Antarctic Environments Portal
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Working Paper submitted by New Zealand SCAR and Australia

Summary

New Zealand, SCAR and Australia see that there is a pressing need to improve the availability of, and access to, scientific syntheses and high quality information to inform decision-making to support the effective implementation of the Protocol. We are seeking to develop an online Antarctic Environments Portal, which aims to be the primary source of information on Antarctic environments. A portal would be an efficient means to strengthen the link between Antarctic science and policy, enhance the CEP’s advisory role to the ATCM, facilitate SCAR’s advisory role to the ATCM and CEP and assist in communicating information on Antarctic environments to the public. We recommend that the CEP note the usefulness of this approach and endorse the concept of the Antarctic Environments Portal.

Introduction

The CEP is charged with providing advice to ATCMs on the implementation of the Protocol, including minimising or mitigating environmental impacts of activities in the Antarctic Treaty area, the state of Antarctic environments and the need for scientific research related to the implementation of the Protocol.

Antarctic environments are changing due to global and local pressures. Rapid changes in ocean and air temperature, sea ice extent and species distribution and abundance have been observed in parts of the Antarctic. Further rapid changes are expected over the next century. Climate induced pressures on the Antarctic may be compounded by pressures from continuing and increasing human activity there.

If policy debate and management decisions are to keep pace with the changes in Antarctic environments, an effective means of collating summary information is needed. The CEP has identified priority areas for action in its 5-year work plan, including:

- Consider implications of climate change for management of the Antarctic environment (priority 1);
- Advance recommendations from climate change ATME (priority 1);
- Identify opportunities for improving the effectiveness of the CEP (priority 1);
- Consider long-term objectives for Antarctica (50-100 years time) (priority 1);
- Maintain awareness of threats to existing biodiversity (priority 2).

The availability of high quality and readily available information on Antarctic environments will greatly assist to achieve these and other ambitious goals as are agreed in the work plan.

An Antarctic Environments Portal

There is a pressing need to improve the availability of, and access to, scientific syntheses and high quality information to inform decision-making and support the effective implementation of the Protocol.

Rationale:

- Antarctica’s unique status as a natural reserve and Parties’ commitment to the comprehensive protection of the Antarctic environment demands wise and informed management;
- If policy and management decisions are to keep pace with the change in Antarctic environments, an effective means of accessing summary information is needed;
- A core function of the CEP is to provide informed advice to the Parties on the implementation of the Protocol;
• SCAR’s dual mission includes providing independent, sound, scientifically based advice to the ATS and other policy makers including the use of science to identify emerging trends and bringing these issues to the attention of policy makers. With regards the ATS, this is done through the Standing Committee on the Antarctic Treaty System (SCATS). SCAR both provides advice in response to requests from the ATS and/or the identification of threats or issues on the horizon;

• Whilst there are a range of sources of available Antarctic data and information, to date there has been no centralised or standardised means for synthesising this in a format that readily supports management and policy discussions and decision making.

Guiding Principles

While the details and functioning of this project are to be worked through, the following principles would guide the development of the portal:

• Be an online resource of policy-ready information on Antarctic Environments to support the work of the ATCM and CEP;

• Display and collate information that informs priority issues identified in the CEP work plan and, if developed, the ATCM work plan;

• Be flexible and responsive, providing policy makers with ready access to the most up to date information relating to priority issues;

• Improve the availability of, and access to, scientific syntheses and other relevant high quality information. Synthesised information is important as the value of results and observations to informing decision-making, management and policy is significantly increased when combined to give a broader picture;

• Present high quality, unbiased information. Science information in the portal would be based on peer reviewed work. Other relevant information may be included subject to robust quality control processes (the details of which are to be determined);

• Present information in a format suitable for a policy audience (i.e. not raw data, or specialist/technical information, but instead summaries of information with independent expert interpretations, giving a clear indication of information gaps and uncertainties);

• Not attempt to convey all information on all environments, rather to provide syntheses of key information on priority issues for the CEP and ATCM;

• Not represent a completely new way of working or require significant effort or resources to establish and maintain, rather it would make existing information and resources more accessible.

Objectives:

• Assist to ensure that the most up to date, scientifically defensible information is available to support policy and management discussions within Antarctic Treaty fora;

• Create a central location for scientific syntheses and reporting of information on Antarctic environments;

• Facilitate SCAR’s independent advisory role to the CEP and ATCM;

• Enhance the CEP’s advisory role to the ATCM;

• Establish a means of communicating information to the public on Antarctic environments and management responses.

Subject to the endorsement of this Committee, New Zealand, SCAR and Australia are willing to work with interested Members to oversee the development of a demonstration portal, to explore options for the long-term hosting and to keep the CEP informed of progress.
Other Portals

This concept is not new. Other international organisations have demonstrated the effectiveness of ensuring science knowledge is collated and readily available to support decision making. These include the websites of the Intergovernmental Panel on Climate Change (IPCC), the Agreement on Conservation of Albatrosses and Petrels (ACAP) and the IUCN Red List.

In the Arctic context the working groups of the Arctic Council have produced a number of synthesis reports. The Arctic Monitoring and Assessment Programme (AMAP) provides synthesized information on pollution trends and climate change (www.amap.no), the working group on Conservation of Arctic Flora and Fauna provides information on biodiversity status and trends through its Arctic Biodiversity Portal (www.caff.is) and the working group on Protection of the Arctic Marine Environment provides information about the marine environment on its website (www.pame.is). The websites on environmental monitoring of Svalbard and Jan Mayen (MOSJ) (www.mosj.npolar.no) and the Barents Portal (www.barentsportal.com) are also good examples.

What could go in the Portal?

There are many environmental datasets, websites and information sources on Antarctica and SCAR has produced many reports that inform policy makers. However, accessing compiled information on, for example, the status and trends of species, emerging environmental concerns, threats to biodiversity or implications of climate change is challenging.

The portal would be developed with flexibility to display a range of information types. Spatial information could be displayed and downloaded e.g. the Environmental Domains Analysis, the Antarctic Conservation Biogeographic Regions and the network of protected areas. Bringing together information in this way could support, for example, the consideration of non-native species risks, threats to biodiversity and the implications of climate change.

Existing reports and information could also be included in summary form with the key points drawn out. For example, SCAR papers on wildlife disturbance (ATCM XXXI, WP12, 2008), persistent organic pollutants (ATCM XXXII, IP 69, 2009) and updates to the Antarctic Climate Change and the Environment Report (ATCM XXXIV, IP 52 2011; ATCM XXXIII, IP 46, 2010).

Information on species distribution, abundance and trends (e.g. Southern giant petrel, Ross seal, Antarctic fur seals) could be included in the portal and updated as information becomes available so that the information could build over time, and gaps in knowledge could be identified.

The portal would provide access to assessments/syntheses prepared independently by SCAR on priority issues. The summaries of those assessments, relevant figures and updates could be displayed in the portal. SCAR are also working on a Conservation Strategy (see IP 35 2012), the outcomes of which could be presented through the portal.

Recommendations

New Zealand, SCAR and Australia recommend that the Committee:

1. Endorse the concept of an Antarctic Environments Portal, which aims to be the primary source of policy-ready information on Antarctic environments;
2. Note that the portal would be an efficient means to strengthen the link between Antarctic science and policy, enhance the CEP’s advisory role to the ATCM, facilitate SCAR’s advisory role to the ATCM and CEP and assist in communicating information on Antarctic environments to the public;
3. Encourage New Zealand, SCAR, Australia and other interested Members to continue to develop the portal and update the Committee on progress;
4. Encourage New Zealand, SCAR, Australia and other interested Members to consider options for the longer term hosting of the portal.