

## IPY Report for Arctic Council Senior Arctic Officials, April 2007

10 April 2007

The International Programme Office of the International Polar Year 2007-2008 welcomes the opportunity to bring the following information to the attention of all parties at the meeting of Senior Arctic Officials, April 2007.

### 1) IPY Launch and Opening Ceremonies

The International Polar Year 2007-2008 started on 1 March 2007 with broad international participation in launch events and extensive international press coverage. More than 30 institutions, organizations and nations conducted IPY launch celebrations. As shown on the IPY web site ([www.ipy.org](http://www.ipy.org)), nearly every member country of the Arctic Council, the Indigenous People, and several Arctic Council observer nations conducted IPY ceremonies or issued IPY declarations. In approximate chronological order of event or declaration:

Indigenous Peoples IPY Opening Ceremony (Kautokeino)

UK

USA

Finland

France

Germany

Italy

Norway

Poland

Spain

Sweden

Netherlands

Russian Federation

In addition, representatives from most of the Arctic Council member countries and from several of the Permanent Participants participated in the IPY International Opening Ceremony in Paris on 1 March 2007.

### 2) IPY Projects

IPY starts with 228 endorsed Projects: 170 in wide areas of science, 1 broad international collaboration on data management, and 57 education, outreach and communication activities. Of the IPY science Projects, more than 120 focus on Arctic systems or on global processes that connect to and influence Arctic systems. These Arctic Projects include a very broad range of topics, covering geophysical, ecological and social sciences. Unlike previous Polar Year's, IPY 2007-2008 includes a very strong focus on ecology, biodiversity and biological processes, and human and community health and well-being.

Overall, approximately one third of IPY Projects have substantial funding. Another one third have partial funding. As more nations develop IPY funding resources and processes, the funding situation for IPY Projects should continue to improve. At this

point, funding for Arctic research, particularly in areas of ecology and human health, appears somewhat deficient relative to other areas of IPY science.

### 3) IPY Education and Outreach

In addition to IPY launch events and celebrations mentioned above, researchers and educators from many nations and organizations participate in international education and outreach activities. The 57 IPY Endorsed Education and Outreach Projects include films, books, museum exhibitions, atlases, classroom materials, conferences, workshops, voyages, and expeditions. As for the IPY Science Projects, only approximately one third of these Education and Outreach Project have sufficient funding to achieve their goals. Several nations evaluate education and outreach proposals separately from, and after, science proposal evaluation, so as for science funding, education and outreach funding should improve. However, IPY experience already shows that truly international education and outreach projects, those that might have broadest impact, face substantial difficulties in national funding processes.

IPY calls to the attention of all Senior Arctic Officials the existence, potential excellence, and funding needs of several education and outreach activities directly relevant to the Arctic:

- ‘The University of the Arctic and IPY’ led by University of Alaska Fairbanks and involving Canada, Finland, Greenland/Denmark, Iceland, Norway, Russia, Sweden, United States. This IPY activity will strengthen the UArctic infrastructure and develop new networks for higher education and outreach sharing and exchange among Arctic institutions and those outside the Arctic.
- ‘Indigenous Peoples’ Forum on Environmental Monitoring in the Arctic’, led by Nunavut Tunngavik Incorporated, Canada and the Inuit Circumpolar Conference, with partnership from Denmark, Greenland, New Zealand, Norway, Russia, Sweden, and United States. This IPY project will bring Indigenous knowledge and perspectives out of the anecdotal background into the forefront of environmental monitoring work in the Arctic. It will be held early on (Fall 2007) in the IPY timeframe, and will therefore be able to serve as a guiding tool to subsequent IPY Arctic initiatives.
- ‘Circumpolar Indigenous Youth Conservation Project’, led by Canada and Russia, with participation from Denmark, Finland, Greenland, Iceland, Norway, Sweden, and USA. This IPY project seeks to build a functioning, circumpolar conservation network linking youth across the Arctic countries and with the global conservation community. This Project will also produce, on a regular basis, young indigenous people and potential leaders better prepared to make knowledgeable decisions about their environment and sustainable resource use and to contribute to the global conservation agenda.
- ‘International Symposium on the Health/Wellbeing of Arctic Indigenous People’, led by University of Ottawa and the Arctic Monitoring and Assessment Program (AMAP) of the Arctic Council, with partnership from Denmark, Norway, Sweden, Finland, Russia, Iceland, Faro Islands, USA, and Greenland. This project will draw together new and established scientists and

policy makers in an international symposium at the end of the IPY, to produce a comprehensive scientific report that addresses the cutting edge of known and predicted health implications of changing economic, social, physical, and environmental conditions in the Arctic.

#### 4) IPY Legacies

IPY should produce many legacies. Some we can already name: vast steps forward in data and information and improved skill of global and regional weather and climate models, for example. Others, involving new systems for attribution and distribution of scientific information, new science funding paradigms, or even new political or economic cooperation, may come into view more slowly.

For two identified and anticipated IPY legacies, namely the recruitment of next generations of vigorous and talented polar researchers and the establishment of long-term sustained polar observational systems, planning and action now, at the onset of IPY, will ensure maximum impact and success.

The IPO recognizes the importance of actions by IASC, together with SCAR, to support the developing international Association of Polar Early Career Scientists (APECS). IASC should also continue to provide leadership and energy for the planning, development and implementation of pan-Arctic observing systems.

IPY 2007-2008 highlights the particular need for sustained polar observing systems. From the rich history of previous Polar Years, we already recognize the need to study the Earth as an integrated system, and that we require “coordinated, synchronized and long-term sustained observations to provide information on characteristics, changes and the distinctive nature of phenomena in space and time” (Weyprecht, 1879).

During this IPY, the Arctic Council Ministerial Meeting of 26 October, 2006 has provided a mandate for sustained Arctic observing networks by urging *"all Member countries to maintain and extend long term monitoring of change in all parts of the Arctic, and request[ing] ... efforts to create a coordinated Arctic Observing network that meets identified societal needs"*. The IPY IPO, with AMAP and IASC, takes this responsibility very seriously and contributes strongly to the Sustained Arctic Observing Networks (SAON) initiative discussed at this meeting

The IPY sponsors, ICSU and WMO, have from the start seen IPY as a unique and compelling opportunity to develop sustained observing systems at both poles as key elements of the IPY legacy, in order to improve our ability to detect and understand change in polar regions as the basis for improving forecasts of further change, and so as to guide policy makers in their attempts to mitigate or adapt to future change.

#### 5) IPY Events

At the fifth meeting of the IPY Joint Committee, held 28 February and 2 March 2007, the JC endorsed a general IPY science conference plan that anticipates major international IPY-specific or IPY-focused events every 2 years, starting in 2008. In this sequence, 2008 would represent an opportunity for initial and mid-course

assessment, 2010 would represent an early look at IPY science, and 2012 would represent an opportunity for overall assessment.

The IPY JC has endorsed initial plans for the first two (2008 and 2010) events. The SCAR/IASC Open Science Conference, scheduled for St. Petersburg from July 8-11, 2008, with the bipolar theme: 'Polar Research - Arctic and Antarctic Perspectives in the International Polar Year' represents a timely and welcome opportunity for IPY mid-course assessment. An Early Science Conference, hosted by Norway and tentatively scheduled for May or June of 2010, represents a timely and useful opportunity to stimulate discovery and collaboration.

Submitted by:  
D. Carlson, IPY IPO