Charge to the Committee of Visitors
Office of International Science and Engineering
FY 2008 – FY 2010

BACKGROUND

The National Science Foundation (NSF) relies on the judgment of external experts to maintain high standards of program management, to provide advice for continuous improvement of NSF performance, and to ensure openness to the research and education community served by NSF.

A Committee of Visitors consists of external experts in science and engineering research and education who review actions taken on proposals for one or more NSF programs. Committee reports provide NSF with independent judgments on the quality and integrity of program operations and program-level technical and managerial matters pertaining to proposal decisions, and comment on other topics of interest to the programs under review. Committee of Visitors reviews are conducted at regular intervals of approximately three years for NSF programs and offices that recommend or award grants.

CHARGE TO THE COV

The NSF Advisory Committee for International Science and Engineering (AC-ISE) hereby establishes a AC-ISE Subcommittee for a Committee of Visitors Review of the NSF Office of International Science and Engineering (COV). The COV is charged to assess the quality, integrity, and transparency of program operations and program-level technical and managerial matters and other activities performed by OISE. The COV will conduct a review of the proposal actions and related management and international representational activities of OISE in accordance with relevant NSF policies and procedures.

SCOPE OF REVIEW

The COV review will consider proposal actions that were completed during fiscal year (FY) 2008, FY 2009 and FY 2010, and were managed or co-reviewed by the NSF Office of International Science and Engineering (OISE). In addition, the COV will address management actions, portfolio goals, representational activities, and other topics as described in the attached Core Questions and Reporting Template.

PROCESS OF REVIEW

The COV meeting will be held on July 12-14, 2011 at NSF headquarters in Arlington, Virginia. The COV members will be provided with relevant information and a list of all proposal actions taken by OISE during the FY 2008 – FY 2010 timeframe. Each COV member will examine a sample of 10-15 files of proposal actions that were taken by OISE or were co-reviewed by OISE with other NSF programs. The sample of proposal actions will be selected by OISE staff in consultation with the COV chair using a stratified random process based on program, proposal action, and other relevant variables. The COV may select additional proposals to review from the set of all proposal actions taken by OISE during the timeframe, within the constraints of applicable conflicts of interest regulations.

Program officers from OISE and other NSF directorates, and senior OISE officials will meet with the COV and describe activities related to program and portfolio management, and other relevant topics.

DEVELOPMENT AND DISPOSITION OF REPORT
The COV will produce a written response to each of the Core Questions in the attached COV Report Template before the COV meeting adjourns. The COV report will be discussed at the fall, 2011 meeting of the AC-ISE. The AC-ISE chair will forward the report to the OISE Director with any comments from the AC-ISE. In accordance with NSF policy, the OISE Director will provide a written response to each COV suggestion or recommendation. Both the COV report and the OISE Director's response will be forwarded to the Director of the NSF, and ultimately posted on the NSF web site.

Saifur Rahman
Chair, NSF Advisory Committee for International Science and Engineering

Machi F. Dilworth
Director, Office of International Science and Engineering

CORE QUESTIONS and REPORT TEMPLATE
FY 2011 Committee of Visitor (COV)
NSF Office of International Science and Engineering (OISE)

Date of COV: July 12-14, 2011
Program/Cluster/Section: NSF Office of International Science and Engineering
Division:
Directorate:
Number of actions reviewed by COV: **Awards:** 41 **Declinations:** 45 **Other:** Invited = 2, Not Invited = 12, Withdrawn = 1
Total number of actions within OISE during period under review: **Awards:** 1,391   **Declinations:** 1,560 **Other:** 1,164 (including 517 PIRE pre-proposals, 433 co-fund actions, and 183 Returned without Review, and 31 Withdrawals)
Manner in which reviewed actions were selected: The sample of proposal actions was selected by OISE staff in consultation with the COV chair using a stratified random process based on program, proposal action, and other relevant variables.

INTEGRITY AND EFFICIENCY OF OISE'S PROCESSES AND MANAGEMENT

Briefly discuss and provide comments for each relevant aspect of OISE's review process, management, portfolio balance, and representational activities. Comments should be based on a review of proposal actions (awards, declinations, and withdrawals) that were _completed within the FY 2008 through FY 2010 timeframe, and other information provided to you_. Quantitative information may be required for some questions. Constructive comments noting areas in need of improvement are encouraged.

I. Quality and Effectiveness of OISE's Use of Merit Review Process. Please answer the following questions about the effectiveness of the merit review process and provide comments or concerns as appropriate**.**	Yes, No, Data Not Available, Not Applicable
1. Are the review methods (for example, panel, ad hoc, site visits) appropriate? Comment: The COV did not have access to site visit data	Yes
2. Are both merit review criteria addressed a) In individual reviews?	Yes
b) In panel summaries?	Yes
c) In Program Officer review analyses?	Yes
Comments: The internal, ad hoc, and panel summaries consistently address both merit review criteria. The COV noted that only a very few individual reviews did not address both criteria- less than 1%. The COV lauds OISE for providing clear guidance to panelists and ad hoc reviewers that accounts for this consistency. The COV appreciated the format of many of the reviews that identified and included strengths and weaknesses. _Recommendation 1: Include strengths and weaknesses under each merit criteria in the panel summary._	Yes
3. Do the individual reviewers provide substantive comments to explain their assessment of the proposals? Comment: Some reviews are more detailed than others, and as a result,	yes

some reviews are more informative than others.	
4. Do the <u>panel summaries provide the rationale for the panel consensus</u> (or reasons consensus was not reached)? Comments: The COV found it helpful when the evaluation panel discussion was explicitly identified in the panel summary. Some panel summaries did not include the statement that all members of the panel have read and concur that the summary accurately reflects the discussion and evaluation by the panel. The COV noted that some EAPSI jackets were not as complete as the jackets from other programs. The panel believes that this is because of the large numbers of proposals submitted. *Recommendation 2: Ensure that the panel summaries should reflect not only the reviews but also the discussion and development of the final consensus.*	yes
5. Does the documentation <u>in the jacket</u> provide the <u>rationale for the award/decline decision</u>?	yes
6. Does the documentation <u>to PI</u> provide the <u>rationale for the award/decline decision</u>? Comment: Some correspondence to the PI included statistics of program awards; others do not. *Recommendation 3: The COV suggests standardizing the process so that program award statistics information is consistently provided to PIs.*	yes
7. Additional comments on the <u>quality and effectiveness of the program's use of merit review process</u>: Comment: The merit review process appears to be highly effective: only one proposal out of the 101 proposals sampled by the panel did not meet the minimum review criteria and should not have been sent to reviewer.	n/a

II. **Selection of Reviewers.** Please answer the following questions about the selection of reviewers and provide comments or concerns as appropriate**.**	Yes, No, Data Not Available, Not Applicable
1. Did OISE make use of <u>reviewers having appropriate expertise and/or qualifications</u>? The COV saw evidence that reviewers have appropriate expertise. Due to the large volume and diverse nature of EAPSI proposals, we recognize the challenges of recruiting appropriate reviewers.	yes
2. Did OISE recognize and resolve <u>conflicts of interest</u> when appropriate?	yes
3. Additional <u>comments on reviewer selection</u>: The COV noted that OISE has done an exemplary job in the difficult task of recruiting appropriate reviewers, and we particularly commend the practice of engaging EAPSI alumni in the review process.	yes

III. **Management of OISE**. Please comment on the following:	Yes, No, Data Not Available, Not Applicable
1. <u>Management</u> of the individual programs. Comments: The COV found that OISE programs follow standard solicitations: these typically follow Dear Colleague letters. This has proved to be good practice and is encouraged to be continued. OISE consults extensively with other directorates before issuing solicitations. The dwell time of proposals from 2008-2010 at OISE was at or slightly below the NSF average. During the influx of ARRA funds in 2010, the dwell time did not exceed six months, despite a significant increase in proposal activity and concomitant workload. Only one out of 101 decisions in the sampled jackets was contested: the dispute was clearly documented in the jacket. The COV did not find any evidence of unsuccessful or early termination of	

projects. The COV is aware that individual program assessments are taking place, but the information is currently unavailable. The COV commends OISE for taking steps to maintain institutional memory and consistent management by structuring the director position as a non-rotating position. Program officers (especially program coordinators) have sufficiently long tenure in the office, enabling the establishment and continuity of working relationships with international organizations and agencies. This is particularly important in an office such as OISE tasked with building bridges to international institutions: a process that can take many years. Interviews with program officers from other directorates strongly indicated that travel funds to establish, build and maintain international relationships are severely limited. *In light of OISE core functions, this is an especially critical issue.* We understand that IRFP and EAPSI are currently being evaluated. The COV notes that the management of the EAPSI program may want to reevaluate the practice of providing grants directly to students without oversight by US universities, due to potential liability issues. Some of the OISE programs have higher funding success rates than the NSF average. We commend the current efforts of OISE to increase the pool of applicants to its programs. We note that *Dear Colleague* letters are an established and effective way to inform the scientific community of the programs currently in OISE's portfolio. *Recommendation 4: Further increase OISE officers' travel budgets to enable the core functions of establishing, building and maintaining international relationships for the entire foundation.*	
2. Responsiveness of OISE to <u>emerging research and education opportunities</u>. Comments: There are various channels through which OISE receives information about emerging opportunities. These include: attention to NSF strategic plan and goals, communications with program officers in other directorates, communications through international networks, and recommendations of the Advisory Committee for International Programs. As an example, OISE has aligned the 2011-2012 PIRE solicitation to the current NSF investment area, Sustainability, Energy and Environment. While the COV understands the rationale behind restricting PIRE submissions to one of NSF's current	

investment area, we believe that this program should remain open to proposals from all disciplines in future solicitations. Such a policy will ensure the responsiveness of OISE to emerging research and international opportunities.	
3. Program <u>planning and prioritization</u> process (internal and external) that guided the development of the OISE portfolio. *Recommendation 5: OISE should further engage other NSF directorates early on in their programmatic activities.*	
4. Responsiveness of OISE to <u>previous COV comments and recommendations</u>. Comment: Response to previous COV comments is adequate	Yes

IV. **Portfolio Review**. Please provide comments on OISE's programmatic portfolio goals, catalytic initiatives, and representational activities.	Yes, No, Data Not Available, Not Applicable

1. Please provide comments on whether OISE's portfolio goals are appropriate and whether OISE has achieved a proper portfolio balance. Please include comments on any program areas in need of improvement or gaps within program areas.
 	
Comments:
The COV noted that OISE did not have a strategic plan in place until 2010. The portfolio goals that we examined are:
 	
    -Develop a globally engaged U.S. workforce
    -Advance US research excellence through new collaborations
    -Scale up international partnerships and networks
 	
We will address two balance issues:
 	
    i.   The balance between proposal and non-proposal activities.
 	
We understand that more than half of all OISE effort goes into non-proposal activities. The COV found it very difficult to evaluate quantitatively the effectiveness of non-proposal activities of this office. However, the roundtable participants from other directorates indicated resounding satisfaction of the role OISE takes in supporting international efforts. They also indicated that they believed that OISE's effectiveness is limited by budget and staffing restrictions.
 	
Recommendation 6:
Develop a metric through which OISE staff record their intangible, non-proposal contributions, for staff performance review as well as documentation of OISE's significant contribution to the overall goals of the NSF.
 	
    ii.   The balance among grant programs.
 	
OISE programs appropriately addresses its portfolio goals. The COV believes that the balance among award programs is appropriate.
 	
Even though a large proportion of OISE budget's is directed to PIRE, this particular program offers the unique opportunity to leverage the resources of NSF directorates in establishing viable international collaborative	

agreements. Based on an active discussion, the committee reached agreement that the current portfolio of programs reasonably reflect OISE's portfolio goals. The portfolio exhibits a balance of larger grants of high strategic importance, as well as small grants that serve to stimulate international engagement of the future US scientific workforce. The diversified portfolio actively engages other directorates of the organization as well as other countries, and assists OISE in fulfillment of its catalytic role promoting international science engagement across the agency. *Recommendation 7:* *The portfolio of OISE programs should be evaluated by the Advisory Committee for International Programs with the benefit of the ongoing evaluations of three of the core programs (IRFP, EAPSI, PIRE).*	
2. How catalytic has OISE been in helping to shape NSF's international engagement? Comments: OISE serves as a catalytic force in fostering international engagements. Based on the roundtable discussion with program directors from other NSF directorates, the COV felt that OISE plays a central and critical role in identifying partners, making contacts, and facilitating, nurturing, and catalyzing international partnerships and networks. In the words of the program directors at the roundtable, OISE plays a critical role in promoting the international mission of NSF and facilitating the development of international programs and partnerships. The COV was impressed by the high praise OISE received in the determining success of their disciplinary international efforts. They also indicated the critical role OISE plays in the creation of fruitful partnerships. The roundtable of external program directors made a point of saying that the fundamental contribution of OISE can't easily be quantified. There needs to be a mechanism that allows for OISE to be credited for non proposal activities such as development of long-term relationships over a number of years that benefit the research directorates and U.S. science mission.	
3. A large part of OISE's workload involves "non-proposal" activities such as preparing briefing materials for senior NSF officials who are undertaking foreign visits or hosting foreign visitors, meeting with foreign visitors and planning detailed schedules for them as they seek to learn about NSF, participating in interagency working groups, and	Yes

| preparing documents on behalf of NSF for intergovernmental activities, etc. Given the above, is OISE optimally organized to carry out its responsibilities?

Comments:
Examples of non-proposal related activities supported by OISE include:

Foreign visitor/delegations: ca. 50 annually
Joint consultative meetings: ca. 15 annually
Briefs for NSF Director and Deputy: ca. 15 annually
Correspondence for the Office of the NSF Director: ca. 65-100 annually
J-1 Visa waivers: ca. 30 inquiries and requests annually
Embassy fellows: ca. 42 NSF fellows since 2001
Country Clearances for NSF staff: more than 700 trips annually
Overseas office administration and support
International travel assistance and support

From the roundtables and discussions with individual program directors over the past three days, we have no reason to believe that OISE is inadequately structured to take care of the responsibilities listed above.

There needs to be administrative structures and mechanisms that allow for quantification and recognition of intangible, non-proposal support of the international science mission throughout the NSF. | |

V. Other Topics	Yes, No, Data Not Available, Not Applicable
1. Please provide comments on <u>any other issues the COV feels are relevant</u>. Comments: There is apparently an increasing need for expertise in OISE to support IRB processes, and data management for NSF-funded programs sited in other countries. There have been two successful initiatives that leveraged non-NSF funds-- the Gates Foundation (BREAD) and the recent MOU with	

USAID. OISE is optimally situated within the organization to catalyze and nurture such initiatives. *Recommendation 8: OISE should further develop the capacity to nurture and catalyze inter-Agency partnerships as well as partnerships with non-governmental organizations to support its core missions.*	
2. NSF would appreciate your comments on <u>how to improve the COV review process, format, and report template</u>. *Recommendation 9: Provide future COVs with additional documentation of all core activities including more detailed information on non-proposal activities, as well as access to an up-to-date strategic plan.*	