Updated: May 3, 2012

Agenda Ocean Science Observing Committee Consortium for Ocean Leadership Washington, DC May 16, 2012

Goal of Meeting - Establish goals and products of OOSC for the coming year

Morning -Focus is on information gathering and 'getting on same page'

0800 Coffee

0815 Introductions and opening remarks:

- · Opportunity for each participant to speak
- Review OOSC Charter (included below)
- · Review agenda
- Goals of meeting
- Agree on agenda and what we leave with.

NSF update on ocean observing assets with major focus on OOI but also including MARS and other assets represented by UNOLS committees. (Jean McGovern)

- Project Status
- Timeline for known deployments.
- Glider Fleet operations and changes related to staffing
- OOI Operation and Maintenance (O&M) Realities Information on O&M cost cutting recommendations from recent workshop will be presented.
- Question/Answers (Note: Further OOSC discussion/feedback on the timeline, gliders, and O&M is planned during the afternoon.)

1015 **Break**

1030 Discussion of Science and OOI

- NSF Observatory Science Future perspectives. (Jean McGovern)
- OOI Office (Tim Cowles)
- UNOLS Committees (DESSC, SCOAR, etc) comments regarding OOI
- Open Discussion

1145 **Purchase Lunch** – We will break for 15 minutes to get lunch from local establishments.

<u>Afternoon - Focus is on developing plan for coming year:</u>

Working Lunch – We will break for 15 minutes to get lunch from local establishments and return to the conference room.

Fostering Science Utilization of OOI – NSF has requested OOSC input in identifying five things that NSF can do to foster science utilization of OOI? Each OOSC member will be asked to share

his/her input on this topic.

- OOI Science Subcommittee development and stand up NSF proposes that the OOSC establish OOI science subcommittees for Pioneer, Irminger (with the intent on expanding to Global), and the NE Pacific (Regional/Cabled Array, Endurance and Station Papa with the idea that we form a regional science subcommittee). These subcommittees would serve to advise the OOI project (and project scientists) on the science user perspective of the OOI. This advice in the short term would take the form of things such as:
 - a. Alignment of science questions and projected "as-built" OOI. Almost all of our sensors should be under contract by June, so the time is now to start addressing this issue.
 - b. Data Management Issues
 - c. "Alpha and Beta" CI users for the release 3 (science user software). The science user software design is expected to commence when the release 2 is completed this January 2013.
 - OOSC Discussion and feedback on this proposed task
- 1400 **Glider Fleet Issue on the OOI Project** (revisited from the morning) OOSC feedback on the O&M impacts as well as community impacts to NSF's recommendations regarding glider operations and staffing. Feedback is request to NSF by June 1st.
- 1430 **Break**
- OOI Timeline and O&M OOSC feedback to the OOI timeline of deployments and O&M information that was presented during the morning session.
- OOSC's role with OOI, other NSF observing systems, and the oceanographic community a general open discussion period regarding:
 - OOSC's role
 - Identify near and long-term tasks
 - Terms of reference (attached below)
 - White Paper Refine outline based on the meeting's discussions, identify writing assignments, and set timeline.
- Review and Fine Tuning of Actions (including future meetings and other events) agreed upon by the committee during the day.
- 1700 Adjourn

ANNEX X - TO THE CHARTER

Ocean Observing Science Committee (OOSC) Terms of Reference

1. INTRODUCTION

In response to the global need to study the inter-connectivity of the ocean with the Earth system as a whole, the ocean science community has planned and invested in the design, deployment and operation of ocean observatories. Ocean observatories provide a research platform to study many temporal and spatial scales

using concurrent time-series data and responsive capabilities. Compelling science themes include climate variability, ocean ecosystems, turbulent mixing, plate tectonics and sub-seafloor biogeochemistry. In addition, these observatories can be critical to support tactical decisions in response to episodic events such as oil spills, harmful algal blooms and tsunamis. The National Science Foundation (NSF) is making a major investment in ocean observing capabilities with the Ocean Observatories Initiative (OOI), a program that began its observatories installation in 2010, will take 66 months to deploy, and will operate for 25 years. The observatories will require the use of other ocean science infrastructure including the US Academic Research Fleet, AUV/ROVs and unmanned systems such as gliders. Community input and perspectives on current and future directions is needed by NSF in order to effectively align the ocean science and research needs with technically sound decisions and cost efficient operations.

The Ocean Observing Science Committee, (OOSC), is charged with providing advice and guidance on decisions and plans from the science perspective related to NSF observing investments such as the Monterey Accelerated Research System (MARS) and OOI as well as other ocean observing support systems. The OOSC will be an essential element in the process of communicating the science user perspective to the National Science Foundation and to the project teams involved in developing, deploying and operating ocean observatories.

2. AUTHORITY

These terms of reference shall be incorporated as Annex X to the Charter. Due to the significant investment in the OOI construction project, NSF will work closely with UNOLS to ensure the OOSC membership will represent a balanced cross section of the bio/geoscience community. In addition, each federal agency providing funding to the UNOLS Program Office will be invited to designate one official observer to the committee. The OOSC is empowered to identify and establish subcommittees to advise the Committee on specific issues relating to the development, operation and use of the NSF supported ocean observatories and support system infrastructures. These subcommittees are particularly important for working emergent issues related to the construction of OOI and the OOSC will work closely with NSF to determine the timing for their establishment. The subcommittees may draw on expertise outside of the committee itself, but shall not include members of the teams receiving federal funding to construct and operate ocean observing systems.

3. MEMBERSHIP

The OOSC membership shall be comprised of up to seven individuals who will represent the various science disciplines required to fulfill the Committee tasks as outlined below. The Committee shall include individuals with significant expertise in scientific research, as well as in ocean observing infrastructure and systems, and data acquisition and management. The OOI Operator, Consortium for Ocean Leadership, may only be represented by non-voting ex-officio representatives. The OOSC shall not include members of the teams receiving federal funding to construct and operate ocean observing systems.

4. NOMINATIONS

Nominations to the OOSC and for the OOSC Chair will be solicited from the research community and other organizations with relevant expertise. Vacancies will be announced in journals and other venues as appropriate, and candidates will be asked to submit a vita and letter of interest. Applications for membership to the OOSC and the OOSC Chair will be reviewed and voted on by the standing OOSC. The standing OOSC will select one nominee for each open position and forward the nomination to the UNOLS Chair. The UNOLS Chair, with the endorsement of the UNOLS Council, shall appoint the OOSC members and the OOSC Chair from the nominations put forward by OOSC. Members of the OOSC will be appointed for terms

up to three years, staggered so that two or three terms begin each year. Individuals may serve not more than two consecutive terms. Given the potential impact of Ocean Observing Systems support requirements on the US Academic Research Fleet, and with the Council's concurrence, other standing committees of UNOLS, such as RVOC, RVTEC and FIC may also designate ex-officio members as appropriate to OOSC.

5. MEETINGS

It is expected that the OOSC will typically meet twice per year. One meeting will occur in the winter period and will be generally devoted to a strategic review of the portfolio of ocean observing assets and support systems. A second meeting will be timed to occur concurrently or immediately after the annual OOI Construction/Operations review in early summer. A subset of the OOSC and/or Subcommittees may be asked to participate in additional periodic reviews of the OOI Subsystems. The meeting logistics and travel arrangements shall be coordinated by the UNOLS Office.

6. CHARGE TO THE COMMITTEE

- a. Provide advice on decisions and plans from the science perspective related to NSF ocean observatories (MARS, HOTS, BATS, OOI, and others) and ocean observing support systems. These may include the US Academic Research Fleet, AUV/ROVs, and other unmanned systems such as gliders. The OOSC will not review proposals, but rather provide a research community perspective on the strategic, tactical and prioritization issues that project teams and agencies are addressing for the portfolio of ocean observatories.
- b. Represent science user perspectives. The OOSC will provide through the UNOLS process, the science user perspective to the project teams and the federal agencies that are developing, deploying and operating ocean observatories. The OOSC will develop a process and structure for effectively representing the community who use or who have interest in NSF ocean observatories and supporting systems.
- c. Provide technical advice. The OOSC will be requested by NSF to review technical decisions and trade off analyses to inform decisions and provide advice as needed. This may require establishing subcommittees.
- d. Project Reviews. NSF will conduct periodic performance reviews of the OOI construction project using personnel not associated with the OOI Project Team. The OOSC will be requested by NSF to observe (1-2 OOSC members) these reviews and provide science users perspectives.
- e. Evaluate best practices across Ocean Observatories. The OOSC will identify and disseminate best practices for ocean observatories across both technical and managerial regimes.
- f. Reporting. Reports of activities shall be made to the UNOLS membership on at least an annual basis and to the UNOLS Council at regularly scheduled Council meetings.

7. DOCUMENT HISTORY

Originally adopted: October 15, 2010, Arlington, VA