

**National Science Foundation
Advisory Committee for Business and Operations
Executive Summary for the Spring 2013 Meeting
April 30-May 1, 2013**

This is the Executive Summary of the spring meeting of the Advisory Committee for Business and Operations held at the National Science Foundation on April 30-May 1, 2013.

Dick Seligman, Charlene Hayes
Co-chairs

Committee members in attendance:

James Barbret	Wayne State University
Jake Barkdoll	Consultant
Warren Buck	University of Washington, Bothell
Cecilia Conrad	CEOSE Liaison
Cindy Blazy	Belmont University
Marti Dunne	New York University
Carson Eoyang	Naval Postgraduate School
Charlene Hayes	Johns Hopkins University
Cindy Hope	University of Alabama
Greg Jackson	EDUCAUSE
Kathryn Newcomer	George Washington University
Dick Seligman	California Institute of Technology
Devon Streit	Department of Energy
John Tao	O-Innovation Advisors LLC
Joe Thompson	Retired
David Trinkle	UC Berkeley

This report summarizes the discussions and recommendations of the NSF Business and Operations Advisory Committee (the “Committee”) that took place at the April 30-May 1, 2013 meeting. Topics are reported in the order in which they appeared on the Committee’s agenda.

Introduction

Charlene Hayes, Committee Co-Chair Chair, opened the meeting with a welcome and a special introduction of John Tao, for whom this was the first meeting that he has attended in person.

John Tao, O-Innovation Advisors LLC, provided some background information about himself: he spent 30 years with Technology Partnerships for Air Products and Chemicals. He also worked for

Weyerhaeuser, from which he retired in 2011. He currently serves on panels for Department of Energy, US Department of Agriculture as well as NSF.

Following the introduction, Co-Chair Hayes stated that Dr. Cora Marrett has a conflict and will be coming to the meeting at 10 am tomorrow instead of 11 am as shown on the agenda.

Co-Chair Hayes reviewed the status of prior committee recommendations, noting items related to workforce challenges and workload are still in progress.

BFA/OIRM/CIO Updates

Marty Rubenstein, Chief Financial Officer and Head of Budget, Finance and Award Management (BFA), provided the following updates:

- FY2013 funding for NSF was appropriated in March, six months into the fiscal year. The appropriated amount of \$6.88 billion is 2.1% below the FY2012 levels.
- On April 10, 2013 a budget request was transmitted for FY14 in the amount of \$7.63 billion.
- Cost saving measures that NSF is implementing include more virtual site visits, thus reducing travel.
- Recovery Act Waiver requests have been granted. OMB notes that waiver requests for certain awards that go beyond Sept 30th are approved. Expenditure reports are to be available on a real-time basis with Awardee Cash Management Service (ACM\$).

Gene Hubbard, Chief Human Capital Officer (CHCO) and Head of the Office of Information and Resource Management (OIRM), provided the following updates:

- FY13 budget –OIRM can be funded at the request level. Although there is an appropriation, OIRM does not know the allocation. Whatever the numbers end up, they will represent a downward trend to NSF's Information Technology (IT) budget.
- The FY14 IT budget will be smaller, but close to same as this year. While funding has gone down there is pressure on to increase IT due to iTRAK, Data Warehouse/ public access and virtual tech priorities.
- FutureNSF-- As soon as GSA makes the award/signs lease (expected this summer), NSF will announce it. The procurement was very competitive due to the current financial lending market and local jurisdictions were very aggressive. However, the procurement is essentially GSA's decision. If Arlington is selected, there will be a significant renovation (lease to start in 2016). GSA signed interim leases for 4 years for our current space: 4 years for Stafford I, extended the current one for Stafford II for 8 months and will then do a 4 year lease.
- Federal Employee Viewpoint Survey (FEVS-2012) – NSF has submitted an Action Plan 1.0 to OPM. What has been done to-date:
 - Idea Share campaign
 - Town Halls
 - Focus Groups/Listening Sessions in some organizations

- Suggestion e-mail box
- OIRM Initiated actions in workload, career development, recognition of performance and career/life balance. Working with managers to implement the action plan.

The 2013 survey is being conducted effective last week and will close at the end of May.

- OIRM and Claudia Postell, Office of Diversity and Inclusion, have been working on a Diversity and Inclusion (D&I) Strategic Action Plan. Gene and Claudia are working together to track the implementation of the actions in the plan. They have held two Town Hall meetings and plan another one next week. They have set up an anonymous e-mail account and have revised the D & I plan with a goal to implement and track the actions. NSF plans to use a dashboard to track and display action completion and outcomes, will review the FEVS, and will continue to conduct town halls and solicit union and employee feedback.
- As of March 2013, 30% of all panels were virtual panels. It is estimated that NSF has saved \$3.2 million on travel for panels during 2013. This has resulted in a challenge in that NSF will need to prioritize funding for support because of the unexpectedly large usage of virtual panels.

Amy Northcutt, Chief Information Officer (CIO), provided an update on the CIO activities.

Amy's stressed the need for NSF to think strategically about information technology. She described her Information Technology vision as to "innovate, protect and deliver," emphasizing that both the "Innovate" and "Deliver" components of the vision represent opportunities.

Amy highlighted the following activities that she plans to develop further this year:

- Transparency in budget
- Governance (who makes the spending decisions)
- Strategic use of technology

BFA Strategic Priorities

Marty Rubenstein, along with team members Florence Rabanal, Jessie Richardson, and Tim Kashmer, presented information on BFA's Strategic Priorities

- Using risk assessment to prioritize operations
- Reducing duplication of services provided
- Creating a SWAT Team to address critical needs

The team has focused on BFA operations and outlined some lessons learned. The team will publish a report on the results of its work. It will be made available to all BFA staff. Marty will present the results to the Acting Director of NSF. Transparency and follow up were emphasized. The selection of specific implementable actions and milestones was discussed.

There was further discussion of the benefits of participation in the SWAT Teams. It was considered a highly positive experience that empowered participants by giving them a "voice." The Advisory Committee commended the staff on the work done thus far and encouraged them to continue the process.

NSF Strategic Plan Update and Linkage to Employee Performance Plans

The topic was introduced by Marty Rubenstein and Alan Blatecky and the presentation continued with Amber Baum, Pam O'Neil, Judy Sunley and Chrissy Peterson. The relationship between the Strategic Plan and Employee Performance Plans was discussed. Marty Rubenstein commented on key aspects in the development of a Strategic Plan:

- Performance plans must be developed in order to track the status of improvements, as well as areas in which additional effort is required.
- Better “top-down” leadership communication must be emphasized. More program staff must be engaged in the process.
- The disconnection between management directives and staff implementation of those directives must be bridged.
- The process of strategic planning must be incorporated into other planning activities.

Gene Hubbard noted the difficulty associated with picking between an emphasis on outcome or process with performance evaluations. He described the unique challenge of tracking and evaluating NSF's long term outcomes and effects. Judy Sunley described the disconnect between organizational goals of NSF and goals of individual NSF staff. Surveys have indicated that while staff members agreed with overall strategic objectives, they did not agree with the strategic goals. Moreover, employees seemed to disagree over the wording of organizational goals. To foster employee buy-in with the goals, feedback from upper level management must permeate all levels of the Foundation. Employee performance evaluations must be accurate indicators of performance, as well as motivational tools that point to areas of improvement for the individual employee.

Kathy Newcomer described the importance of historically tracking an organization's performance in order to determine whether the organization is improving over time. In order to track historical performance, a centralized capability to conduct evaluations must exist. An “evaluation office” could serve as this capacity and conduct performance measurements. Organizational performance should be tracked and analyzed according to tangible metrics. Measurement of performance may be difficult because of conflicting and competing externalities. The success or failure of the new STEM education policy, for example, may be due to changing external factors and not to the implementation of new policies. Effective performance measurement requires clearly defined goals that are understood by management.

Program evaluation should be planned and executed strategically and in a coordinated fashion within the organization. The identification of needed evaluation competencies should begin with a consideration of the desired outcomes, i.e., enhanced organizational learning and improved organizational performance. Evaluation should be treated as a management imperative and designed in a strategic and holistic fashion. Performance measurement processes should be designed and employed as one component of a strategic organization-wide evaluation approach and better informed by program evaluation skills and standards. The entire range of evaluation approaches, from qualitative and quantitative tools employed to assess service quality, to cost effectiveness analyses to measure the results of regulations, should be embraced within the evaluation purview.

Evaluation should be situated within organizations to facilitate organizational learning and staffed with experts in the specific fields as well as by representatives of multiple disciplines. Organization cultures

can become more receptive to the use of evaluation and measurement when top leaders are consistent in their commitment to both. Priority and capacity to promote continuous learning and continual self-examination of current management practices and performance is also needed and shaped by top leadership.

The Committee commends NSF staff for holding Town Hall and Poster sessions to solicit feedback on the Strategic Plan Objectives and for doubling the “performance” staff to support the PIO. The new strategic planning requirements under GPRAMA are much more demanding and require more clear linkages to performance measurement and evaluation than before. Cascading alignment from strategic objectives and performance goals to performance appraisals will be very difficult. The committee suggested that NSF use an independent facilitator to hold focus groups of more senior staff to solicit ideas on how to do this. Kathy Newcomer has volunteered her time to facilitate groups pro bono. It is critical for the NSF top leadership to embrace evaluation as a mission support function and to place a high priority on the new Chief Evaluation Officer they plan to hire.

Leveling Award Workload

The Committee received a presentation from Karen Tiplady, Director of Division of Grants and Agreements, and Lori Wiley concerning the possibility of Leveling Award Workload. Data presented for fiscal years 2010-2012 show that an average of 77% of all NSF awards are issued in the last half of the fiscal year, with 49% issued during the final quarter. Making so many awards in a compressed timeframe stresses the Foundation’s resources, increases risk, and requires paying overtime and bringing in additional help.

Potential implementation was divided into three areas:

Calendar Management: Shift solicitations, evaluate panel cycles, set priority deadlines and commit funds in the 1st quarter for cross-cutting multi-year initiatives.

Operating Procedures: Create quarterly targets; award proposals paneled in the 4th quarter during the next fiscal year; streamline process for solicitations; standardize administrative procedures; and support additional outreach and training participation.

IT Improvements: Modernize award system; improve eJacket functionality by enabling data fixes without decommitting; and changing post-award approval requirements; and replace the Program Information Management System used for clearance.

BFA made it clear that while it was highly preferable to get a new awards system, the effort to level award workload was viable even without it. It would take time for existing staff to implement, but it would not take additional financial outlays.

Marti Dunne presented the view from the university awardee community. Beginning with the notion that a good first step to leveling the award workload would be to spread deadlines for proposals out over the fiscal year as well, she described the stresses placed on the awardees by having clustered deadlines. Typically, deadlines at NSF occur during the first three and the last three months of the fiscal year. Deadlines pop up in clusters resulting in faculty frantically trying to assemble their science, departmental administrators who are working on multiple proposal boilerplate and budgets, hurried reviews by University chairs and deans and tremendous pressure on the Sponsored Programs Office to

get the proposal out the door without adequate time to check for compliance with the myriad rules and regulations.

Advantages to distributed deadlines would be:

More time for all participants in the process to devote to proposal preparation resulting in better written proposals; fewer mistakes and better compliance. Regularized deadlines would allow for better planning. Principal Investigators will have time to write more proposals.

Similar advantages would accrue to leveling awards:

A distributed award schedule would eliminate the highest volume during what is traditionally a vacation time (summer). The emphasis on collaboration has exponentially increased the need for subcontracts which in turn, has placed pressure on the contracts office to create outgoing subs and review and negotiate incoming subs. Leveling awards would reduce the backlog that occurs every fall. The tasks themselves will not change; therefore there would be no increase in overall workload. Grantees are accustomed to modifying their behaviors based on grantor requirements.

It should be noted that NIH successfully made a similar change several years ago without much fuss from the awardee community. An award is welcome any time it arrives.

The Committee was unanimous in its support for both the leveling of proposal deadlines and awards issuance. This would be a win-win for NSF and the awardee community. It was suggested that NSF begin with a directorate which is neutral in its opinion of the concept and demonstrate its efficacy of the concept. The Committee offered to assist NSF to develop a business case to promote the implementation of the idea. The Committee agreed to send a letter to Marty and Gene urging BFA to move forward as soon as possible and offering its participation in the rollout (note: The letter was sent on May 30, 2013).

Virtual Meetings

Greg Jackson discussed the BOAC's "experiment" in holding a virtual meeting. He concluded that the virtual meeting went better than expected, that it works better for short meetings, it shouldn't replace in person meetings, and that performance improves with practice. The committee acknowledged the outstanding IT support that was provided for the virtual meeting. Without that level of support, the virtual meeting would have been much less successful.

The Committee recommended that we have a face-to-face meeting in the fall of 2013 and that we consider having one or two virtual meetings between now and then. It is important that the topics be matched to the meeting format.

Meeting with Dr. Marrett

Dr. Cora Marrett, Acting NSF Director, met with the committee. Summaries of the committee's major discussions were presented. Dr. Marrett indicated her appreciation for the committee's engagement and the quality of interaction.