Proposed SOOS Amundsen and Bellingshausen Sector 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.

Amundsen and Bellingshausen Sector Working Group Objective

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

Terms of Reference

The SOOS Amundsen-Bellingshausen Seas Working Group aims to fulfill the following terms of reference:

1. Develop and enable regional-scale observing using SOOS best practice for observing system including areas from which data sets already exist to detect long-term changes.

2. Identify physical, geochemical and biological key processes and their coupling in areas of the Amundsen-Bellingshausen Seas region under climate change and in environmentally stable areas being expected to experience warming and melting of sea-ice in the future.

3. Advocate long-term sustained observations in the region to enable monitoring of changes and understanding variability within the Amundsen-Bellingshausen Seas region.

4. Identify and assemble important legacy data sets and sampling techniques.

5. Based on the experience in the region, identify data gaps and bottlenecks in the observation systems, which until present hinder a comprehensive and better understanding of the physical, geochemical and biological systems.

6. Facilitate coordinated and, where possible, multi-disciplinary observations.

7. Make plans of operations available on the SOOS website to increase collaboration amongst the international community.

8. Facilitate procedures to achieve data availability across the science community according to SOOS data policy, which includes the publication of data and meta-data.

9. Convene focussed sessions at international meetings, including SCAR and SCOR, and facilitate synthesis products, to increase the awareness of the science community to the importance of the Amundsen-Bellingshausen Seas region.

10. Provide support to the International Program Office (IPO) by providing short 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.

<u>Participants</u>

For the Amundsen and Bellingshausen Sea WG the proposed co-chair is Bastien Queste (Sweden) and a leadership team consisting of Anna Wahlin (Germany), Tae-Wan Kim (Democratic Republic of Korea), Povl Abrahamsen (UK) and Patricia Yager (USA) as well as an APECS early career representative Yoshiro Nakayama (). If approved, a call will be made for expressions of interest by scientists, particularly from countries knowledgeable about observations in the Amundsen and Bellingshausen Sea, to participate in the working group. A specific focus will be to entrain the many countries maintaining a sustained research presence in the Amundsen and Bellingshausen sector.