Recompetition Subcommittee Overview

Mark Coles
LFO/BFA



Goal – Produce Recommendations for Implementation of NSB Policy

- Ad hoc subcommittee met Nov. 2-4 to discuss practices for implementation of NSB Recompetition Policy – received input from user communities and facility operators
- Will draft a report of recommendations <12/31
- Final report to B&O Advisory Committee BOAC < 3/31/12
- Official acceptance following BOAC review at May 2012 meeting



NSB-08-12 : February 7, 2008: NATIONAL SCIENCE BOARD RESOLUTION COMPETITION AND RECOMPETITION OF NSF AWARDS

WHEREAS, the Committee on Programs and Plans has reassessed, at its meeting of February 6-7, 2008, the major principles and key issues in a statement "Competition, Recompetition and Renewal of NSF Awards" (NSB/CPP-08-4) in the context of the various types of NSF awards. Therefore, be it RESOLVED that the National Science Board (the Board) endorsed strongly the principle that all expiring awards are to be recompeted, because rarely will it be in the best interest of U.S. science and engineering research and education not to do so.

Furthermore, the Board endorsed a recompetition policy for major facility awards which is transparent to the research community such that after construction of major facilities is completed, followed by an appropriate time period to bring the facility to sustainable operations, full and open competition of the operations award will be required.

This position was based on the conviction that peer-reviewed competition and recompetition is the process most likely to assure the best use of NSF funds for supporting research and education.



More on NSB Recompetition in the August 2009 Board Statement:

• There are organizational and management issues involved with the operation of large facilities, and hence NSF finds it necessary to conduct management reviews (as distinct from science reviews) at regular intervals and to provide feedback to the managing organizations, which also conduct such reviews. It is important that NSF provide proper guidance on how best to conduct these management reviews, along with defined review criteria and review forms. In particular, supplemental criteria addressing management issues should be used. Further, the user community should be periodically surveyed about the level of satisfaction with the services the performing organization is providing. This can often be as important as good management, and the two such reviews can provide a more holistic view of the awardee.



NSF statement ...continued

 Even in cases where the management has been explicitly and rigorously reviewed and found to be effective, the benefits of competition may outweigh any short-term disadvantages of recompetition. NSF must determine periodically whether there is a better approach to managing the facility. The issue of recompetition should be explicitly addressed as a regular part of the decision process for every such award.



Subcommittee Process

• June 2011:

 Formed NSF Organizing Committee, with representatives from all Divisions operating major multi-user research infrastructure

July 2011:

- Formed subcommittee of influential senior researchers in the fields served by NSF's various large facilities
- Charged the subcommittee to recommend implementation practices nuanced to facility-specific concerns (reviewed by BOAC at May 2011 meeting)

August/September 2011

- Invited prominent user community spokespersons to discuss community perspectives on recompetition with subcommittee
- Invite management of facilities and awardee institutions to discuss perspectives on recompetition with subcommittee

September/October 2011

- Held teleconferences with Subcommittee and NSF organizing committee to go over facility background and management issues, provide NSB perspective, AD perspective, review recent recompetition history of National Atmospheric and Ionospheric Center, and Network for Earthquake Engineering Simulation
- Invited attendee written input in advance of November Subcommittee meeting
- Set up password-protected website to share all written inputs

November 2-3, 2011

- Meeting with ~100 users and operators 11/2-3
- OSTP, NSF program officers, NSF Deputy Director, STPI



Remaining activities

- Subcommittee produces draft set of recommendations to Business and Operations Advisory Committee < 12/31
- Final report < 3/31/12, expected much sooner
- B&O AC accepts report following review, 5/12
- NSB requests regular updates on subcommittee activities



NSF Organizing Committee

- Rodey Batiza Division of Ocean Sciences / Geosciences Directorate
- Charisse Carney-Nunes Office of Business, Finance, and Award Management
- Mark Coles Large Facilities Office / Office of Business, Finance, and Award Management
- Joe Dehmer Division of Physics / Mathematical and Physical Sciences Directorate
- Craig Foltz Division of Astronomical Sciences / Mathematical and Physical Sciences Directorate
- Bob Houtman Division of Ocean Sciences / Geosciences Directorate
- Tim Kashmer Division of Acquisition and Cooperative Support / Office of Business, Finance, and Award Management
- Fae Korsmo Office of the NSF Director
- Bill Miller Large Facilities Office / Office of Business, Finance, and Award Management
- Peter Milne Office of Polar Programs
- Steve Nelson Division of Atmospheric and Geospace Sciences / Geosciences Directorate
- Joy Pauschke Division of Civil, Mechanical, and Engineering Innovation / Engineering Directorate
- Phil Puxley Division of Astronomical Sciences / Mathematical and Physical Sciences Directorate
- Florence Rabanal Large Facilities Office / Office of Business, Finance, and Award Management
- Guebre X. Tessema Division of Materials Research / Mathematical and Physical Sciences Directorate
- Jim Whitcomb Division of Earth Sciences / Geosciences Directorate



Recompetition Subcommittee

- Bill Frazer Subcommittee Chair. Senior Vice President, Emeritus of the University of California (UC) system, Professor of Physics Emeritus, UC Berkeley.
- **2. Barry Barish** Linde Professor of Physics, emeritus, California Institute of Technology. Member, National Science Board (NSB) 2003-2009.
- 3. Jack Burns Professor in the Department of Astrophysical and Planetary Sciences at the University of Colorado (CU) in Boulder. He is also Vice President Emeritus for Academic Affairs and Research for the CU System.
- **4. Greg Deierlein** J. A. Blume Professor of Engineering, and Director, John A. Blume Earthquake Engineering Center, Dept. of Civil & Env. Engineering, Stanford University,
- 5. Margaret Leinen Associate Provost for Marine and Environmental Initiatives and Executive Director, Harbor Branch Oceanographic Institute, Florida Atlantic University. NSF Assistant Director for Geosciences, 2000-2007.



Subcomm membership ctd

- **6. Keith Moffat** Louis Block Professor of Biochemistry & Molecular Biology, The University of Chicago.
- 7. Bruce Darling Vice President for Laboratory Management, University of California
- **8. Art Ramirez** Dean, Baskin School of Engineering, and Professor of Electrical Engineering and Professor of Physics, University of California at Santa Cruz.
- 9. Adam Dziewonski Frank B. Baird, Jr. Research Professor of Science, Department of Earth and Planetary Sciences, Harvard University.
- **10. Thorne Lay** Distinguished Professor, Earth and Planetary Sciences Department, and Director, Center for Studies of Imaging and Dynamics of the Earth, University of California at Santa Cruz.
- **11. Kerry Emanuel** Breene M. Kerr professor of atmospheric science at the Massachusetts Institute of Technology,
- **12. Devon Streit** Associate Director, Office of Laboratory Policy and Evaluation, Department of Energy, is a member of the NSF Business and Operations Advisory Committee and liaison to the Subcommittee.



More information

- NSB policy
- Charge to subcommittee
- Subcommittee members
- Recompetition history
- Sample questions for discussion
- Participants from user community and facility operators
- Written statements from participants



Sample general questions

- What should NSF look at to assess the benefits to the user community from implementing the NSB recompetition policy rigorously?
- How can the NSB policy implementation promote creativity and innovation in the competition for future operating awards?
- How is your research program affected, or how could it be affected by the recompetition process? How might recompetition affect the cost or duration of conducting your research program?
- What are perceived or anticipated benefits, detriments, or vulnerabilities of your own research to regular recompetition of facility operating awards?
- Are there unintended consequences of recompetition of which the subcommittee should be aware?



Collaborative activities

- How are collaborative research activities between facility staff and community researchers likely to be impacted in a recompetition process?
- What recommendations do you have for processes that put science first in a recompetition process?



International partnerships

 Are there special considerations in implementing recompetition pertaining to the coordination of international partnerships, which have defined scope and duration, with respect to the timing and schedule of recompetition activities?



Facilities that are big science experiments

 What does recompetition mean within the context of facilities that are more like big science experiments, where there is a close link between the intellectual contributions of the proponents for planning and constructing the facility and then conducting the experiment for which the facility is intended?



University-based facilities

- What does or should recompetition mean for a facility located on a university campus?
- What might be the consequences on the facility, awardee, and user community if NSF were to mandate the operating award be shared between the university where the facility is located and some other university or universities?
- Are their unique considerations for university based programs that preclude recompetition?



For facilities located on multiple university campuses or operated by multiple university consortia:

- Should recompetition consider proponents from outside the current group, and what might the specific considerations be in promoting or disallowing this?
- Are their risks foreseen to the consortia from conducting a recompetition, and if so what steps can be done to minimize these risks?



Considerations for facilities operated by academic consortia:

- Some facilities are operated by consortia that represent all or nearly all of the organizations conducting research in a particular discipline. What can be done, and what should be done to stimulate creativity and innovation in that circumstance?
- What would the affect on the research community be of transferring the award to a new entity (such as non-profit, commercial organization, or one of the members of the current consortium)?



Challenges

- Stimulate creativity and innovation
- Match recommendations to community needs
- Avoid unintended negative consequences
- Produce convincing recommendations