

# **Interagency Ocean Observation Committee (IOOC) Glider Task Team**

## **Scope of Work**

July 27, 2015

## **Goals**

The primary goals of this IOOC Glider Task Team is to enable increased engagement with the glider community and to advance the coordinated use of glider observing systems to meet global, national and regional sub-surface observing requirements. The glider community includes glider operators, data providers, data users and sponsors. To meet these goals, the IOOC Glider Task Team will collaborate with the IOOS Program Office, the Regional Associations and other federal interagency working groups identified to gather information and develop a report with recommended actions for increased collaboration and engagement.

## **Background: Developing an Underwater Glider Network**

IOOS published a white paper, "*Toward a U.S. IOOS® Underwater Glider Network Plan: Part of a comprehensive subsurface observing system,*" in August 2014. Through discussion, analysis and review during the development of the white paper, there were a number of unresolved issues identified. Issues specifically related to defining what a Glider Network should look like and who should perform which roles and responsibilities to implement such a network. The global, national and regional observing and glider communities have evolved to the point where it makes sense to consider establishing such a network. The global community is in discussion with JCOMM to advance glider coordination. The European GROOM program, IMOS and US groups have also taken steps to coordinate data formats and other glider activities. Nationally, federal and non-federal glider operators are looking for more opportunities to collaborate and meet stakeholder needs. IOOS has developed a framework for sharing glider data publicly on the web as well as to the WMO recognized National Meteorological and Hydrological Services via the Global Telecommunications System. While a "network" may be elusive now, there are a number of steps the community can take to move in this direction. An IOOC Glider Task Team will facilitate a more collaborative and coordinated approach to subsurface glider observing.

Other efforts are currently underway to coordinate unmanned systems at a higher level. The IWG-FI established a Subcommittee on Unmanned Systems (SUS). NOAA has also established a UxS Roadmap group. These groups both have a larger scope of coverage, and any IOOC task team work will be done such that it is complementary to ongoing work and all groups are mutually aware of each other's progress.

## Objectives

The high level objectives of the task team are to:

- a. Conduct needs assessments for components of the network
  - i. Common glider uses today
  - ii. Mission coordination/science coordination for increased sharing and awareness (not directive)
  - iii. Observing system analysis options (e.g. using gliders for observing system experiments)
- b. Identify observing gaps that gliders could be best suited to meet due to their unique capabilities
- c. Develop a community of best practices for glider operations (including by interest area, ie. HABs, hypoxia, etc.)
- d. Develop a community of best practices for glider data (including quality, distribution and access)

## Draft Responsibilities and Activities (may be revised once task team established)

There are a number of responsibilities and activities at varying levels of effort for an interagency team to consider.

Initial task team responsibilities include:

1. Survey federal agencies for identified sub-surface observing data gaps that could be met with gliders; for those operating gliders, identify activities within agency glider efforts that could benefit from a coordinated approach
2. Identify and prioritize list of activities that could benefit from interagency coordination
3. Host an expert workshop to review the observing gaps and activities
4. Write report with recommendations for coordination activities and glider operations
5. Initiate communities of best practices in the U.S.
6. Serve as international representatives for US to develop communities of best practices

## Timeline

- **Initial Virtual Meeting:** review this scope of work and agree on approach for execution
- **Conduct Survey**
- **Complete Analysis**
- **Glider Workshop (x months – *in-person*):** With non-federal partners to evaluate survey results
- **Develop Report (x months - *virtual*):**

## Resources Required

**Staff and Facilities:** IOOC support staff with the assistance of the Consortium for Ocean Leadership will provide logistical requirements.

**Budget:** Up to \$20,000 initial request from IOOC for potential travel support for participants to attend the workshop. Note: anticipate NOAA contributions to support meetings and/or workshops.

### **Membership/Representation**

The task team shall consist of a minimum of three representatives from at least three of the interested IOOC member agencies and operate with the approval/oversight of the IOOC. All officially recognized task team members can vote. Non-voting participants may be invited to help achieve specific task team objectives only.

### **Suggested Task Team Representatives:**

Lead: Becky Baltus, IOOS Program Glider Rep  
Mete Uz (NSF)  
Terri Paluszkiwicz (ONR)  
Bill Michaels (NOAA, UxS Member)  
Guillermo Auad (BOEM, Walter Johnson, Brian Zelenke, alternates)  
David Legler, IOOC Co-Chair Rep

### **Invited Non-Federal Participants**

Lead: Barb Kirkpatrick, IOOS Association Rep  
Dan Rudnick (SCRIPPS, Glider Operator)  
Luc Rainville (UW-APL, Glider Operator)  
Andrew Thompson (CalTech, Glider Operator)  
Scott Glenn, (MARACOOS, Glider Operator)  
Jack Barth, (NANOOS, Glider Operator)

### **Approval Process/Reporting**

The IOOC will be the final approval authority for the scope of work and products for the Glider Task Team.

- The IOOC Co-Chairs will initially review the final scope of work and proposed products and approve them for review by the IOOC.
- During the time the task team is active, any questions and issues that cannot be resolved by internal consensus will be presented to the full IOOC for resolution.
- The task teams will provide written or verbal updates at every IOOC meeting and as needed to the IOOC Co-Chairs.

### **Frequency**

The frequency of meetings will be as agreed by the group to achieve the activities in a timely manner. The frequency of meetings should be reviewed by the IOOC Co-Chairs within a three month period initially, and as part of a periodic review thereafter. Meetings will be open to the

public and the IOOC may support attendance by non-Federal participants with necessary expertise as a Glider Task Team participant.

**Sunset Date**

Task team will remain constituted until July 27, 2017 (one year from establishment), unless disbanded sooner or extended.

**Members**

NSF, ONR, BOEM, NOAA