

# Facilitation of Internationally Collaborative Antarctic Research

Michelle Rogan-Finnemore

*Executive Secretary, Council of Managers of National Antarctic Programs*

*michelle.finnemore@comnap.aq*

## Background

The Council of Managers of National Antarctic Programs (COMNAP) strives to facilitate internationally collaborative research amongst its thirty Member national Antarctic programmes. “Facilitation” is the act of helping others achieve their goals. As highlighted at the COMNAP Symposium 2018, in the case of national Antarctic programmes, facilitation entails sharing of specialised knowledge and skills in order to achieve long-term planning, dependable logistics chains, and implementation of the plans and policies to ensure scientists arrive where and when their research objectives demand. It also includes, among other things, technologies to appropriately collect, transit, and store data and samples (Falkner 2018).

Science facilitation is a challenging task but especially so in the Antarctic, where extreme weather and physical conditions, strict environmental management criteria, and risks to life and infrastructure must be fully considered and minimised. National Antarctic programmes are charged by their Governments to support and deliver a breadth of science disciplines across large geographic areas and environments. Antarctic science is also a relatively expensive endeavour. Because of all this and more, national Antarctic programmes recognised 30 years ago that international collaboration, within COMNAP, provides the way to succeed.

This presentation discusses the role of COMNAP, presents some of the outcomes of the Scientific Committee on Antarctic Research (SCAR) Antarctic and Southern Ocean Horizon Scan and the COMNAP Antarctic Roadmap Challenges (ARC) project, and presents a snapshot of the review of progress against both the Horizon Scan and ARC five-years on from the first Horizon Scan publication in 2014.

## The role of COMNAP

COMNAP is the international association, formed in 1988, which brings together its Members, who are the national Antarctic programmes that are the Government organisations that have responsibility for delivering and supporting scientific research in the Antarctic Treaty area on behalf of their respective Governments and in the spirit of the Antarctic Treaty. COMNAP’s purpose is to “develop and promote best practice in managing the support of scientific research in Antarctica”. It does this by:

- Serving as a forum to develop practices that improve effectiveness of activities in an environmentally responsible manner;
- Facilitating and promoting international partnerships;
- Providing opportunities and systems for information exchange; and
- Providing the Antarctic Treaty System with objective and practical, technical and non-political advice drawn from the National Antarctic Programs' pool of expertise.

## The SCAR Horizon Scan

The goal of the first SCAR Horizon Scan was to establish a process that could be routinely used to identify the most important, highest priority scientific questions that Antarctic science should aspire to answer. A horizon scan is a priority setting method that systematically searches for opportunities, which are then used to articulate a vision for future research directions (Sutherland & Woodroof 2009). In the first SCAR Horizon Scan, the timeframe was the next two decades and beyond. After comprehensive community involvement and a retreat of experts, eighty Antarctic research questions within seven themes were identified and published as the “roadmap” for the next two decades and beyond (Kennicutt et al, 2014).

## **The COMNAP ARC**

The ARC project was the next step-what would we need to deliver the “roadmap”. The ARC was the opportunity for the science support community to look across all those critical questions and think about what the necessary infrastructure, technologies, energy requirements, personnel skills and, importantly, funding requirements might be in relation to such research questions – what will be needed in order to deliver critical research outcomes such as those identified in the Horizon Scan process (Shiraishi, 2016). The ARC outcomes were published in 2016 and continue to be relied upon by the COMNAP community to ensure the Antarctic science of today and the future can be adequately supported. The ARC provided the community with very specific lists of science needs and, overwhelming, it emphasised that only through international collaboration can all Antarctic research goals be achieved.

## **Review of Progress: “the 21<sup>st</sup> Century Imperative”**

SCAR initiated in early 2019, a project to review progress against the priorities set out by the Horizon Scan and ARC, recognizing across each theme where progress has been made, where it is lagging, and what new challenges have arisen. The review was recently published in the journal *One Earth* in September 2019 (Kennicutt et al, 2019). The progress assessment was ordered by the seven research clusters as identified by the Horizon Scan and added an eighth topic in regards to engagement, impact, delivery and uptake. The review shows that some progress has been made in the last five years but there is still some way to go.

## **References**

Falkner, K.K., in Council of Managers of National Antarctic Programs Special Publication *Proceedings of the COMNAP Symposium 2018 Facilitation of Internationally Collaborative Antarctic Science*, ISBN 978-0-473-46407-3, 2018.

Kennicutt, M. C., Bromwich, D., et al, Rogan-Finnemore, M. (co-author) [full list at doi.org/10.1016/j.oneear.2019.08.014] ‘Sustained Antarctic Research: A 21st Century Imperative’, *One Earth*, 1, 1, Pages 95-113, 20 September 2019.

Kennicutt, M. C., Chown, S. L., et al, Rogan-Finnemore, M. (co-author) [full list at doi:10.1017/S0954102014000674] ‘A roadmap for Antarctic and Southern Ocean science for the next two decades and beyond’, *Antarctic Science*, Pages 1-16, September 2014.

Shiraishi, K., in Council of Managers of National Antarctic Programs *Antarctic Roadmap Challenges*, ISBN 978-0-473-35672-9, 2016.

Sutherland, W.J. and Woodroof, H.J. 2009. The need for environmental horizon scanning. *Trends in Ecology & Evolution*, 24, 523–527.