U.S. Science Support Program Associated with the Integrated Ocean Drilling Program (USSSP-IODP)

Program Solicitation
NSF 06-575

Replaces Document(s):
NSF 03-586

National Science Foundation

Directorate for Geosciences
Division of Ocean Sciences

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

September 20, 2006

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

U.S. Science Support Program Associated with the Integrated Ocean Drilling Program (USSSP-IODP)

Synopsis of Program:

The Integrated Ocean Drilling Program (IODP) is an international program of basic research in the marine geosciences, supported by the National Science Foundation (NSF) and several international partners. IODP builds on a rich legacy of scientific ocean drilling pioneered by NSF in the 1960's with the Deep Sea Drilling Project (DSDP), which provided a test of the plate tectonic hypothesis and a basic reconnaissance of deep sea sediments and crustal rocks. This was followed in 1985 by the Ocean Drilling Program (ODP) is focused on examination of Earth, ocean and climate processes. For ODP, Joint Oceanographic Institutions, Inc. (JOI), provided and facilitated various elements of support enabling the U.S. scientific community's participation in ODP. This, along with additional support elements directly provided by NSF to the U.S. community, through funding of unsolicited proposals, fostered U.S. leadership in ODP as well as in the broader international geoscience community.

This solicitation seeks the services of a qualified provider to facilitate and enhance the participation of the U.S. scientific community in all aspects of the IODP. The initial period of the award, to be administered as a Cooperative Agreement, is intended to cover the full period of IODP beginning on March 1, 2007 through September 30, 2013. IODP is an expanded program of scientific ocean drilling based on "Earth, Oceans and Life: Scientific Investigations of the Earth System Using Multiple Drilling Platforms and new Technologies; Integrated Ocean Drilling Program Initial Science Plan, 2003 - 2013" (http://www.iodp.org/isp.html).

Cognizant Program Officer(s):

- Rodey Batiza, Program Director, OCE, 725 N, telephone: (703) 292-8581, fax: (703) 292-9085, email: rbatiza@nsf.gov
- James Allan, Program Director, OCE, 725N, telephone: (703) 292-8581, email: jallan@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

Anticipated Funding Amount: $65,000,000 for the period FY 2007 (March 1, 2007) through FY 2013 (September 30, 2013)

pending availability of funds.

Eligibility Information

Organization Limit:

Proposals may only be submitted by the following:

- Proposals will be accepted from U.S. academic institutions and U.S non-governmental, non-profit organizations familiar with academic geoscience research and the geoscience community. Familiarity with the scientific drilling community, its goals and aspirations is necessary. The successful proponent will have the organizational infrastructure, experience and demonstrated managerial capability to provide the support to the scientific drilling community defined in the solicitation. Experience in developing outreach and educational programs at all levels is required.

PI Limit:

None Specified

Limit on Number of Proposals per Organization:

None Specified

Limit on Number of Proposals per PI:

None Specified

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- Letters of Intent: Not Applicable
- Full Proposal Instructions: This solicitation contains information that deviates from the standard Grant Proposal Guide (GPG) proposal preparation guidelines. Please see the full text of this solicitation for further information.

B. Budgetary Information

- Cost Sharing Requirements: Cost Sharing is not required by NSF.
- Indirect Cost (F&A) Limitations: Not Applicable
- Other Budgetary Limitations: Not Applicable

C. Due Dates

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

  September 20, 2006

Proposal Review Information Criteria

Merit Review Criteria: National Science Board approved criteria. Additional merit review considerations apply. Please see the full text of this announcement for further information.

Award Administration Information

Award Conditions: Standard NSF award conditions apply

Reporting Requirements: Additional reporting requirements apply. Please see the full text of this announcement for further information.

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I. INTRODUCTION

Scientific ocean drilling is an essential capability in modern geoscience research and education. Its broad use as a scientific tool ranges from investigating the causes of change in the Earth's climate to the rifting and drifting of continents. Drilling is the primary method of sampling sediment and crustal rock from the large percentage of the Earth's surface covered by oceans, and is the only technique for sampling anything more than a few tens of meters below the ocean floor.

The Deep Sea Drilling Project (DSDP), which began in 1968 under NSF sponsorship, served as a test of the plate tectonic hypothesis and a basic reconnaissance of deep-sea sediments and crustal rocks. In 1974, the DSDP became an international program, with several European nations, Japan and the USSR entering into an agreement with NSF for providing scientific and financial participation.

The DSDP was followed in 1985 by the Ocean Drilling Program (ODP) which formally ended in 2003 and which focused on examination of earth, ocean and climate processes. Since its inception, approximately 700 U.S. scientists from 150 universities, government agencies, and industrial research laboratories have participated in ODP cruises. Samples and data have been distributed to an additional 700 to 800 U.S. scientists. International participation in planning, research and funding of operations has grown from an initial five countries in DSDP to over 20 nations in ODP.

For both DSDP and ODP, NSF provided the primary facility by contracting and converting an industry drill ship for scientific drilling - the Glomar Challenger for the former, and the JOIDES Resolution for the latter. Both vessels served as facilities to carry out investigations proposed by the scientific community over the course of each program. The proposals, submitted to the ODP international advisory structure, were evaluated and ranked by panels of science experts, and those with the greatest scientific merit were scheduled for vessel cruises. The ODP was structured such that formal agreements between NSF and international partners terminated at the end of 2003.

The IODP builds upon the achievements of the predecessor programs and expands on their scientific scope based on the "Earth, Oceans and Life: Scientific Investigations of the Earth System Using Multiple Drilling Platforms and new Technologies; Integrated Ocean Drilling Program Initial Science Plan, 2003 - 2013" (http://www.iodp.org/isp.html). The plan identifies the need for two dynamically positioned drill ships, the use of "mission specific" drilling platforms, new sampling and downhole measurement technologies, and long-term observatories for borehole experiments and time series studies of active processes.

NSF and the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan have agreed to co-lead IODP which began in FY2004. MEXT has finished construction of a heavy drill ship with riser capability to address deep drilling objectives in the new program. Their vessel, the *Chikyu* (Earth), was launched in January 2002 (http://www.iodp.org), and will undergo outfitting and testing and be available for IODP operations in late 2007. European plans are to provide additional "mission specific" drilling capability for shallow water and Arctic objectives and up to one third of program operating costs. NSF will provide a non-riser drilling vessel as the U.S. contribution to IODP. The new Scientific Ocean Drilling Vessel (SODV) is expected to be available in late 2007.

The drill ships, facilities, and operations will be used to address scientific research programs identified in the Initial Science Plan. The scientific plan for the IODP is the result of an extensive, international collaborative effort, and will encompass three principal scientific themes: (1) the Deep Biosphere and the Subseafloor "Ocean," (2) Environmental Change, Processes, and Effects, and (3) Solid Earth Cycles and Geodynamics. Program initiatives and proposals supporting each of these themes will serve as a focus for scientific investigation. Recommendations for specific drilling activity and required science services will be provided by a Science Advisory Structure (SAS). SAS is an international committee structure representing the scientific communities in member countries and organizations of the IODP. These recommendations will result in an annual science plan. Progress in the IODP Initial Science Plan will require access to global samples of sediments, rocks, fluids and biota buried at great depths below the seafloor. The effort will also include in-situ geophysical measurements or emplacement of instrumentation for long term monitoring in deep seafloor boreholes.

As with ODP, all member countries in IODP will support scientific drilling operations, and each member country will be required to independently provide support for the research effort of its scientists participating in the program. In ODP, elements of this support were provided through the Cooperative Agreement with Joint Oceanographic Intitutions, Inc. for the U.S. Science Support Program. This solicitation seeks to continue, and to build on the past successes by establishing a similar support program for the U.S. scientific community during IODP.

II. PROGRAM DESCRIPTION

It is the intent of NSF's Division of Ocean Sciences (NSF-OCE), within available resources, to provide robust and effective

participation of the U.S scientific community in all phases of the IODP. Through this solicitation, NSF-OCE is seeking to enter into a Cooperative Agreement with an organization to administer parts of that support by establishing the U.S. Science Support Program Associated with IODP. The support provided through USSSP-IODP is intended to complement the direct support to the scientific community that NSF will provide through its grants program in response to unsolicited proposals. The nature and development of the USSSP-IODP will be based, in large part, on the recommendations provided in the report: *"Conference on U.S. Participation in IODP* (CUSP)" (http://www.joi-odp.org/USSSP/Default.html) prepared by the ODP - U.S. Advisory Committee (USAC) and should, as appropriate, take into consideration the results of community outreach activities such as the USAC questionnaire at the same web site. The U.S. scientific community has long played a strong leading role in scientific ocean drilling, in terms of planning activities, drilling operations, and producing important scientific results. Responsibility for that success has been in large part due to the effectiveness of the existing U.S. Science Support Program in ODP. USSSP-IODP is intended to further that tradition in IODP. Therefore the proposal for this Cooperative Agreement should address the following support activities:

1. Program Development and Planning

   USSSP-IODP will support planning activities that develop program concepts, and refine the major long-range objectives as outlined in the "*IODP: Earth, Oceans and Life: Scientific Investigations of the Earth System Using Multiple Drilling Platforms and new Technologies"* (http://www.iodp.org/isp.html), and to develop the optimal drilling strategies needed to achieve these objectives.

   It should provide the required support for U.S. scientists to effectively participate in IODP Science Advisory Structure (SAS) panels, committees, and international conferences on scientific ocean drilling. This support will include travel and per diem, and when determined to be appropriate, within the terms of the Cooperative Agreement, salaries.

   USSSP-IODP will establish within the U.S. scientific community the means whereby new ideas, approaches, and proposals relevant to scientific ocean drilling can take advantage of and optimize the science that is possible utilizing the two principal IODP platforms, and where appropriate the occasional mission specific platform. This will include, but not be limited to, sponsorship of topical thematic and regional workshops and symposia.

2. Pre-Drilling Activities

   USSSP-IODP will fund activities required to refine drilling site information and data syntheses. This element should provide support for participation of U.S. scientists on non-U.S. site surveys and acquisition of data on ships-of-opportunity. It also supports reprocessing and syntheses of existing data to aid in both long- and short-term IODP planning.

3. Platform Participation Activities

   Participation in scientific activities and operations is defined in the Memorandum between NSF and MEXT and can be found at (http://www.iodp.org). Full membership in IODP is equivalent to one participation unit which will entitle the member to have one representative on each panel or committee of the SAS, and two scientific participants per "cruise leg" or equivalent, for each IODP platform. The U.S. and Japan will contribute equally to Program costs and may require more participation units necessary to fully support the Program. Numbers for U.S. participants is estimated at 6 to 10 per cruise, per platform.

   Initially, for planning purposes within the time frame of this Cooperative Agreement, staffing models for continuous coring, non-riser drilling proposed in IODP should be based on the historical experiences provided by ODP and the IODP Implementation Period. Platform staffing and operations for the riser platform at this time are not well defined. The requirements for the riser platform will become more apparent once planning for operations of the first riser leg get underway. Since the Japanese vessel *Chikyu* is scheduled to begin scientific drilling operations in the late 2007 time frame, staffing requirements will become more clear prior to the award period of this Cooperative Agreement.

   Mission specific operations to date have used shore based parties to satisfy the leg requirements. The size and nature of these operations will probably continue to vary depending on the requirements to meet expedition and post-expedition responsibilities. The European Consortium for Ocean Research Drilling (http://www.ecord.org/models/accueill.php) has indicated its intent to continue to provide mission specific capability for IODP.

   Support for U.S. platform participation should include travel to and from the vessel as well as required pre- and post- cruise meeting travel to meet expedition requirements.

   Salary for U.S. scientific party members should include time on board and time necessary to meet program defined pre- and post- cruise responsibilities.

   Salary for U.S. co-chief scientists should reflect the level of effort and responsibilities for successful expedition planning, implementation, research coordination, and synthesis and publication of expedition results.

   Awardee's implementation of the Cooperative Agreement will follow NSF's merit review criteria when making funding decisions and awards.

4. Post-Expedition Activities

   This support should be directed towards completing the analyses and measurements required to meet expedition requirements that lead to the publication of the initial reports of the expedition. Planning for the level of resources required for this support should take into account the expedition variability reflected in the annual Program Plan developed by the IODP Central Management Organization. This support has historical precedence with the U.S. Science Support Program associated with ODP and should not necessarily be a fixed amount per person per expenditure.

   Expedition Objective Research - Scheduled drilling expeditions are the result of highly ranked and important science objectives. Optimizing the success of these research objectives will require additional resources from those provided under the Cooperative Agreement that results from this solicitation to fulfill post expedition responsibilities leading to publication of initial results. Since the level of support that might be required to meet these research objectives could be significant, it is the intention of the NSF-OCE Drilling Program to entertain unsolicited proposals from U.S. expedition participants to fulfill these research objectives. The intent is to evaluate these proposals through the NSF peer review process and make timely funding decisions. The window for submission of these research proposals by U.S. members of the scientific party for an expedition will be from the time an

expedition is scheduled until the end of the moratorium on sample availability for non-cruise participants expires. Support for the activities described in this paragraph are not part of this solicitation.

5. Education and Outreach Activities

   Support for educational and outreach activities that target students at all levels should be established. This support should build and improve on the achievements of the predecessor support program for ODP. The awardee will keep the U.S. scientific communitry fully apprised of IODP plans and developments. It should do this through a variety of methods such as, but not limited to, web sites, newsletters, and mail servers for example.

   The Program should encourage and support graduate students to conduct research related to IODP and to encourage their participation in drilling campaigns.

   The USSSP-IODP will develop innovative measures that effectively communicate the activities of the IODP to a broad cross section of the public.

   The USSSP-IODP will make every effort to take advantage of the increased capabilities of the IODP to enhance its educational and outreach activities.

   Through its education and outreach activities the USSSP-IODP should promote diversity and encourage participation of underreperesented groups in all aspects of IODP.

6. Instrumentation Development

   Modest, timely support for the development or refinement of unique or innovative instrumentation for core or borehole analysis and experiments may be required. The awardee should make this capability available and should develop the necessary review and evaluation procedures that validate the innovative and/or unique added value this activity could provide to the science objectives of the expedition(s) in question. The testing of or use of any speciallty instrumentation/tools will have to conform to the third party regulations and safety requirements of the IODP operators and SAS.

7. Coordinating Structure and Management Plan

   The awardee will provide for a planning and management structure that can provide, within available resources, optimal participation of the U.S. scientific drilling community in all aspects of the internationally managed IODP.

   The proposal should identify a qualified Project Director, familiar with the U.S. scientific drilling community, and academic research in marine geology and geophysics, whose responsibilities will include the overall management and coordination of the USSSP-IODP.

   The awardee will be expected to establish a national, proactive coordinating body for the oversight of U.S. national participation in IODP and to provide guidance for activities associated with IODP. Guidance to the awardee should include advice regarding the balance of related science drilling objectives within IODP. This coordinating body should be representative of the U.S. scientific ocean drilling community and its interests. This body will serve a similar purpose for IODP that the U.S. Science Advisory Committee has done for ODP.

III. AWARD INFORMATION

- Anticipated Type of Award: Cooperative Agreement
- Estimated Number of Awards: 1
- Anticipated Funding Amount: $65,000,000 for the period FY 2007 through FY 2013, pending availability of funds.

Support for the Cooperative Agreement that results from this solicitation will be for 6.5 years, the duration of the IODP.

IV. ELIGIBILITY INFORMATION

Organization Limit:

Proposals may only be submitted by the following:

- Proposals will be accepted from U.S. academic institutions and U.S non-governmental, non-profit organizations familiar with academic geoscience research and the geoscience community. Familiarity with the scientific drilling community, its goals and aspirations is necessary. The successful proponent will have the organizational infrastructure, experience and demonstrated managerial capability to provide the support to the scientific drilling community defined in the solicitation. Experience in developing outreach and educational programs at all levels is required.

PI Limit:

None Specified

Limit on Number of Proposals per Organization:

None Specified

Limit on Number of Proposals per PI:

None Specified

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Full Proposal Instructions: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF Grant Proposal Guide (GPG). The complete text of the GPG is available electronically on the NSF website at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (202) 292-7827 or by e-mail from pubs@nsf.gov.

The following information deviates from the GPG guidelines. Up to seventy-five (75) pages will be allowed in the Project Description. The following items should be included in the Project Description:

- Project Director, staff, and business capabilities to execute the requirements of this solicitation.
- Mechanism for constituting a USSSP-IODP coordinating and advisory body representative of the U.S. scientific drilling community.
- Plans and methods for engaging the USSSP-IODP coordinating and advisory body, to maximize advice and input to policy decisions that reflect the support needs of the the U.S. scientic drilling community's participation in IODP.
- A balanced and innovative education and outreach program in consultation with the USSSP-IODP advisory body, that also takes advantage of and leverages the efforts of the IODP Cental Management Office and Implementing Organizations.
- Mechanisms for growing the U.S. scientific drilling community and engaging/liaising with other major research efforts relevant to the scientific goals of IODP.
- Mechanisms by which awardee will evaluate their effectivenes and performance at implementing the various elements of this solicitation.

Proposers are reminded to identify the program solicitation number (Populated with NSF Number at Clearance) 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.

B. Budgetary Information

Cost Sharing: Cost sharing is not required by NSF in proposals submitted under this Program Solicitation.

C. Due Dates

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

  September 20, 2006

D. FastLane Requirements

Proposers are required to prepare and submit all proposals for this program solicitation through the FastLane system. Detailed instructions for proposal preparation and submission via FastLane are available at: http://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 solicitation.

Submission of Electronically Signed Cover Sheets. The Authorized Organizational Representative (AOR) must electronically sign the proposal Cover Sheet to submit the required proposal certifications (see Chapter II, Section C of the Grant Proposal Guide for a listing of the certifications). The AOR must provide the required electronic certifications within five working days following the electronic submission of the proposal. Proposers are no longer required to provide a paper copy of the signed Proposal Cover Sheet to NSF. Further instructions regarding this process are available on the FastLane Website at: http://www.fastlane.nsf.gov

VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program and, if they meet NSF proposal preparation 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 who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with the 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 with the proposer.

A. NSF Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board (NSB)-approved merit review criteria: intellectual merit and the broader impacts of the proposed effort. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two NSB-approved merit review criteria are listed below. The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which the reviewer is qualified to make judgements.

What is the intellectual merit of the proposed activity?
How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

What are the broader impacts of the proposed activity?
How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

NSF staff will give careful consideration to the following in making funding decisions:

Integration of Research and Education
One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

Integrating Diversity into NSF Programs, Projects, and Activities
Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- 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.

Additional Review Criteria:

Reviews will focus on:

- Evaluating the proponent organization's structure, competence, overall ability, and past history in providing service and support to the community of Earth and Ocean sciences.
- Thoroughness of the proposal in addressing the various elements of support identified in the solicitation.
- How well the proposal achieves appropriate balance of resource allocation.
- How well the proposal addresses the concerns of the scientific drilling community as expressed in the report: "*Conference on U.S. Participation in IODP* (CUSP)" (http;//www.joi-odp.org/USSSP/Default.html).

B. Review and Selection Process

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

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. 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 is striving to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. The time interval begins on the date of receipt. The interval ends when the Division Director accepts the Program Officer's recommendation.

A summary rating and accompanying narrative will be completed and submitted by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers, 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

In all cases, 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 and 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.

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 Division 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.A. for additional information on the review process.)

B. Award Conditions

An NSF award consists of: (1) the award letter, 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 letter; (4) the applicable award conditions, such as Grant General Conditions (NSF-GC-1); * or Federal Demonstration Partnership (FDP) Terms and Conditions * and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreement awards also are administered in accordance with NSF Cooperative Agreement Terms and Conditions (CA-1). Electronic mail notification is the preferred way to transmit NSF awards to organizations that have electronic mail capabilities and have requested such notification from the Division of Grants and Agreements.

*These documents may be accessed electronically on NSF's Website at http://www.nsf.gov/home/grants/grants_gac.htm. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from pubs@nsf.gov.

More comprehensive information on NSF Award Conditions is contained in the NSF *Grant Policy Manual* (GPM) Chapter II, available electronically on the NSF Website at http://www.nsf.gov/cgi-bin/getpub?gpm. The GPM is also for sale through the Superintendent of Documents, Government Printing Office (GPO), Washington, DC 20402. The telephone number at GPO for subscription information is (202) 512-1800. The GPM may be ordered through the GPO Website at http://www.gpo.gov.

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 at least 90 days before the end of the current budget period. (Some programs or awards require more frequent project reports). Within 90 days after expiration of a grant, the PI also is required to submit a final project report.

Failure to provide the required annual or final project reports will delay NSF review and processing of any future funding increments as well as any pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

PIs are required to use NSF's electronic project-reporting system, available through FastLane, for preparation and submission of annual and final project reports. Such reports provide information on activities and findings, project participants (individual and organizational) publications; and, other specific products and contributions. PIs will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system. Submission of the report via FastLane constitutes certification by the PI that the contents of the report are accurate and complete.

In addition to the annual project report there are other reporting requiremnets which will be further defined in the Cooperative Agreemment. The work under the Cooperative Agreement will be carried out in accordance with an annual "Program Plan" developed by the Awardee in consultation with the NSF/ODP Program Officer and approved in writing by the NSF/ODP Program Officer. The Program Plan shall cover the upcoming agreement year and shall address, but not be limited to, the following:

- Review of all program elements
- Establishment of programmatic goals and objectives,
- Scheduled activities
- Staffing and Organization Plans
- Projected Budgets
- Major Planning Activities
- Recent program accomplishments

Each Program Plan shall be prepared and submitted in accordance with schedules, funding levels, guidelines, formats, and cost elements approved by the NSF/ODP Program Officer. In addition to the Program Plan, the awardee shall provide the NSF with such backup information as the NSF may request.

Significant changes, apparent to the awardee or identified by the NSF/ODP Program Officer, in objectives or activities described in the annual Program Plan must be approved by the NSF Grants and Agreements Officer prior to implementation. Included are changes involving a funding re-distribution in excess of an amount yet to be negotiated between NSF Program Officials and awardee. The impacts and reasons for the proposed changes must be explained. The changes may or may not require modification of the approved budget. Awardee shall provide NSF Program Officials with copies of all significant revisions to documentation, upon request, substantiating all changes to the Program Plan, whether or not NSF approval is required. All significant changes shall be reported in the quarterly report.

The Awardee shall be expected to provide quarterly reports which summarize U.S. Science Support Program financial and operational information and activity to the NSF/ODP Program Officer. The monthly report format for reporting actual costs shall follow the budget format established in the Program Plan.

VIII. AGENCY CONTACTS

General inquiries regarding this program should be made to:

- Rodey Batiza, Program Director, OCE, 725 N, telephone: (703) 292-8581, fax: (703) 292-9085, email: rbatiza@nsf.gov
- James Allan, Program Director, OCE, 725N, telephone: (703) 292-8581, email: jallan@nsf.gov

For questions related to the use of FastLane, contact:

- FastLane Help Desk, telephone: 1-800-673-6188; e-mail: fastlane@nsf.gov.
- Kandace S Binkley, Associate Program Director, 725 N, telephone: (703) 292-8583, fax: (703) 292-9085, email: kbinkley@nsf.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, MyNSF (formerly the Custom News Service)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 Regional 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. MyNSF also is available on NSF's Website at http://www.nsf.gov/mynsf/.

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

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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."

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NSF receives approximately 40,000 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 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.

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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.

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