Management and Operation of the Ocean Bottom Seismometer Instrument Center (OBSIC)

PROGRAM SOLICITATION

NSF 17-587



National Science Foundation

Directorate for Geosciences Division of Ocean Sciences

Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):

October 25, 2017

IMPORTANT INFORMATION AND REVISION NOTES

Any proposal submitted in response to this solicitation should be submitted in accordance with the revised NSF Proposal & Award Policies & Procedures Guide (PAPPG) (NSF 17-1), which is effective for proposals submitted, or due, on or after January 30, 2017.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Management and Operation of the Ocean Bottom Seismometer Instrument Center (OBSIC)

Synopsis of Program:

This solicitation seeks the services of a qualified organization to manage and operate an Ocean Bottom Seismometer Instrument Center established and sponsored by Marine Geology and Geophysics research programs within NSF's Division of Ocean Sciences. Research activities requiring the use of the existing pool of instruments supported by NSF are expected to continue well beyond the period of performance for the existing Ocean Bottom Seismometer Instrument Pool Management Office award, scheduled to expire in early 2018. The award resulting from this solicitation will be administered as a Cooperative Agreement with a single Lead Institution that will perform the OBSIC activities described herein.

Cognizant Program Officer(s):

Please note that the following information is current at the time of publishing. See program website for any updates to the points of contact.

- Candace Major, Program Director, telephone: (703) 292-7597, email: cmajor@nsf.gov
- Jim Holik, Program Director, telephone: (703) 292-7711, email: jholik@nsf.gov

Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):

47.050 --- Geosciences

Award Information

Anticipated Type of Award: Cooperative Agreement

Estimated Number of Awards: 1

A principal role of OBSIC is to serve as the central entity responsible for providing appropriate ocean bottom seismometers for high quality data acquisition and coordinating their deployment in support of scientific research programs. It is anticipated that a base amount of approximately \$1.8M per year will be provided for OBSIC management and operation. Supplemental funding increments for field support of instrument deployment and recovery on specific projects will be executed through the award resulting from this solicitation. The OBSIC Program budget, number of awards and average award size/duration are subject to demand for Ocean Bottom Seismometer (OBS) use and the availability of funds.

The successful proposal will be awarded as a Cooperative Agreement. NSF anticipates that the initial award commitment will be for five years, with continuation for a maximum of an additional five years contingent on the availability of funds and the successful outcome of a comprehensive external review of Awardee performance in the third year of the initial period (see Section VII.B, "Special Award Conditions"). Budget amounts given in this program solicitation are for planning purposes only - actual annual funding increments will be determined on the basis of Annual Program Plans submitted by the Awardee and approved by NSF, subject to the availability of appropriated funds and contingent upon successful performance of the Awardee.

Should a new Awardee be selected to replace the current OBSIP Management Office Awardee, NSF will consider funding allowable transition costs for a period of up to six months. Relevant transition activities may include interviewing and hiring personnel, assigning subcontracts, website development, and transferring data and property. During this transition period, the new Awardee will have appropriate access to incumbent personnel and facilities.

Anticipated Funding Amount: \$9,000,000

Base funding up to \$9M total or \$1.8M annually, including management, operations and data quality assurance and control. The program budget for field experiments will supplement the base funding depending on the demand for Ocean Bottom Seismometer (OBS) use in terms of number of awards, average award size/duration and availability of funds.

Eligibility Information

Who May Submit Proposals:

The categories of proposers eligible to submit proposals to the National Science Foundation are identified in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG), Chapter I.E.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization:

One proposal as Lead Institution per organization. A proposed Lead Institution may serve as a SubAwardee for another proposed Lead Institution.

Limit on Number of Proposals per PI or Co-PI:

There are no restrictions or limits.

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

• Letters of Intent: Not required

• Preliminary Proposal Submission: Not required

Full Proposals:

- Full Proposals submitted via FastLane: NSF Proposal and Award Policies and Procedures Guide (PAPPG) guidelines apply. The complete text of the PAPPG is available electronically on the NSF website at: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.
- Full Proposals submitted via Grants.gov: NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov guidelines apply (Note: The NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: https://www.nsf.gov/publications/pub_summ.jsp? ods_key=grantsgovguide).

B. Budgetary Information

. Cost Sharing Requirements:

Inclusion of voluntary committed cost sharing is prohibited.

• Indirect Cost (F&A) Limitations:

Not Applicable

• Other Budgetary Limitations:

Not Applicable

C. Due Dates

• Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):

October 25, 2017

Proposal Review Information Criteria

Merit Review Criteria:

National Science Board approved criteria. Additional merit review considerations apply. Please see the full text of this solicitation for further information.

Award Administration Information

Award Conditions:

Additional award conditions apply. Please see the full text of this solicitation for further information.

Reporting Requirements:

Additional reporting requirements apply. Please see the full text of this solicitation for further information.

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I. INTRODUCTION

The National Science Foundation (NSF) is authorized by the National Science Act of 1950, as amended, to initiate and support basic and applied research and programs to strengthen scientific research potential. To achieve these goals, NSF invests in facilities and equipment that provide research capabilities in various scientific disciplines. NSF has fostered and supported state-of-the-art ocean bottom seismic instrumentation for the collection of marine seismic data during much of its recent history. Active and passive source seismic tools are critical for addressing fundamental questions about the structure and dynamics of the Earth's crust and interior. With 70% of the Earth's surface covered by oceans, seismic instruments that can be deployed on the seafloor provide key coverage and the ability to answer questions about the nature of the ocean basins that cannot be addressed with other tools.

The Ocean Bottom Seismograph Instrument Pool (OBSIP) was established in 1999 to enable research in a range of programs across the Ocean and Earth Sciences. The OBSIP was originally funded by separate Cooperative Agreements with three principal Institutional Instrument Contributors equipped to provide seismic instruments to NSF-sponsored research programs. Later, the OBSIP Management Office was established in 2012 to provide more centralized organization of the instrument pool and enhanced coordination with NSF and the user community. This support has ensured maintenance of the necessary technical capabilities, and has provided access to Ocean Bottom Seismic instruments and data for a broad user community, but has also resulted in proliferation of instrument designs, operational approaches, field support needs, and management practices that is not sustainable.

In order to meet the continuing demand for OBSs, the Division of Ocean Sciences seeks the services of a qualified organization,

through a Cooperative Agreement, to provide Management and Operation of a new consolidated Ocean Bottom Seismometer Instrument Center (OBSIC) to support research and education in the Ocean and Earth sciences. OBSIC will serve as the primary source of OBS instruments and field support for NSF-funded research programs. With the new management model, NSF strives to encourage greater operational efficiency and service while maintaining the technical foundation necessary for future innovation and ensuring that OBS capabilities support, sustain, and advance frontier science within available resources.

An internal Resource Library that includes information relevant to OBSIC Management and Operation, as identified in Section V herein, will be made available to interested proposers.

II. PROGRAM DESCRIPTION

Overview

The Ocean Bottom Seismometer Instrument Center (OBSIC) is envisioned as a single organization that will enable seamless access to high quality OBS-related instrumentation, data collection, and data delivery capabilities to a broad scientific community. OBSIC will serve as the primary source of OBS instruments and field support for NSF-funded research programs.

As the selected managing organization, the Awardee will work closely with NSF and the U.S. oceanographic community to ensure that, subject to budgetary constraints, OBSIC will provide centralized support for separately funded research programs that require OBS instrumentation. The Awardee will maintain an appropriate balance of engineering, technical and management personnel to provide support to potential users who may be unfamiliar with the instruments or the complexities of OBS experiment design, field operation, and data quality assessment.

OBSIC will provide mechanisms for processing instrument requests and obtaining timely feedback from the user community concerning instrument capabilities, performance, and data quality concerns. The Awardee will establish and maintain a website to inform the community about OBS planning, services and products. Also, the Awardee will ensure that OBS data acquired through the use of OBSIC will be in formats usable by researchers and of sufficient quality to be entered into an appropriate long-term data repository, such as the Incorporated Research Institutions for Seismology Data Management Center (IRIS-DMC), and made publicly available in a timely fashion. In addition to the customary NSF oversight of Awardee performance, an external Oversight Committee will provide expert advice and represent the interests of the broader science community.

The expected annual budget of up to \$1.8M to support OBSIC comprises only the base costs (including data quality assessment/control but not long-term data storage), with no funding for support of individual experiments or any development efforts. Supplemental funding for individual experiments will be provided to the OBSIC in accordance with research proposal success, and funding for development efforts may be sought through other NSF programs. Should support for instrument recapitalization be sought during the award period of performance, the Awardee will demonstrate that new equipment is consistent with the goals of greater standardization of instrument types and support requirements as a cost saving priority. NSF will retain ownership of any such instruments, and they will be subject to the terms and conditions of federally-owned property (see NSF Proposal & Award Policies & Procedures Guide section IX.D.4).

Awardee Responsibilities:

In general, the Awardee will manage and coordinate OBS-related activities that most effectively respond to the needs of the geosciences community. OBSIC will have responsibility for performing activities needed to furnish and support ocean bottom seismometers for field experiments that have been peer-reviewed and approved by the NSF. The OBS inventory available to OBSIC will include, at a minimum, the 60 broadband instruments acquired with NSF American Reinvestment and Recovery Act (ARRA) support ("Cascadia OBSs", including shallow-water trawl resistant designs; more information available at http://www.obsip.org/instruments/) as well as 14 broadband instruments transferred to OBSIP from the Transportable Array. The Awardee will closely coordinate with the University-National Oceanographic Laboratory (UNOLS) to assure efficient scheduling and deployment of OBS equipment and support personnel. The Awardee will have responsibility for quality assurance and quality control of data and meta data acquired using OBSIC assets, (which will include close coordination with Principal Investigators requesting the data for research purposes), prior to OBSIC transmittal to a long-term data archive.

OBSIC instruments assigned to funded field experiments may be obtained from existing inventories or from proposals submitted to NSF programs. OBSIC will be expected to support requests by Principal Investigators for information on the costs to acquire OBS instrumentation for inclusion in research proposals. The OBSIC award will be supplemented to cover costs associated with awarded proposals that required OBSIC tools and field services.

Operating expenses for OBSIC will be negotiated annually. Base funding under the Cooperative Agreement will be used for instrument maintenance and repair, but not for significant new technical developments. Major instrument design efforts should be proposed separately to an appropriate program, such as the Ocean Technology and Interdisciplinary Coordination (OTIC) Program in the NSF Division of Ocean Sciences or the NSF Major Research Instrumentation (MRI) Program.

OBSIC will also encourage, to the extent practicable, greater standardization of instruments and equipment, instrument operation and maintenance practices, data processing, and the associated workflows. Proposals submitted pursuant to this solicitation must be based on a detailed, integrated, and well-defined Work Breakdown Structure (WBS) and an associated WBS Dictionary. Each section of the Project Description and each element of the proposed budget must be tied clearly and directly to the proposal WBS. The WBS shall include but not be limited to the following areas of responsibility and associated tasks:

OBSIC Management and Operations

For the organizational structure and staff, the Awardee will provide expertise and leadership in planning, coordinating, overseeing, reviewing, and reporting of OBS management, operations, and data delivery. This will include:

 Managing activities, personnel, equipment, and facilities required to furnish, operate, maintain and refurbish instrumentation, equipment, and infrastructure for optimal performance.

- . Monitoring instrument status and assuring readiness of the OBS instrumentation for deployment and data delivery.
- Obtaining SubAwardee, subject to NSF's prior approval, and/or subcontractor assistance on an as needed basis.
- Following well-defined workflows for engineering, data collection, and data delivery, including processes for integrating new technology into the instrument pool.
- Tracking OBSIC assets by providing a detailed running inventory of available OBS instruments including type, location, operational capability and special features of interest to the user community.
- Planning and coordinating training and staffing necessary for instrument maintenance and field support. (Use of the UNOLS Marine Technician Pool may offer improved operational efficiency and cost effectiveness).
- Preparing Annual Program Plans that describe operational plans and associated budgets
- Managing and controlling program budgets and expenditures.
- Developing and implementing metrics to assess and improve OBSIC performance.
- Maintaining liaison with the Oversight Committee and the science community.
- · Reporting in accordance with program requirements to include Quarterly Activity and Annual progress reporting to NSF.

Community Interface

The Ocean Bottom Seismometer Instrument Center (OBSIC) will serve as the interface between NSF/OCE and the OBS user community. Tasks under this area of responsibility will include:

- Preparing informational budgets for individual research proposals to NSF that will require use of OBSIC resources.
- Providing technical support to Users of OBSIC to inform researchers regarding the appropriate tools to match science questions to be addressed.
- Providing mechanisms for timely responses to information related to instrument needs of the user community and associated feedback regarding OBS instrument performance.
- Maintaining a website that provides easily available information that informs the science community and other users about OBS instrument features, data products and availability, deployment schedules and OBSIC services.
- Engaging the User community and Oversight Committee in identifying current and emerging priorities for OBS-related science, and ensuring that the instrument pool serves those needs to the extent practicable.
- Working with Users to ensure that all data issues are identified and resolved and that updated datasets are uploaded to the
 appropriate long-term data archive in a timely manner.
- Engaging in relevant programs to inform the Ocean and Earth science community about capabilities and accomplishments of OBSIC.

Deployment/Recovery Cruise Interface

The Awardee will be proactively involved in developing ship schedules for OBS deployment/recovery cruises through attendance at UNOLS Scheduling Committee meetings. Once schedules are established, any revisions that become apparent to the Awardee will be promptly communicated to the UNOLS Office. Related tasks under this area of responsibility will include:

- Planning and coordinating instrument, manpower, and scheduling requirements for deploying and recovering ocean bottom seismometers in cooperation with NSF/UNOLS or other ship operators.
- Attending UNOLS Scheduling Committee meetings, fully prepared to represent scheduling requirements of Principal Investigators who will be conducting OBS-related field experiments. (This will include estimated ship days for completion of the work as well as days for contingency).
- Executing and maintaining any environmental compliance requirements and permitting associated with ocean bottom seismometer deployments in cooperation with the UNOLS Scheduling Committee.
- Collaborating and coordinating activities with the UNOLS Scheduling Committee to minimize deployment and recovery times and/or duplication of efforts.

Data Management Interface

In compliance with the NSF/OCE data policy, data acquisition enabled by OBSIC will be submitted to a long-term data archive within two years of collection. Data submission to the long-term archive will be the responsibility of the OBSIC, following coordination with the associated researchers. Related tasks in this area of responsibility include:

- Ensuring delivery of high quality OBS data and meta data to PIs for research projects and for subsequent archiving through adherence to a well-defined data quality plan and robust service performance monitoring.
- Establishing processes and procedures to ensure that high quality data acquired from OBS deployments are entered into a long-term archive in a timely fashion.
- Ensuring prompt updating of datasets in the long-term archive if errors are discovered.
- Reporting on status of all data submission and data quality issues in reports submitted to NSF and to the Oversight Committee.

III. AWARD INFORMATION

Anticipated Type of Award:

Cooperative Agreement

Estimated Number of Awards: 1

A principal role of OBSIC is to serve as the central entity responsible for providing appropriate ocean bottom seismometers for high quality data acquisition and coordinating their deployment in support of scientific research programs. It is anticipated that a base amount of approximately \$1.8M per year will be provided for OBSIC management and operation. Supplemental funding increments for field support of instrument deployment and recovery on specific projects will be executed through the award resulting from this

solicitation. The OBSIC Program budget, number of awards and average award size/duration are subject to demand for Ocean Bottom Seismometer (OBS) use and the availability of funds.

The successful proposal will be awarded as a Cooperative Agreement. NSF anticipates that the initial award commitment will be for five years, with continuation for a maximum of an additional five years contingent on the availability of funds and the successful outcome of a comprehensive external review of Awardee performance in the third year of the initial period (see Section VII.B, "Special Award Conditions"). Budget amounts given in this program solicitation are for planning purposes only - actual annual funding increments will be determined on the basis of Annual Program Plans submitted by the Awardee and approved by NSF, subject to the availability of appropriated funds and contingent upon successful performance of the Awardee.

Should a new Awardee be selected to replace the current OBSIP Management Office Awardee, NSF will consider funding allowable transition costs for a period of up to six months. Relevant transition activities may include interviewing and hiring personnel, assigning subcontracts, website development, and transferring data and property. During this transition period, the new Awardee will have appropriate access to incumbent personnel and facilities.

Anticipated Funding Amount: \$9,000,000

Base funding up to \$9M total or \$1.8M annually, including management, operations and data quality assurance and control. The program budget for field experiments will supplement the base funding depending on the demand for Ocean Bottom Seismometer (OBS) use in terms of number of awards, average award size/duration and availability of funds.

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

IV. ELIGIBILITY INFORMATION

Who May Submit Proposals:

The categories of proposers eligible to submit proposals to the National Science Foundation are identified in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG), Chapter I.E.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization:

One proposal as Lead Institution per organization. A proposed Lead Institution may serve as a SubAwardee for another proposed Lead Institution.

Limit on Number of Proposals per PI or Co-PI:

There are no restrictions or limits.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Full Proposal Preparation Instructions: Proposers may opt to submit proposals in response to this Program Solicitation via Grants.gov or via the NSF FastLane system.

- Full proposals submitted via FastLane: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF Proposal & Award Policies & Procedures Guide (PAPPG). The complete text of the PAPPG is available electronically on the NSF website at: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg. Paper copies of the PAPPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from nsfpubs@nsf.gov. Proposers are reminded to identify this program solicitation number in the program solicitation block on the NSF Cover Sheet For Proposal to the National Science Foundation. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.
- Full proposals submitted via Grants.gov: Proposals submitted in response to this program solicitation via Grants.gov should be prepared and submitted in accordance with the NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov. The complete text of the NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: (https://www.nsf.gov/publications/pub_summ.jsp? ods_key=grantsgovguide). To obtain copies of the Application Guide and Application Forms Package, click on the Apply tab on the Grants.gov site, then click on the Apply Step 1: Download a Grant Application Package and Application Instructions link and enter the funding opportunity number, (the program solicitation number without the NSF prefix) and press the Download Package button. Paper copies of the Grants.gov Application Guide also may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from nsfpubs@nsf.gov.

See PAPPG Chapter II.C.2 for guidance on the required sections of a full research proposal submitted to NSF. Please note that the proposal preparation instructions provided in this program solicitation may deviate from the PAPPG instructions.

Proposers are reminded to review procedures under "Proprietary or Privileged Information" in Chapter II.D.1 of the PAPPG and to mark only such information, including patentable ideas, trade secrets, privileged or confidential commercial or financial information, disclosure of which might harm the proposer, with the appropriate legend such as, "The following is (proprietary or confidential) information that (name of proposing organization) requests not be released to persons outside the Government, except for purposes of review and evaluation." Please also see the section entitled "Privacy Act and Public Burden Statements" below.

The following information is required for the Full Proposal:

- 1. PI/Co-PI Information: This should follow the standard PAPPG or NSF Grants.gov Application Guide guidelines.
- 2. **Cover Sheet:** A cover sheet must be submitted and electronically signed by an Authorized Organizational Representative for all full proposals. Proposers should select "Center/Research Infrastructure" for the Type of Proposal.
- 3. **Project Summary:** This section should provide a summary of the key points of the proposal and should be understandable to a scientifically or technically literate lay reader. This section must follow the standard PAPPG or NSF Grants.gov Application Guide guidelines. Proposals that do not include an overview and separate statements on intellectual merit and broader impacts within the Project Summary will not be accepted by FastLane or will be returned without review.
- 4. Project Description (up to 30 pages): The Project Description section of each proposal should address the qualifications and capabilities of the proposing organization to perform the responsibilities of OBSIC as described in Section II of this solicitation. The Project Description must:
 - Clearly present the management structure, capability, experience, and qualifications of the organization proposed to lead OBSIC. Explain the roles and responsibilities of each known or planned team entity.
 - Describe how the proposed management structure and personnel will enable the Awardee to successfully accomplish
 the specific tasks listed in Section II under the OBSIC Management and Operations area of responsibility.
 - Describe in detail the approach for successfully accomplishing tasks listed in Section II under the Community Interface area of responsibility, including maintaining liaison with the science community and interacting with the Oversight Committee.
 - Discuss in detail the approach for successfully accomplishing tasks associated with the Deployment/Recovery Interface listed in Section II.
 - Discuss in detail the approach for successfully performing the Data Management Interface area of responsibility identified in Section II, including procedures for planning and mobilizing resources for data acquisition, processing, and transmittal to a long-term archive, with emphasis on data quality assurance and quality control.
 - Submit a complete Work Breakdown Structure (WBS) for accomplishing the areas of responsibility and associated tasks identified in Section II of this solicitation.

Please note that all information relevant to determining the quality of the proposed work must be included as part of the Project Description, unless otherwise directed in this solicitation.

- 5. References Cited: This section should follow the standard PAPPG or NSF Grants.gov Application Guide guidelines.
- 6. **Biographical Sketches:** A biographical sketch, limited to 2 pages, must be provided for the PI, each co-PI, all Key Personnel, and any other senior personnel prepared in accordance with the instructions contained in PAPPG Chapter II.C.2.f.
- 7. Budget: See the instructions in Section B. below.
- 8. Current and Pending Support: This section should follow the standard PAPPG or NSF Grants.gov Application Guide quidelines.
- Facilities, Equipment and Other Resources: Per the guidance in the PAPPG, this section should include a description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project.
- 10. Supplementary Documentation: Except as specified in this item or in the NSF PAPPG (see Chapter II.C.2.j), special information relevant to determining the quality of the proposed work must be included either as part of the Project Description or as part of the budget justification.
 - a. Documentation of collaborative arrangements of significance to the proposal: Proposers should document with formal memoranda/letters of collaboration any collaborative arrangements of significance in performing the proposed work. Letters of support are not permitted under this solicitation, and proposals containing such letters may be returned without review. Please see the NSF PAPPG Chapter II.C.2.d (iv) for further details.
 - b. Work Breakdown Structure Dictionary (up to 15 page limit): Document must provide detailed information about each element in the WBS including work scope, deliverables, basis for budget and schedule estimates, assessment measures and milestones.
 - c. Transition Plan: NSF will consider funding appropriate and allowable transition costs if a new Awardee is selected to replace the current OBSIP Management Office Awardee. Organizations other than the incumbent must provide a detailed plan and budget for a transition period of up to 6 months following the new award. The document should not to exceed 10 pages and must include at a minimum:
 - Proposed duration and schedule for the transition period.
 - Estimated resources needed for the transition period.
 - Plans for recruitment, orientation, and training.
 - Plans for changes to staffing, facilities, or operational modes.
 - A plan to acquire office infrastructure and manage the transfer of assets, inventory, commitments, plans, and documents.
 - Identification of assumptions that underlie the transition plan.
 - A detailed budget for the transition period, presented in accordance with instructions given in Section V.B.
- 11. **Single Copy Documents:** Information for the items below should be entered via the Single Copy Documents section in FastLane.
 - a. Collaborators and Other Affiliations Information: Please refer to https://nsf.gov/bfa/dias/policy/coa.jsp for proposal
 content requirements relating to Collaborators and Affiliations.
 - Additional Single Copy Document Project Personnel: Provide the full names, affiliations, educational background, and specific role for each person for whom support is sought, including all PIs, co-PIs, named senior personnel, and/or contractors (including SubAwardees).

General Information

For additional information on this competition, NSF practices and policies, and/or access to the Resource Library that provides further detail, proposing organizations should contact the Cognizant Program Officers, Candace Major (cmajor@nsf.gov) or Jim Holik (jholik@nsf.gov). The following publicly available documents will be informative:

- Sea Change: http://www.nap.edu/catalog/21655/sea-change-2015-2025-decadal-survey-of-ocean-sciences
- Sea Change reply: https://www.nsf.gov/geo/oce/pubs/nsf-oce-sea-change-reply-may-11-2015.pdf NSF 14-043 NSF Strategic Plan
- GEO Visions document: https://www.nsf.gov/geo/acgeo/geovision/nsf ac-geo vision 10 2009.pdf
- OBSIP Ocean Bottom Seismograph Instrument Pool: http://www.obsip.org/index.php/
- University National Oceanographic Laboratory System UNOLS Committees: https://www.unols.org/committees
- NSF 17-080 Dear Colleague Letter: Management and Operation of a National Ocean Bottom Seismometer Instrument Pool.

In addition to the above, proposing organizations should review documentation that is being made available through a NSF-maintained Resource Library. The documents are grouped in categories that include:

- Information Related to Permitting/Environmental Compliance
- Previous Programmatic Documentation
- NSF and OCE Data Policies
- Frequently Asked Questions (FAQs)

B. Budgetary Information

Cost Sharing:

Inclusion of voluntary committed cost sharing is prohibited.

Budget Preparation Instructions:

The full proposal should include a base budget on the budget form in FastLane or the R&R Budget Form in Grants.gov for each year of the initial five-year operational period (2018-2022) proposed. The first year budget should be based on total funding of no more than \$1.8M. Fastlane and Grants gov will automatically provide a cumulative budget. The proposal should provide all staffing and budgeting information needed to describe how the organization would fulfill the Awardee responsibilities in Section II of this solicitation. Requested budget amounts for each year of the proposal should reflect the level considered necessary to perform the NSF-funded activities described in the proposal.

A budget justification tied directly to the integrated WBS and WBS Dictionary for the proposal shall be submitted with the budgets for each year, and shall be in sufficient detail to show how the proposer reached the amounts specified in the budget.

Enter the anticipated total level of any Subrecipient support on line G5, SubAwards, of the FastLane budget or line F5 of the R&R Budget Form in Grants gov. Proposals require the inclusion of separate budgets for Subrecipient agreements, with a budget justification and detailed explanation of the proposing organization's cost analysis of that budget, for a maximum of 3 pages each. Examples include budgeted months and salaries for personnel, quotations to support budgeted equipment, itemized listing of material and supplies with support quotations, statements of risk assessments and monitoring plans for each Subrecipients, cost price analysis to support that the proposed SubAward amounts are reasonable, and copies of the Subrecipients responsibility determinations, including adequacy of accounting system and financial capability. For SubAwards valued at less than \$250,000 year, include the costs in the aggregate on the SubAward line in the budget.

Proposing organizations other than the incumbent must also provide a separate budget for a transition period of up to 6 months following the new award. This information must be provided as part of the required Transition Plan. The budget must be presented in the same style with all applicable budget line items as for the budget for each year of the proposal. If a new Awardee is selected to manage and operate OBSIC, the incumbent will cooperate with the successor to the extent necessary to facilitate uninterrupted functioning during the transition period and will provide transfer of legal rights to relevant property and equipment. The transition budget should not include non-renewal costs of the incumbent. If a new management office is selected, the incumbent may submit to NSF costs related to the Cooperative Agreement non-renewal, and these costs will be considered separately.

Organizations that have not previously received NSF awards should review the NSF Prospective New Awardee Guide (PNAG) and current NSF Large Facilities Manual (NSF 15-089) for additional guidance in preparing their budget submission.

C. Due Dates

• Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):

October 25, 2017

D. FastLane/Grants.gov Requirements

For Proposals Submitted Via FastLane:

To prepare and submit a proposal via FastLane, see detailed technical instructions available at: https://www.fastlane.nsf.gov/a1/newstan.htm. For FastLane user support, call the FastLane Help Desk at 1-800-673-6188 or e-mail fastlane@nsf.gov. The FastLane Help Desk answers general technical questions related to the use of the FastLane system. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this funding opportunity.

For Proposals Submitted Via Grants.gov:

Before using Grants.gov for the first time, each organization must register to create an institutional profile. Once registered, the applicant's organization can then apply for any federal grant on the Grants.gov website. Comprehensive information about using Grants.gov is available on the Grants.gov Applicant Resources webpage: http://www.grants.gov/web/grants/applicants.html. In addition, the NSF Grants.gov Application Guide (see link in Section V.A) provides instructions regarding the technical preparation of proposals via Grants.gov. For Grants.gov user support, contact the Grants.gov Contact Center at 1-800-518-4726 or by email: support@grants.gov. The Grants.gov Contact Center answers general technical questions related to the use of Grants.gov. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this solicitation

Submitting the Proposal: Once all documents have been completed, the Authorized Organizational Representative (AOR) must submit the application to Grants.gov and verify the desired funding opportunity and agency to which the application is submitted. The AOR must then sign and submit the application to Grants.gov. The completed application will be transferred to the NSF FastLane system for further processing.

Proposers that submitted via FastLane are strongly encouraged to use FastLane to verify the status of their submission to NSF. For proposers that submitted via Grants.gov, until an application has been received and validated by NSF, the Authorized Organizational Representative may check the status of an application on Grants.gov. After proposers have received an e-mail notification from NSF, Research.gov should be used to check the status of an application.

VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program for acknowledgment and, if they meet NSF requirements, for review. All proposals are carefully reviewed by a scientist, engineer, or educator serving as an NSF Program Officer, and usually by three to ten other persons outside NSF either as *ad hoc* reviewers, panelists, or both, who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with oversight of the review process. Proposers are invited to suggest names of persons they believe are especially well qualified to review the proposal and/or persons they would prefer not review the proposal. These suggestions may serve as one source in the reviewer selection process at the Program Officer's discretion. Submission of such names, however, is optional. Care is taken to ensure that reviewers have no conflicts of interest with the proposal. In addition, Program Officers may obtain comments from site visits before recommending final action on proposals. Senior NSF staff further review recommendations for awards. A flowchart that depicts the entire NSF proposal and award process (and associated timeline) is included in PAPPG Exhibit III-1.

A comprehensive description of the Foundation's merit review process is available on the NSF website at: https://www.nsf.gov/bfa/dias/policy/merit review/.

Proposers should also be aware of core strategies that are essential to the fulfillment of NSF's mission, as articulated in *Investing in Science, Engineering, and Education for the Nation's Future: NSF Strategic Plan for 2014-2018.* These strategies are integrated in the program planning and implementation process, of which proposal review is one part. NSF's mission is particularly well-implemented through the integration of research and education and broadening participation in NSF programs, projects, and activities.

One of the strategic objectives in support of NSF's mission is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions must recruit, train, and prepare a diverse STEM workforce to advance the frontiers of science and participate in the U.S. technology-based economy. NSF's contribution to the national innovation ecosystem is to provide cutting-edge research under the guidance of the Nation's most creative scientists and engineers. NSF also supports development of a strong science, technology, engineering, and mathematics (STEM) workforce by investing in building the knowledge that informs improvements in STEM teaching and learning.

NSF's mission calls for the broadening of opportunities and expanding participation of groups, institutions, and geographic regions that are underrepresented in STEM disciplines, which is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

A. Merit Review Principles and Criteria

The National Science Foundation strives to invest in a robust and diverse portfolio of projects that creates new knowledge and enables breakthroughs in understanding across all areas of science and engineering research and education. To identify which projects to support, NSF relies on a merit review process that incorporates consideration of both the technical aspects of a proposed project and its potential to contribute more broadly to advancing NSF's mission "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes." NSF makes every effort to conduct a fair, competitive, transparent merit review process for the selection of projects.

1. Merit Review Principles

These principles are to be given due diligence by PIs and organizations when preparing proposals and managing projects, by reviewers when reading and evaluating proposals, and by NSF program staff when determining whether or not to recommend proposals for funding and while overseeing awards. Given that NSF is the primary federal agency charged with nurturing and supporting excellence in basic research and education, the following three principles apply:

 All NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge. NSF projects, in the aggregate, should contribute more broadly to achieving societal goals. These "Broader Impacts" may be accomplished through the research itself, through activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. The project activities may be based on previously established and/or innovative methods and approaches, but in either case must be well justified.

Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the
likely correlation between the effect of broader impacts and the resources provided to implement projects. If the size of the
activity is limited, evaluation of that activity in isolation is not likely to be meaningful. Thus, assessing the effectiveness of these
activities may best be done at a higher, more aggregated, level than the individual project.

With respect to the third principle, even if assessment of Broader Impacts outcomes for particular projects is done at an aggregated level, PIs are expected to be accountable for carrying out the activities described in the funded project. Thus, individual projects should include clearly stated goals, specific descriptions of the activities that the PI intends to do, and a plan in place to document the outputs of those activities.

These three merit review principles provide the basis for the merit review criteria, as well as a context within which the users of the criteria can better understand their intent.

2. Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board approved merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two merit review criteria are listed below. **Both** criteria are to be given **full consideration** during the review and decision-making processes; each criterion is necessary but neither, by itself, is sufficient. Therefore, proposers must fully address both criteria. (PAPPG Chapter II.C.2.d(i). contains additional information for use by proposers in development of the Project Description section of the proposal). Reviewers are strongly encouraged to review the criteria, including PAPPG Chapter II.C.2.d(i), prior to the review of a proposal.

When evaluating NSF proposals, reviewers will be asked to consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers will be asked to evaluate all proposals against two criteria:

- Intellectual Merit: The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- Broader Impacts: The Broader Impacts criterion encompasses the potential to benefit society and contribute to the
 achievement of specific, desired societal outcomes.

The following elements should be considered in the review for both criteria:

- 1. What is the potential for the proposed activity to
 - a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
 - b. Benefit society or advance desired societal outcomes (Broader Impacts)?
- 2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- 3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- 4. How well qualified is the individual, team, or organization to conduct the proposed activities?
- 5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. NSF values the advancement of scientific knowledge and activities that contribute to achievement of societally relevant outcomes. Such outcomes include, but are not limited to: full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM); improved STEM education and educator development at any level; increased public scientific literacy and public engagement with science and technology; improved well-being of individuals in society; development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others; improved national security; increased economic competitiveness of the United States; and enhanced infrastructure for research and education.

Proposers are reminded that reviewers will also be asked to review the Data Management Plan and the Postdoctoral Researcher Mentoring Plan, as appropriate.

Additional Solicitation Specific Review Criteria

Proposals submitted in response to this program solicitation will be reviewed by a Panel established specifically to review OBSIC Management and Operation proposals. Specific review criteria will include:

- 1. Proposer experience in effectively managing ocean bottom seismometer instrumentation and delivering high quality data and meta data to PIs and publicly accessible long-term data archives.
- Understanding of the organizational interfaces necessary to successfully perform OBSIC functions, including those applicable to OBS users, UNOLS ship scheduling, OBS data management, and science community liaison.
- 3. Effectiveness of proposed approach to achieving the maximum scientific benefit from the Oversight Committee.
- Completeness and transparency of the workflows associated with the specific duties identified in Section II of this solicitation and reflected in the implementing Work Breakdown Structure.
- 5. Practicality and achievability of proposed Transition Plan (as applicable).

The Panel will be asked to prepare a report on the merits of each proposal submitted to NSF. The Program Officer assigned to manage the proposal review will consider the advice of the Panel in preparing an award recommendation.

B. Review and Selection Process

Proposals submitted in response to this program solicitation will be reviewed by Panel Review.

Reviewers will be asked to evaluate proposals using two National Science Board approved merit review criteria and, if applicable, additional program specific criteria. A summary rating and accompanying narrative will generally be completed and submitted by each reviewer and/or panel. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

After scientific, technical and programmatic review and consideration of appropriate factors, the NSF Program Officer recommends to the cognizant Division Director whether the proposal should be declined or recommended for award. NSF strives to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. Large or particularly complex proposals or proposals from new awardees may require additional review and processing time. The time interval begins on the deadline or arget date, or receipt date, whichever is later. The interval ends when the Division Director acts upon the Program Officer's recommendation.

After programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications. After an administrative review has occurred, Grants and Agreements Officers perform the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at their own risk.

Once an award or declination decision has been made, Principal Investigators are provided feedback about their proposals. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers or any reviewer-identifying information, are sent to the Principal Investigator/Project Director by the Program Officer. In addition, the proposer will receive an explanation of the decision to award or decline funding.

VII. AWARD ADMINISTRATION INFORMATION

A. Notification of the Award

Notification of the award is made to *the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See Section VI.B. for additional information on the review process.)

B. Award Conditions

An NSF award consists of: (1) the award notice, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award notice; (4) the applicable award conditions, such as Grant General Conditions (GC-1)*; or Research Terms and Conditions* and (5) any announcement or other NSF issuance that may be incorporated by reference in the award notice. Cooperative agreements also are applicable Programmatic Terms and Conditions. NSF awards are electronically signed by an NSF Grants and Agreements Officer and transmitted electronically to the organization via e-mail.

*These documents may be accessed electronically on NSF's Website at https://www.nsf.gov/awards/managing/award_conditions.jsp? org=NSF. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from nsfpubs@nsf.gov.

More comprehensive information on NSF Award Conditions and other important information on the administration of NSF awards is contained in the NSF *Proposal & Award Policies & Procedures Guide* (PAPPG) Chapter VII, available electronically on the NSF Website at https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.

Special Award Conditions:

The award associated with this solicitation will be a Cooperative Agreement, not a standard grant or a contract that will fund the Ocean Bottom Seismometer Instrument Center (OBSIC) Management and Operation in accordance with approved Annual Program Plans. Any special requirements not stated herein will be negotiated at the time of award. Cooperative Agreements include substantial involvement of the Government, particularly in oversight of award performance. The following are some of the measures NSF uses to conduct oversight:

- Review of Annual Reports, Program Plans, and Performance Metrics.
- · Site visits, annually or as necessary.
- Review of management performance and operation activities approximately midway through the initial five-year award.

This award will be subject to the following Cooperative Agreement Terms and Conditions:

 Cooperative Agreement Financial & Administrative Terms and Conditions (CA-FATC): https://www.nsf.gov/pubs/policydocs/cafatc/cafatc 116.pdf.

C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the Principal Investigator must submit an annual project report to the cognizant Program Officer no later than 90 days prior to the end of the current budget period. (Some programs or awards require submission of more frequent project reports). No later than 120 days following expiration of a grant, the PI also is required to submit a final project report, and a project outcomes report for the general public.

Failure to provide the required annual or final project reports, or the project outcomes report, will delay NSF review and processing of any future funding increments as well as any pending proposals for all identified PIs and co-PIs on a given award. PIs should examine the formats of the required reports in advance to assure availability of required data.

Pls are required to use NSF's electronic project-reporting system, available through Research.gov, for preparation and submission of annual and final project reports. Such reports provide information on accomplishments, project participants (individual and organizational), publications, and other specific products and impacts of the project. Submission of the report via Research.gov constitutes certification by the PI that the contents of the report are accurate and complete. The project outcomes report also must be prepared and submitted using Research.gov. This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project. This report will be posted on the NSF website exactly as it is submitted by the PI.

More comprehensive information on NSF Reporting Requirements and other important information on the administration of NSF awards is contained in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) Chapter VII, available electronically on the NSF Website at https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.

Additional Reporting Requirements

- 1. The Awardee will submit Annual Program Plans to NSF with budgets for support of baseline operations.
- 2. The Awardee will provide Quarterly Reports to NSF in addition to the Annual Reports noted previously.
- 3. The Awardee will provide regular informal reporting including communications with the NSF Program Officer.
- 4. In compliance with the NSF/OCE data policy, data collection enabled by this CA will be submitted to a long-term archive within two years of collection. Submission of data will be the responsibility of the Awardee following coordination with Principal Investigators receiving and using the data from OBSIC for research purposes.

News releases and other similar items prepared by the Awardee and/or its subcontractors/employees that describe activities or research results will be submitted for NSF review at least two days prior to proposed publication and will acknowledge the sponsorship of the NSF. Public information brochures, and other related material prepared by the Awardee, will be sent to the NSF before being made available to the public. The text of any planned Congressional testimony related to OBSIC will be submitted to NSF for approval prior to its presentation.

The Awardee will acknowledge the support of the NSF on any signs identifying OBSIC. An acknowledgment of NSF support and disclaimer must appear in any publication of any material based upon or developed under this contract in substantially the following terms:

"The Ocean Bottom Seismometer Instrument Center (OBSIC) is sponsored by the National Science Foundation. Any opinions, findings and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the National Science Foundation." (The preceding sentence may be omitted from scientific articles or papers published in scientific journals.) Also, support of other agencies or international contributors shall be acknowledged as appropriate.

VIII. AGENCY CONTACTS

Please note that the program contact information is current at the time of publishing. See program website for any updates to the points of contact.

General inquiries regarding this program should be made to:

- Candace Major, Program Director, telephone: (703) 292-7597, email: cmajor@nsf.gov
- Jim Holik, Program Director, telephone: (703) 292-7711, email: jholik@nsf.gov

For questions related to the use of FastLane, contact:

• FastLane Help Desk, telephone: 1-800-673-6188; e-mail: fastlane@nsf.gov.

For questions relating to Grants.gov contact:

 Grants.gov Contact Center: If the Authorized Organizational Representatives (AOR) has not received a confirmation message from Grants.gov within 48 hours of submission of application, please contact via telephone: 1-800-518-4726; e-mail: support@grants.gov.

IX. OTHER INFORMATION

The NSF website provides the most comprehensive source of information on NSF Directorates (including contact information), programs and funding opportunities. Use of this website by potential proposers is strongly encouraged. In addition, "NSF Update" is an information-delivery system designed to keep potential proposers and other interested parties apprised of new NSF funding opportunities and publications, important changes in proposal and award policies and procedures, and upcoming NSF Grants Conferences. Subscribers are informed through e-mail or the user's Web browser each time new publications are issued that match their identified interests. "NSF Update" also is available on NSF's website.

Grants.gov provides an additional electronic capability to search for Federal government-wide grant opportunities. NSF funding opportunities may be accessed via this mechanism. Further information on Grants.gov may be obtained at http://www.grants.gov.

ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) is an independent Federal agency created by the National Science Foundation Act of 1950, as amended (42 USC 1861-75). The Act states the purpose of the NSF is "to promote the progress of science; [and] to advance the national health, prosperity, and welfare by supporting research and education in all fields of science and engineering."

NSF funds research and education in most fields of science and engineering. It does this through grants and cooperative agreements to more than 2,000 colleges, universities, K-12 school systems, businesses, informal science organizations and other research organizations throughout the US. The Foundation accounts for about one-fourth of Federal support to academic institutions for basic research

NSF receives approximately 55,000 proposals each year for research, education and training projects, of which approximately 11,000 are funded. In addition, the Foundation receives several thousand applications for graduate and postdoctoral fellowships. The agency operates no laboratories itself but does support National Research Centers, user facilities, certain oceanographic vessels and Arctic and Antarctic research stations. The Foundation also supports cooperative research between universities and industry, US participation in international scientific and engineering efforts, and educational activities at every academic level.

Facilitation Awards for Scientists and Engineers with Disabilities (FASED) provide funding for special assistance or equipment to enable persons with disabilities to work on NSF-supported projects. See the NSF Proposal & Award Policies & Procedures Guide Chapter II.E.6 for instructions regarding preparation of these types of proposals.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation about NSF programs, employment or general information. TDD may be accessed at (703) 292-5090 and (800) 281-8749, FIRS at (800) 877-8339.

The National Science Foundation Information Center may be reached at (703) 292-5111.

The National Science Foundation promotes and advances scientific progress in the United States by competitively awarding grants and cooperative agreements for research and education in the sciences, mathematics, and engineering.

To get the latest information about program deadlines, to download copies of NSF publications, and to access abstracts of awards, visit the NSF Website at https://www.nsf.gov

• Location: 4201 Wilson Blvd. Arlington, VA 22230

• For General Information (703) 292-5111

(NSF Information Center):

• TDD (for the hearing-impaired): (703) 292-5090

• To Order Publications or Forms:

Send an e-mail to: nsfpubs@nsf.gov

or telephone: (703) 292-7827

• To Locate NSF Employees: (703) 292-5111

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; and project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to proposer institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of

awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies or other entities needing information regarding applicants or nominees as part of a joint application review process, or in order to coordinate programs or policy; and to another Federal agency, court, or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004), and NSF-51, "Reviewer/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

An agency may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding the burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to:

Suzanne H. Plimpton Reports Clearance Officer Office of the General Counsel National Science Foundation Arlington, VA 22230

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