

IASC MWG 19/02/2023, Vienna

Notes by Andrew Brierley (St Andrews; in Vienna) and Finlo Cottier (SAMS; online)

UN Decade Arctic Proposal (Lee Cooper, Christina Goethel). A proposal was submitted to the Intergovernmental Ocean Commission (IOC) aimed at development of an Arctic Regional Programme Office to better support coordination among existing groups, stakeholders and initiatives in the Arctic in the frame of the UN Decade. IOC suggested a more ambitious approach, the development of a regional (Arctic) Decade Collaborative Centre (DCC). Several DCCs already exist. The question for MWG is 'should MWG continue to push this effort?' If the answer to this is 'Yes', a host will need to be identified. The view seems to be that this is something that should be led at IASC across all WGs (cross-cutting). It is a bigger matter than just MWG (e.g. social elements). Perhaps a Polar DCC could be an option, since there are parallels with Antarctic, and relevance to International Polar Year.

Strategic Plan for MWG (Colin Stedmon, Henrieka Detlef, Heidi Kassens). A dedicated workshop was held at the Technical University of Denmark (Copenhagen, November 15-17) to explore the view of the MWG about priorities for the UN Decade and formulate a contribution to the Fourth International Conference on Arctic Research Planning (ICARP IV) process and to the new IASC Strategic Plan. Five research themes are defined (Marine Life, Sea Ice & Stratification, Disturbances, Biogeochemical Cycles, Connectivity & Borealization), and approaches to addressing them were outlined. The MWG Strategic Plan should enable grant applicants to ensure that their applications are aligned with the wider IASC plan.

Presentation by the new IASC MWG Fellow (Lisa Winberg von Friesen). Swedish. Doing PhD in Denmark at University Copenhagen. Arctic marine ecologist / sea ice.

<https://www1.bio.ku.dk/english/staff/?pure=en/persons/673961>

She touched on links to Synoptic Arctic Survey (SAS). Jackie Grebmeier elaborated that SAS has its coordination Office in Norway. SAS serves coordination of aligned cruises, standardizing measurements from carbon to higher predators, supposedly every 10 years.

Reports on MWG activities supported in 2021/22.

MWG provides funding for projects that help build networks or support participation (particularly ECR participation) in Arctic marine activity. Short presentations given for projects receiving support

1 Atmospheric rivers and the onset of sea-ice melt (ARTofMELT). Planning for an international early spring expedition on the Swedish icebreaker Oden, targeting warm-and-moist air intrusions into the Arctic and their role for the onset of the sea-ice melt

(<https://www.polar.se/en/expeditions/artofmelt-2023/>)

2 Ice Sheets: Weather versus Climate. A 1.5-day workshop on "Ice sheets: Weather versus Climate" was held in Reykjavik, Iceland, on 23-24 August 2022, linked with the IGS Symposium on "Ice, Snow and Water in a Warming World"

3 Race and systemic bias. A workshop was held on the 18th February during the ASSW 2023 (<https://assw.info/program/assw-2023-program#tab99>) discussing Race and Systemic Bias within Arctic Sciences.

4 Gordon Research Conference and Seminar for Polar Marine Science 2023 (Klaus Meiners). IASC supported 5 invited speakers. <https://www.grc.org/polar-marine-science-conference/2023/>

Other Initiatives and activities

1 Synoptic Arctic Survey cruise onboard the USCGC Healy to the central Arctic Ocean and DBO-C30 cruise CCGS Sir Wilfrid Laurier (Jackie Grebmeier)

1. USCGC Healy Synoptic Arctic Survey cruise to the North Pole (chemistry to plankton, but no fish. Higher pred observers didn't see much). Many open leads enabling 10 knot passage northwards in open water 'rivers'.

2. CCGS Sir Wilfrid Laurier Distributed Biological Observatory-Canada's Three Oceans cruise and the developing pan-Arctic DBO network (42 stations). There is a DBO PLoS Special Issue.

2 Arctic GOOS (Global Ocean Observing System) Regional Alliance (GRA) (Joseph Nolan)

A report on a meeting on the potential development of a new structure for improved international coordination of Arctic oceanography. The forum is open and interested to hear input from any interested parties. <https://eurogoos.eu/current/towards-an-arctic-goos-regional-alliance/>

3 Polar Connect (Magnus Friberg) 2026 and 2030 plans for cables from Norway across the Arctic Ocean (North Pole) to Greenland, Japan etc. Cables can be made 'smart' with scientific sampling capability. This project is a feasibility study: linking with commercial partners, development of a joint research ice-breaker/cable-layer (no existing vessel able to lay cables in ice).

4 ICARP IV (Henrieka Detlef, Heidi Kassens). Overview of the status on the Fourth International Conference on Arctic Research Planning (ICARP IV) and discussion about MWG specific contributions during the ICARP IV engagement phase. Discussion highlighted the following: geoengineering should be mentioned explicitly. The point made in the joint session about learning from previous ICARPs was made: perhaps MWG should conduct an analysis so IV can benefit from previous successes and avoid failures.

5 Synoptic Arctic Survey (SAS) maps climate change in the Arctic Ocean (Maria Teresa Bezem). Intended to be a snapshot of how everything in the ocean is now (Essential Ocean Variables etc; ambitious), and will be followed up in 10 year intervals to enable change to be documented.