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Project proposal by Norway Maximising the Legacy of IPY

Introduction

The International Polar Year 2007-2008 (IPY) is a major, international research programme involving many tens of thousands of scientists. IPY aims to make significant advances in the polar sciences, and the IPY effort is especially large in the Arctic. IPY lasts from 1st March 2007 to 1st March 2009, but in reality many IPY projects will continue beyond that date. IPY will have a major impact on polar sciences for years to come.

IPY consists of more than 200 international projects. The larger of these typically involve between 10 and 20 countries and a few hundred scientists. A major legacy of the research will be the advances in knowledge that IPY produces, both in publications and in stored, accessible data. In general, such issues are managed by the research communities, and there are already various discussions underway within the IPY bodies on such legacy questions.

But this large cooperative effort also opens several other legacy issues. The permanent human presence in the Arctic, the different legal regimes in the Arctic compared to the Antarctic, and the different evolution of science cooperation in the two polar areas mean that many of these are Arctic specific. Thus the Arctic Council is the relevant body to discuss these, rather than the Antarctic Treaty Consultative Meetings, although there obviously are also issues of common interest. It is thus both appropriate and timely that the Arctic Council now considers such IPY legacy issues and decides where it should apply efforts, to ensure that IPY provides maximum benefits and outcomes for society at large.

Some major legacy challenges requiring Arctic Council attention

The following outlines some legacy issues that go beyond the research itself and are of societal interest:

A. Societal use of the research results

The intensified science efforts of IPY will result in breakthroughs in knowledge. Although complete analysis of the results will take years, we now know the science that will be done during IPY, and so it is now possible to outline where advances will be made. If best use is going to be made of the new knowledge, then it is important that links and processes are developed to bring the IPY results timely into the arena of the decision makers.

B. Observations and data

Nowhere is national and international interest in the Arctic more apparent than the rapid environmental changes that are being observed throughout the Arctic system and their regional and global consequences. The Arctic environment is sensitive to global influences, and Arctic environmental changes have significant global consequences (e.g. sea level rise due to melting glaciers and ice sheets).

Notwithstanding the many and frequent reports of Arctic change, our knowledge of the Arctic system is limited in many respects; there are temporal, spatial and disciplinary gaps in observing records, and data are often difficult to obtain or even unavailable.

Sub-optimal observing and data management hamper our ability to monitor and study environmental and socio-economic change and their regional and global consequences.

The need for a well coordinated and sustained Arctic observing network that meets scientific and societal needs has been identified in many high level reports, including in the Salekhard Declaration of the Arctic Council.

An initiative has been taken to establish 'Sustained Arctic Observing Networks' (SAON) involving IPY and the research communities, governmental agencies and local observations.

The key to the success of this initiative lies in making sustained observations (long time series of data). IPY and the research communities are short to medium-term funded, so governmental agencies have to fill in the longer term needs, to achieve continued data collection after IPY, and quality storage and access to Arctic data. The SAON initiative is likely to end up as a governmental agreement with working relationships with the research communities and those undertaking local observations. The recommendations from the SAON Initiating Group are due at the end of 2008.

C: Access

Coordinated observations implies that the observers need to have access to where the observations are to be made. In the past, access to some areas has been severely hampered by bureaucratic and economic obstacles. Such obstacles have been especially problematic for scientists moving across a national border, but they have also existed within a country. As a special recognition to IPY, the Russian Federation has taken concrete actions to both reducing their bureaucratic rules on access as well as fees. These improvements seem so far limited to the IPY period.

A possible legacy of the IPY could be to look at access impediments in all regions of the Arctic, taking note of the Russian improvements, and through intergovernmental consultations really improving the access for scientists on a long-term basis.

D. Circum-Arctic scientific cooperation including coordinated funding

Important processes for understanding ongoing (and coming) changes in the Arctic are not confined to national borders. Only circum-Arctic science and monitoring can provide reliable answers to critical issues both for the Arctic region and for understanding important global processes. The IPY has demonstrated the value of circum-Arctic studies of Arctic change and has boosted such scientific cooperation. However, there are still implementation obstacles.

Coordinated research planning and funding is one critical issue. Traditionally, research funding (and priorities) is decided at the national level. However, there are a few exceptions, and some of the experiences gained from the IPY process could be of value in developing ideas for improved research coordination and funding. There are extensive experiences with trans-national funding implemented in the EU, where there is now action for a joint polar climate proposal call. An “EU solution” is not likely for circum-Arctic research funding, but perhaps other steps could be taken. This is an issue that could be moved forward by consultations involving Ministries of Science/Education and National funding agencies.

A project proposal from Norway

To address these issues, Norway proposes establishment of a project that takes the following approach:

1. First, a scoping study aimed at sorting out which issues: a) are being handled adequately by the science bodies; b) need bi-polar cooperations; and c) should receive special attention from the Arctic Council. Item c) should include analysing the IPY science programme with regard to where it will produce new knowledge of societal impact that should be brought to the attention of decision makers. This study could be carried out under the administration of the Norwegian IPY Secretariat in close cooperation with both other National IPY secretariats, and the central IPY organization, which consists of the IPY Joint Committee and the IPY Project office (located in Cambridge, UK). This scoping study should clarify the relationship to other IPY-legacy activities initiated elsewhere.
2. A workshop that convenes all stakeholders. The workshop should be based on the findings of the scoping study, and these findings should be circulated to the participants in advance. The workshop should aim to identify and recommend areas where further work by the Arctic Council may be appropriate to close gaps in the legacy issues.
3. Prepare recommendations, based on the outcomes of 1) and 2) above, and submit to the Arctic Council for their consideration. It is important to bring this forward through the Ministerial Declaration 2009.

Budget and time lines

1. Scoping study

Time: 6 months.

Budget: NOK 800 000

The budget includes work of a project coordinator, publishing on the internet and production of a background document. Norway is prepared to fund this study.

2. A stakeholder workshop

Time: at the end of the scoping study, i.e. possibly late 2008.

Budget: NOK 600 000

The budget includes organisation of the workshop and writing and printing of the workshop report with recommendations. Norway is prepared to fund this workshop.

All delegations will have to cover their own costs related to their contributions to the scoping study and the workshop (as in kind contributions).