



WP 25

Agenda Item: 8.4

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Capacity Building and Education Plan

Executive Summary

Title: Capacity Building and Education Plan

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Introduction/ Background: SCAR is committed to developing scientific capacity among all the SCAR member countries, assisting students, early career scientists, underrepresented groups and emerging programs to participate in Antarctic research. SCAR promotes and facilitates the incorporation of Antarctic science into all levels of education.

Important Issues or Factors: The CBET committee reconstituted from time to time has been actively working on mandated activities. Its main activities are managing SCAR fellowship program, Visiting Professor scheme, supporting APECS.

Recommendations/Actions and Justification: Continued support of both SCAR and CBET activities be encouraged by all SCAR members to achieve the objectives.

Expected Benefits/Outcomes: Increased Capacity in SCAR Member countries, developing Antarctic Programs and early career scientists and students.

Partners: Association of Early Career Scientists, International Arctic Science Committee, International Polar Foundation, ICSU, COMNAP, CCAMLR, Muse Prize and others.

Budget Implications: Fellowships initial allocation \$32,000 for 2014

SCAR Visiting Professor Scheme initial allocation \$5,000 for 2014

Early careers scientist support and Secondment = \$3,000 each in 2014

SCAR has been successful in obtaining external grants to support CBET activities, e.g. ICSU grants, management of the Martha T. Muse Prize for Science and Policy in Antarctica from the Tinker Foundation.

Capacity Building, Education and Training

General Structure and membership of Committee:

Committee

Committee should consist of 5 members and one Chair (VP CBET). The membership should be time limited (4 to 6 years). The members need not be National delegates but those who work in areas related to Capacity building, and ensuring geographic and M/F distribution.

Reviewers Panel

(For SCAR CBET activities like Medals, Visiting Professor, and Fellowship programmes):

CBET Committee to suggest installation of a review panel for all application/nomination based SCAR CBET activities. Panel should consist of 30 members and 1/3rd to rotate off each year. Ensure balanced topical, gender and geographical distribution. CBET members would be part of review panel by default, and the review panel should be chaired by VP CBET. Each panel member will be on the panel for a maximum of 3 years.

Review of SCAR CBET work:

The Terms of Reference for the CBET Committee describe general outline of CBET work. A review of objectives and results obtained should take place every 4 years. The review should be set up at the beginning of the VP - CBET term. This review should be led by the incoming VP CBET.

Review should include:

Internal evaluation of actions and achievements against the defined aims:

- using simple questionnaire for national committees, scientific programmes, other SCAR groups as well as general audience (including early career researchers, and organisations like APECS, etc)
- Facts and figures of CBET programmes which are provided by EO on an annual basis to be reviewed for gaps or shortcomings

Future plans:

Following the general aims of SCAR CBET for the next five years the following tasks should be considered:

- generating polar emphasis in existing science/environmental educational programmes;
- having an international polar day/week at Universities around the globe;
- organising summer schools/workshops with a polar focus.

At *university level* capacity building efforts can be designed to:

Provide places for Members' young scientists, especially from countries with less well-developed Antarctic programmes, in specialist courses in major polar education and training centres;

Several Members have academic or government organisations offering advanced specialised training courses on some aspect of polar science. Usually there is the potential for these courses to be joined by participants from countries with less well-developed Antarctic programmes, provided that a source of funds can be found.

Provide access and input for training activities:

Examples of such training activities are workshops, presentations, discussion groups, SCAR CBET committee members or Secretariat have provided input. SCAR also provides input to distance learning programmes with a polar focus like International Antarctic Institute, led by the University of Hobart.

(see <http://www.scar.org/about/capacitybuilding/antarcticinstitute/index.html>).

Set up new schemes for capacity building as appropriate:

Highlight to National Committees the availability of CBET material on the SCAR website.

Create an updated list of communications personnel from SCAR member institutions, to have a two-way exchange of news.

Small workshop of communications personnel to facilitate cooperation with SCAR and between the communications group.

Each future activity should come under one of the 5 objectives set up above.

New Draft Terms of reference for SCAR's CBET committee

SCAR's aim is "to develop scientific capacity in all SCAR Members, especially with respect to younger scientists, and to promote the working together of all national Antarctic programmes". In terms of scope, the term 'capacity building' can cover a wide range of subjects, from human capacity (more and better trained scientists), through institutional capacity (the right balance of institutions to enable Antarctic science to move forward effectively at the national level). This document provides the ToRs of SCAR's CBET committee and outlines its efforts to develop Education, Training and Awareness-Raising in Antarctic science and policy.

SCAR's CBET efforts are designed to help Members achieve the following objectives:

- i. to engage in high quality international scientific research in the Antarctic region, and on the role of the Antarctic region in the Earth system;
- ii. to participate in, contribute to, and benefit from SCAR's main programmes and other activities;
- iii. to award and promote high achievement in Antarctic science and policy at the international level
- iv. Promoting CBET activities for potentially attracting funding from both external donors as well as from national committees
- v. to help Members to make best use of Antarctic examples to illustrate key scientific principles

The CBET Committee's role is to promote SCAR activities and further facilitate them by seeking appropriate funds and helping to develop the kinds of partnerships that seem to be essential for the success of capacity building and education in any context. National Antarctic science committees have a key role to play in stimulating the development of Antarctic science at national levels.

Mechanisms for achieving aims and objectives

To meet the five objectives (above) CBET has developed following activities:

Objective (i) to help all Members to engage in high quality international scientific research in the Antarctic region, and on the role of the Antarctic region in the Earth system;

Provide Fellowships enabling early career researchers to spend time in leading polar science institutions elsewhere.

SCAR itself offers 3-5 fellowships per year. We collaborate with other polar organisations to release the fellowships jointly (COMNAP, CCAMLR currently).

Encourage development of Distinguished Visiting Researchers programme to bring top scientists to countries with less well-developed Antarctic programmes for short periods to teach or spend sabbaticals.

This will enable a larger audience in countries with less developed Antarctic programmes to get access to the latest developments in Antarctic Sciences.

Build and sustain a number of network nodes on specific scientific issues:

This should include each SRPs/ AGs/EGs as network node for their topic of expertise. Interested scientists can visit these nodes to seek opportunities for collaboration.

Objective (ii) to help scientists, to participate in, contribute to, and benefit from SCAR's main programmes and other activities;

Provide funds for scientists from countries with less well-developed Antarctic programmes to attend SCAR meetings and workshops via the SCAR SSGs and SRPs

Consideration also needs to be given to attracting scientists from countries with no traditional Antarctic science programme to work with SCAR Members and programmes, as a means of broadening interest in Antarctic science.

Objective (iii) Award/promote high achievement in Antarctic science and policy at the international level

To recognise high achievements in Antarctic and southern ocean science and policy, the following mechanisms are in place:

- SCAR Medal for Excellence in Antarctic Research
- SCAR Medal for International Coordination
- Named Lectures – Weyprecht and Antarctic Science OSC Lectures
- Young Scientists Presentation Awards - OSC
- Certificates of Appreciation
- Honorary Memberships
- Other international awards in Antarctic science and policy, such as the Muse Prize.

Objective (iv) Promoting CBET activities for potentially attracting funding from both external donors as well as from national committees

Provide input to brochures and information sheets to address specific groups of potential donors/funding authorities.

Objective (v) To help National Delegates make best use of Antarctic examples to illustrate key scientific principles

This can take the following main routes:

- i. Direct contact with school and universities to interest them in Antarctica and its science.
- ii. Contributing information via website/lectures available via website, about Antarctica and the Southern Ocean to spread the message of major highlights in the current science and research. The National Committees should be responsible for making this information available for their scientific community and general public.