Education and Outreach activities associated with Antarctic Treaty Consultative Meetings (ATCM)
Education and Outreach activities at the occasion of Antarctic Treaty Consultative Meetings (ATCM)

Working Paper submitted by Brazil, Belgium, Bulgaria, Portugal and UK

Summary
This paper notes that Parties have previously recognised a need for better public and educational outreach. Noting the increasing importance of Antarctic issues in global science and the work it recommends that the ATCM endorse the organization of a workshop to be held prior to ATCM XXXVIII to facilitate discussion of education and outreach activities that can convey the work of the Antarctic Treaty to a wider audience, and in particular, those activities that occur in association with ATCMs.

Introduction
Antarctic education and outreach activities are important because they inform the general public and early career scientists on the uniqueness and global role of the Antarctic, as well as on its environmental protection by the Antarctic Treaty. They also foster scientific curiosity and highlight the importance of scientific research in Antarctica to global problems, thus inspiring the future generations of researchers. Finally, they also help to explain to the tax-payers how their country's contribution to Antarctic research is serving science and society.

At ATCM XXXVI, Portugal and Brazil stressed the importance of education and outreach as a potential issue for discussion in the future. Belgium provided a background paper emphasizing the importance of education and outreach (ATCMXXXVI/BP 22). The Council of Managers of National Antarctic Programs (COMNAP) and Scientific Committee on Antarctic Research (SCAR) exhibited a travelling exhibition of Antarctic photographs. Moreover, the topic ‘Education and Outreach’ was elevated to priority 2 in the Five-Year Work Plan of CEP (CEP XVI, final report, para. 166).

The importance of the issue is shown by the fact that many Parties already invest resources into domestic and, in some cases, international education and outreach activities. In particular, the International Polar Year (IPY) 2007/08 created a significant opportunity to advance Antarctic education, outreach and communication, and scientists from many Treaty Parties carried out numerous initiatives.

1. Currently, organizations involved in Antarctic education and outreach include:
   - SCAR which has a Capacity Building, Education and Training (SCAR CBET) Advisory Group aiming to initiate, plan and oversee the implementation of SCAR capacity building, education and training, including advising on scientific outreach activities and promoting educational activities that highlight the importance and value of Antarctic science.
   - COMNAP who have an outreach expert group which aims to allow exchange of information between national Antarctic programs staff on outreach.
   - The Association of Polar Early Career Scientists (APECS), which is an international and interdisciplinary organization, consisting of more than 4,500 undergraduate and graduate students, postdoctoral researchers, early faculty members, educators and mentors from 75 countries worldwide and which aims to stimulate interdisciplinary and international research collaborations, and develop effective future leaders in polar research, education and outreach.
   - Polar Educators International (PEI), established in 2013, as a global professional network for those that educate in, for, and about the Polar Regions; they aim to highlight and share the global relevance of the polar regions with the broader community as well as promoting new ideas in polar education
   - National Antarctic Programs

2. Information on Antarctic education and outreach activities is exchanged and disseminated, for example, via:
• Antarctic Treaty Consultative Meeting Working and Information Papers (2 WP and 49 IP since 1961; e.g. ATCM XXXVI BP22)
• Informal discussions between interested Parties
• National Antarctic Programs websites and national networks

3. Many different education and outreach activities are undertaken including:
• Websites (e.g. www.discoveringantarctica.org.uk)
• Educational exhibitions and fairs
• Travelling road shows
• Public and school talks
• International workshops
• Educational books
• Antarctic educational expeditions

Education and Outreach projects coinciding with the annual ATCMs

One specific element of outreach is the activities that often are held in association with the annual ATCM and the legacy activities that follow the ATCM. Host nations may undertake a wide variety of activities and develop significant expertise on many outreach issues, which may be of interest to other Parties, and in particular, those who may be hosting the ATCM in the near future.

For example, in association with ATCM XXXVI, Belgium hosted the “Bringing the Poles to Brussels” science fair that took place at the Academy Palace (25-26 May 2013) and which was organized by APECS. Activities included scientific and educational talks by scientists from Belgium, Portugal and Brazil, which promoted capacity building for early career scientists as well as other educational activities to the general public.

Activities planned by Brazil for the ATCM XXXVII in Brasilia (28 April-7 May 2014) include an Antarctic photographic exhibition, an education and outreach workshop directed at schools and the general public, and a panel discussion on Antarctic issues.

To build on previous experience and help plan for the future we would encourage Parties to discuss further (1) how information and expertise could be better shared, (2) whether education and outreach opportunities could be better coordinated at each ATCM:

1. Sources of information and expertise
Information exchange can be extremely valuable for Parties that are already very well-established (e.g. to gather new education and outreach ideas) as well as for those that are initiating their education and outreach programs (e.g. to aid them in producing a strong education and outreach program). The networks established already, such as through APECS, PEI, COMNAP and SCAR CBET, may act as a source of information that Parties may wish to consider when planning education and outreach activities, and in particular activities associated with an ATCM.

2. Coordinate education and outreach efforts at each ATCM
Education and outreach activities associated with ATCMs, and coordinated by the host Party, have become increasing common in recent years. As detailed earlier, Belgium conducted a wide range of education and outreach activities around the ATCM XXXVI in 2013, and Brazil has a range of activities planned around the ATCM XXXVII in 2014. Looking further forward to 2015, Bulgaria has already shown interest in undertaking outreach and educational activities associated with ATCM XXXVIII.

Workshop
In order to explore the question of how education and outreach may be best and most effectively utilised by Parties, it may be helpful to hold an international workshop, prior to the ATCM in Bulgaria. The aims of the workshop would be to enable Treaty Parties, Observers, Invited Experts and the Antarctic Treaty Secretariat to:
Learn more about the Education and Outreach projects already being undertaken;
- Examine whether projects might be linked to maximize the return on resources and the overall impact; and
- Consider how to secure support for a Communication, Engagement and Education Forum as a lasting legacy of the IPY, bringing science and education communicators from the Treaty parties, COMNAP, SCAR and NGOs (e.g. APECS, PEI) to meet together, before ATCMs, to exchange ideas on how to take forward the ATCM’s desire for improved education and outreach.

If such a workshop would be welcomed by the ATCM, Belgium, Brazil, Portugal and UK would be happy to work with Bulgaria to consider options for hosting the event and identifying key topics for discussion.

**Recommendations**

Brazil, Belgium, Bulgaria, Portugal and UK recommends that the ATCM:

1. Acknowledge that education and outreach activities are an important issue for the Antarctic Treaty Parties to discuss.
2. Endorse the holding of a workshop at ATCM XVIII in Bulgaria to facilitate discussion of Antarctic education and outreach activities, especially to exchange experiences, and improve the potential for better coordination in the future through, inter alia, the establishment of a Forum.