### Proposed SOOS Regional Working Group: West Antarctic Peninsula (WAP)

### SOOS Request for Assistance.

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 community Working Groups (WG). These WGs will provide critical information that will be incorporated into a maturing SOOS. SOOS will provide the WG 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.

### **SOOS Working Group WAP Objective**

To assist delivery of coordinated and, where possible, standardized observations of essential physical, chemical and biological variables in the West Antarctic Peninsula in the Southern Ocean in support of the Southern Ocean Observing System.

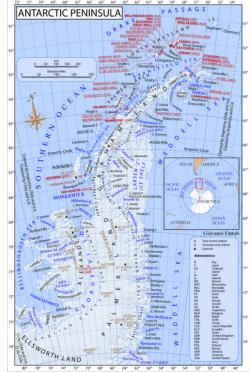


Figure 1. West Antarctic Peninsula study sector

## **Terms of Reference**

The working group (WG) will fulfill the following terms of reference over the next 5 years:

- 1. Develop and enable regional-scale observing in the West Antarctic Peninsula using SOOS best practice for observing system in the WAP.
- 2. Identify and assemble legacy data sets and sampling techniques of ships and stations in the West Antarctic Peninsula of the Southern Ocean 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 Web site.
- 3. Based on the experience in the WAP, identify gaps and bottlenecks in the observation systems and contribute to SOOS in addressing these issues. Facilitate co-ordinated and, where possible, multi-disciplinary (physical, chemical and biological) observations of the West Antarctic Peninsula of the Southern Ocean. 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 West Antarctic Peninsula of the Southern Ocean.
- 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 West Antarctic Peninsula, working group.
- 7. Develop a funding plan to sustain the Working Group activities.
- 8. Have products coming out of the WG acknowledge SOOS.
- 9. Contribute to international initiatives assessing the state of the SO.

## <u>Participants</u>

A minimum 2 co-chairs from different countries is required; however large WGs are encouraged to have an executive committee or structure that can share the administrative burden and help the group to work efficiently. Ideally, there would be representation from each country with research activities in the West Antarctic Peninsula of the Southern Ocean within all relevant<sup>1</sup> disciplines. These representatives would be requested to coordinate input into the WG activities from participating nations and help facilitate coordinated, standardized observations in the future. Participants would help organize workshops and meetings to facilitate the work of the WG.

For the West Antarctic Peninsula WG the proposed co-chairs are Oscar Schofield (USA, Rutgers University) and Kate Hendry (UK, University of Bristol). If approved, a call will be made for expressions of interest by scientists, particularly from these countries who are knowledgeable about observations in the sector, to participate in the working group. A specific focus will be to entrain the many countries maintaining a sustained research presence on the West Antarctic Peninsula. The goal will be to identify ongoing sustained data collection and over time standardizing the measurements using best practices.

# **Products and Outcomes**

- Table of existing sampling practices of ships and stations in the region posted on SOOS Web site, along with planned activities.
- Agreement for data sharing among the science community and provision of data streams to SOOS.
- 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 that their national operators reinforce following the best practice.

# Mode of Operation

The group will work remotely and opportunistically at scientific conferences until funding can be arranged for the group's activities. The SOKI wiki is proposed to be used to facilitate the delivery of the terms of reference.

## **Strategy & Milestones**

The group will convene group spanning the many nations working in the WAP with the goal of producing a list of what routine measurements are being at their land-based field stations. The goal is to access what data is available, how it is collected. The focus after that will be on attempting to standardize measurements as possible using best practices. Results will be reviewed at an international to be held in the

<sup>&</sup>lt;sup>1</sup> Physics, chemistry, biology, and/or sea ice

United Kingdom in 2016. The meeting will result in the production of a report that will be made available through the SOKI page.