>

Some institutions have developed internal review processes through which proposals are chosen to move forward for NSF consideration in limited competitions. What are effective practices that you are aware of that institutions could use to select among proposals when limited to a certain number of proposals for an NSF solicitation?

(4) Alternatives to Limiting Proposal Submissions

Limiting the number of proposal submissions by institution is one management practice that has been used by NSF in recent years to mitigate workload concerns at the NSF (including external review) and institution. What are possible alternative approaches to addressing NSF and institutional workload concerns, given the practical constraints on the NSF review process?

(5) Impact on NSF Portfolio

NSF seeks to fund a portfolio of the most meritorious science, engineering, and education. What are the positive and negative impacts of limits on proposal submissions by institution on NSF's ability to support the most meritorious science, engineering, and education?