### **Proposed SOOS Ross Sea Regional Working Group**

The Southern Ocean Observing System (SOOS) is an international initiative that aims to facilitate the collection and delivery of essential observations on variability and change of the Southern Ocean systems to all international stakeholders through the design, advocacy, and implementation of cost-effective observing and data delivery systems. SOOS requests assistance in developing community, best practices, and initiatives through Regional Working Groups (WG). These RWGs will provide critical information that will be incorporated into a maturing SOOS. SOOS will provide the WGs with a means incorporating grass roots ideas into a lasting international system, mechanisms for enhancing collaboration and resources, and provides a means of providing citable referencing of developed products and a web presence.

## Ross Sea Working Group Objective

To assist delivery of coordinated and, where possible, standardized observations of essential physical, chemical and biological variables in the Ross Sea in support of SOOS.

# **Terms of Reference**

The Ross Sea WG will fulfill the following terms of reference over the next 5 years:

- 1. Develop and enable regional-scale observing in the Ross Sea using SOOS best practice for observing system in the region.
- 2. Identify and assemble legacy data sets and sampling techniques of ships and stations in the Ross Sea in order to provide best practice sampling protocols for physical, chemical and biological parameters to enable their standardization. Sampling approaches and recommendations will be made available on the SOOS Website.
- 3. Based on understanding of existing efforts in the Ross Sea, identify gaps and bottlenecks in the observation systems and contribute to SOOS in addressing these issues. Facilitate coordinated and, where possible, multi-disciplinary (physical, chemical and biological) observations of the Ross Sea. Plans, operations and meta-data will be made available on the SOOS web site to help collaboration amongst the international community.
- 4. Facilitate and, when needed, develop procedures to achieve efficient sharing of data across the science community according to SOOS data policy.
- 5. Convene focussed sessions at national and international meetings, including SCAR and SCOR, and facilitate synthesis products, to increase the awareness of the science community to the importance of the Ross Sea.
- 6. Provide support to International Program Office (IPO) by providing annual reports to be available at the SOOS SSC annual meeting, as well as providing content for the IPO website/newsletters on the activities and outcomes of the Ross Sea Working Group.
- 7. Develop a funding plan to sustain Working Group activities.
- 8. Have products coming out of the WG acknowledge SOOS.
- 9. Contribute to international initiatives assessing the state of the Southern Ocean.

# **Participants**

For the Ross Sea WG the proposed co-chairs are Mike Williams (New Zealand), Walker Smith (USA) and Giorgio Budillon (Italy). If approved, a call will be made for expressions of interest by scientists, particularly from countries knowledgeable about observations in the Ross Sea, to participate in the working group. A specific focus will be to entrain the many countries maintaining a sustained research presence in the Ross Sea sector (e.g., Korea, China, Italy, NZ, USA).

#### **Products and Outcomes**

- Table of existing sampling practices and routine observations of ships and stations in the region posted on SOOS Web site, along with planned activities.
- Identification of observational data streams available from the region, made available on the SOOS website, and agreement for data sharing among the science community and provision of metadata to SOOS metadata portal.
- Publications in a peer-reviewed journal on latest evidence for dynamics and change in the region and future research priorities.
- Deliver innovative products that can be used by researchers to solve the science problems (data committee).
- Facilitate reinforcement of use of best practice for observational efforts, standardised, where possible, across all Regional Working Groups.

### **Mode of Operation**

The group will work remotely to initiate discussions around existing efforts and routine observations. A workshop will be held in late 2017 to bring together all interested participants from the research, logistical and planning communities. Funding for these activities will be sought in the coming year.

## **Strategy & Milestones**