

International Polar Year 2007-2008
Planning Group Meeting 3 (PG3)
1-3 April 2004
Reid Hall, Paris, France

DRAFT MEETING SUMMARY

Present:

Chris Rapley (Chair), Robin Bell (Vice-Chair), Ian Allison, Robert Bindschadler, Gino Casassa, Gerard Duhaime (1-2 April), Chris Elfring, Vladimir Kotlyakov, Olav Orheim, Prem Pandey, Hanne Petersen, Michael Kuhn (IUGG), Werner Janoschek (IUGS), Ed Sarukhianian (WMO), Leah Goldfarb (ICSU, 2-3 April), Elisabeth Merle (ICSU, 2 April), Cynan Ellis-Evans (BAS), Tim Moffat (Secretary)

Apologies:

Steven Chown and Zhanhai Zhang.

Thursday 1st April

WELCOME

1. Introductions

The Chair welcomed members to the Third Meeting of the Planning Group (PG3). Apologies had been received from Steven Chown and Zhanhai Zhang.

The Chair welcomed Werner Janoschek to the meeting. Dr Janoschek is Secretary General of the International Union of Geological Sciences, and replaces Henk Schalke as IUGS liaison.

2. Purpose and Objectives of the Meeting

The PG agreed the objectives for the meeting:

1. To agree the principles and characteristics of IPY content.
2. To review and cluster the ideas submitted.
3. To develop an initial programme structure.
4. To develop a draft Outline Science Plan.
5. To develop further the IPY concept, including possible structures, implementations and links with other organisations and initiatives.
6. To discuss issues relating to outreach and engaging the community, and data.
7. To agree the start and end dates of the IPY

With Steven Chown unable to attend the meeting, Olav Orheim and Ian Allison were concerned that “biology” was poorly represented around the table.

ACTION: Chris Rapley and Robin Bell to advise ICSU to ensure a more balanced membership of the Joint ICSU-WMO Committee, which will take over from the PG.

The Chair clarified the roles of Chris Elfring, Cynan-Ellis Evans and Tim Moffat on the PG. They were attending the meeting in a support capacity only. The Chair apologised for any misunderstanding.

3. Minutes of the PG2 Meeting

ACTION: Bob Bindschadler to send Tim Moffat some text to record in the minutes his reservations about the joint initiative with the WMO.

With this addition, the PG accepted the minutes a true record of the PG2 Meeting.

4. Matters Arising, including Progress on Actions

The Vice Chair reported on the possibility of the IPY being discussed by the UN General Assembly. Informal discussions were held at an Explorer's Club meeting of polar experts in New York on 30 January 2004, involving Ólafur Ragnar Grímsson, the President of Iceland, Peter Schlosser, a member of the US National Committee to the IPY, and Robin Bell. Although no clear actions resulted, some preliminary groundwork and briefing had been made. The PG would need to decide soon on its UN strategy vis-à-vis the possibility of a special resolution or a day on polar regions.

The Chair reported that he had a useful meeting in London on 25 March 2004 with Ed Derbyshire and Ted Nield of the IUGS-UNESCO initiative, the International Year of Planet Earth (IYPE).

All other actions had been completed and/or were covered by items on the meeting's agenda.

5. Key Progress since PG2 Meeting (December 2003)

The Chair reported that he delivered the PG's progress report to ICSU in Paris and made IPY PG presentations to the ICSU Unions Meeting on 10 February and to the ICSU Executive Board (EB) on 11 February 2004. The IPY was received with interest and great enthusiasm. The EB was very complimentary about the speed, quality and effectiveness of the PG's work, and saw the IPY "as exactly the sort of initiative ICSU should be supporting".

The EB made the following important decisions (ICSU EB88/4):

1. To note the interim report from the IPY Planning Group;
2. To further note the many expressions of interest in an IPY from the ICSU community and beyond;
3. To establish an International Polar Year 2007-2008, subsequent to confirmation by the 28th General Assembly of ICSU;
4. To charge the Planning Group with completing its work and submitting a report to the Executive Board by 1 October 2004;

5. To recognize the importance of additional support for the IPY initiative and to charge the Planning Group with the establishment a Secretariat as soon as possible, and at least by 1 October 2004;
6. To reiterate the Terms of Reference and guidance given to the Planning Group especially as regards to the broad scientific scope of the IPY; and
7. To propose to WMO that the two organizations should jointly sponsor IPY 2007-2008 and appoint a Committee to plan and coordinate IPY activities.

The Chair confirmed that the PG would complete its work with its final report to ICSU due in October 2004. The PG would then be superseded by a new, joint ICSU-WMO group responsible for the oversight and coordination of the IPY implementation. As part of the final report, the PG would be recommending to ICSU an IPY implementation strategy and organisational structure, including the establishment of an IPY Secretariat.

The Chair invited members to update the PG on their activities:

Ed Sarukhanian: The WMO Executive Council would be considering a resolution at its meeting in June 2004 to co-sponsor the IPY with ICSU, establish a joint committee, and invite some other organisations. The assumption was that the resolution would be agreed. He had also attended the Russian IPY meeting in St Petersburg, and a meeting on 9 March between Chris Rapley and Michel Jarraud, Secretary-General of the WMO.

The PG would be recommending a structure to implement the IPY. The WMO was a body with an existing, well-defined structure (e.g. Congress, Executive and Secretariat). Also the national meteorological or hydrometeorological agencies were the equivalents of the IPY National Committees. He felt that the best way forward was for WMO and ICSU to work closely together.

Vladimir Kotlyakov: The International Meeting “Cooperation for the International Polar Year 2007-2008” was held in St Petersburg on 22-23 January 2004. The main aim of the meeting was to determine the potential national and international participation in the IPY and to define areas of common interest and future cooperation. The meeting was very productive resulting in a “joint statement” by the participants, which identified several science areas for the IPY, mainly climate change and hydrometeorological studies. Russia’s participation in the IPY had been raised at the highest political level and President Vladimir Putin was expected to clarify his government’s exact contribution very soon.

Michael Kuhn: At the ICSU Unions Meeting in February 2004, he gave a presentation on the Electronic Geophysical Year (eGY). An article on the eGY concept had also been published in EOS, Transactions, American Geophysical Union (Vol. 85, No. 11, 16 March 2004). He went to Perugia in Italy where the IUGG 24th General Assembly would be held in 2007. The Assembly would include a celebration of IGY history.

Werner Janoschek: The IYPE had received formal backing from a wide range of countries, scientific associations and institutes, and UNESCO. Work was

continuing to bring the IYPE forward for adoption at the United Nations General Assembly this autumn. Sponsorship funds (e.g. from UNESCO and Shell) were coming in for the support of a broad range of activities linked to, or based upon the geosciences and their applications. A new brochure would be available from the IYPE website at www.esfs.org.

6. Discussion Forum

The Chair reported that the IPY Discussion Forum was held on 31 March 2004. The purpose of the Forum was to discuss the principles and characteristics of the IPY, to give interested parties insight into the work of the Planning Group, and to give opportunities for them to contribute ideas into the planning process and influence its outcomes.

The Forum was attended by representatives of six IPY National Committees (Belgium, France, Germany, Italy, Japan, and UK), one National Point of Contact (Spain), and some other organisations (Arctic Ocean Sciences Board, European Polar Board, European Science Foundation, National Science Foundation, Scientific Committee on Antarctic Research, International Oceanographic Commission and World Meteorological Organisation), and initiatives (International Heliophysical Year).

Cynan-Ellis Evans would be providing a separate report on the Forum. However, the Chair summarised the key outcomes of the Forum that had particular bearing on the PG3 meeting:

- The criteria for the overall programme, content and research activities were important.
- There was an expectation that the PG would choose a “small” number of science themes (i.e. no more than ten).
- The implementation and management of the IPY was important.
- There was great interest in the role and function of the joint ICSU-WMO implementation group. The PG would be addressing the strategy for IPY implementation during the meeting, including the examination of a paper by Karl Erb.
- There were some concerns about the membership of the PG; countries like Italy, Japan and Germany were not represented.
- Transparency, good communications and outreach were important prerequisites for the IPY planning process to keep the community informed and involved. The Forum had been organised at short notice, and some people were unable to attend.

Ed Sarukhanian suggested that there should be another Discussion Forum before the next PG meeting in September. An announcement should be made well in advance, preferably after the April meeting, to get a better geographical representation and more organisations involved. He also suggested establishing an open forum on the IPY web site as an aid to transparency and encouraging feedback.

ACTION: Chris Rapley and Robin to announce and hold another Discussion Forum on 13/14 September 2004 before the PG4 meeting, and ensure a better geographical and organisational representation.

ACTION: Chris Rapley and Cynan Ellis-Evans to consider establishing an open forum on the IPY web site.

IPY CONTENT

7. Principles and Characteristics of IPY Content

The PG discussed the IPY Concept as a international programme of coordinated, interdisciplinary scientific research and observations in the Earth's polar regions. The three big themes: “Explore”, “Decode” and “Change” needed to be better articulated as the current wording might give the wrong connotations to some people or countries, especially those whose first language was not English. Also, the PG should use words that the public could understand.

Gerard Duhaime felt that the IPY was all about the natural and human environments at the Poles and the interactions between them. He suggested the following principles:

- Ask for the state-of-the-art and the synthesis of knowledge.
- Encourage breakthroughs, not new frontiers or exploration.
- Connect researchers and research.
- Provoke interactions between domains, and translate knowledge.
- Stimulate science and users.

The PG agreed to revise the wording of the IPY Concept as part of the drafting of the Outline Science Plan.

8. Clustering Of Ideas

The PG clarified the criteria to be applied in clustering the IPY ideas submitted into themes. It was important to differentiate between those selection criteria that were mandatory and those that were desirable. The main or umbrella criteria suggested were as follows:

- Limited period of synoptic measurement.
- Involves one or both polar regions.
- Contributes to international collaboration.
- Provides a legacy (information, data, facilities).
- Adds to or enhances existing activities.
- Leads to major progress on targeted issues.

An agreed set of criteria should be included in the Outline Science Plan to define the characteristics of the core activities of the IPY, together with some additional desirable characteristics.

The PG also discussed at length the clustering process. The PG agreed an approach to cluster the ideas into themes. Each theme would include a set of goals or questions and possible activities proposed by the community. The process would also identify gaps, which might need further consideration later.

9. Emerging Themes

The PG split into three groups to cluster the 300 or so ideas into themes. At plenary, following input from Ian Allison in particular regarding the process, the following major themes (or goals) emerged:

- Develop new, more detailed visualizations and descriptions of polar systems using imaging, mapping, modelling, coordinated assets, and new technologies.
- Determine the variability of physical and human systems in the Polar Regions
- Quantify recent, ongoing and future changes in Polar Regions
- Determine the responses of human and physical systems to changes at the Poles
- Improve our understanding of polar processes and polar-global interactions
- Advance our knowledge of the interactions and exchanges in the polar regions especially between space, atmosphere, oceans, cryosphere, solid earth, and biosphere
- Define the history and evolution of polar climate and oceans and their effects on climate, ocean dynamics, and the biosphere to enhance our understanding of today's changing climate

The PG also noted that as the IPY was limited in time, many ideas focussed on making new measurements (e.g. along transects), enhancing existing observation networks, and developing new technologies (e.g. autonomous vehicles). These activities would provide synoptic set of measurements which could establish the status of the polar environments in 2007-08. The activities could also leave a legacy of observational systems for ongoing monitoring of variability and change in the polar earth system.

The PG agreed that all these themes would need to be further developed and refined after the meeting and incorporated into the Outline Science Plan.

Friday 2nd April

IPY CONTENT CONTINUED

10. Outline Science Plan

The PG discussed the content of the initial Outline Science Plan (OSP).

The PG discussed a paper by Olav Orheim on the caveats and criteria for programme selection. As the initial Outline Science Plan would be based on some 300+ submissions of varying detail, authority, and depth of consideration by the PG; and that certain fields of science only had one representative on the PG (e.g. biology and social sciences), it was important that these caveats or shortcomings were expressed in the OSP document for the benefit of the community. The PG should not be open to criticism for writing what can only be an "incomplete" OSP.

The PG agreed that the OSP should:

- Incorporate the caveats and criteria for programme selection proposed by Olav Orheim.
- Include in the introduction the three points noted for the International Geophysical Year (IGY) which were still relevant for the IPY.
- Include the umbrella criteria for programme selection.
- Make a historical/legacy link to the IGY.
- Include the vision statement from the first meeting (PG1)

IPY PLANNING

11. IPY Implementation

The PG discussed the organisational structures necessary to implement the IPY. As a basis for discussion, the PG examined a paper by Karl Erb (US NSF Office of Polar Programs), which provided comments and observations on IPY planning and implementation from the perspective of a governmental funding agency.

Assumptions/Background Concerning IPY Planning

The PG agreed with all the paper's assumptions. These were:

1. "Various national committees, international organizations, planning groups and possibly individuals are in the process of submitting ideas for IPY research themes to the International Council of Science (ICSU) and, apparently, the World Meteorological Organization. The ICSU and WMO have agreed to cooperate in planning for the IPY."
2. "ICSU and WMO will sort & organize these suggestions into a small number (perhaps 3-4) of general or high-level themes."
3. "ICSU and WMO will then build international consensus - in the scientific community, with existing international polar organizations, and among national program officials around those themes."
4. "ICSU and WMO and other international groups may also identify a number of subsidiary, high-priority tasks or projects that would underlie or support the themes (e.g., data protocols and management, observation systems, etc)."
5. "International organizations (perhaps ICSU and WMO?), working with existing international polar organizations, will provide leadership in developing the international agreements among nations that would underlie data sharing, data protocols, data storage, Intellectual Property Rights, etc."

With respect to No. 5, the PG recognised the importance of having data and IPR policies in place, and these would need to be addressed at the next meeting. ICSU was in the process of developing new policies and guidelines, and its recommendations would be adopted by the IPY. The real challenge lay in connecting all the different organisations, policies and initiatives together (e.g. eGY, World Data Centres, ISCU policy, WMO and other intergovernmental organisations).

ACTION: Ed Sarukhanian (or WMO nominee) and Michael Kuhn to establish a crosscutting group to develop an approach to connecting data centres, policies and initiatives, and to provide a paper at the September meeting.

Observations Concerning IPY Implementation

The PG examined each of the observations as follows:

6. “Government agencies and other funders would review this set of IPY themes and projects in close consultation with their science communities and national IPY committees, to determine the extent to which each fits its plans and mission, and also to develop key major projects that address the themes in significant ways.”

The PG agreed with this approach, adding that feedback should be provided to the new, joint ICSU-WMO body responsible for the oversight and coordination of the IPY implementation.

7. “Working through various multilateral venues such as SCAR, IASC, COMNAP, FARO, etc.) and through bi- and multi-national governmental arrangements the agencies will develop agreements to co-sponsor projects of mutual interest. The candidate set of projects would be those identified by ICSU/WMO together with those emerging from the national discussions. Any such project would have to meet criteria established in the consensus-building process noted above in order to be part of the IPY project set.”

The PG agreed with this approach, adding that all projects should meet IPY criteria and deliver IPY goals. The PG was responsible for setting clear criteria that people could interpret as appropriate.

8. “The agencies may also elect to give emphasis to IPY observational strategies within their existing programs and at their existing polar stations.”

The PG agreed.

9. “Within NSF funds would be set aside for special solicitations addressing the IPY projects. The criteria used in proposal review would be the standard NSF merit criteria, supplemented by criteria reflecting the specific IPY goals. The latter, together with the review process, would be developed in consultation with the associated funding partners.”

The PG agreed with this approach, adding that it would apply to all funding agencies, not just NSF.

10. “The agencies supporting a given project would form and provide funding for a project management office and a Science Steering committee to develop science and implementation plans and to carry out the particular program. For IPY 2007-2008 this approach seems appropriate since nowadays few if any governmental agencies would be allowed to simply transfer funds or other assets to an independent organization to achieve those purposes. The participating agencies would need to form appropriate oversight mechanisms to ensure that their funds were being used effectively and wisely.”

The PG felt that the recommended funding mechanism was too limiting, as other funding mechanisms were available, including “no exchange of funds”. The PG was also

concerned that the approach did not acknowledge any continuing role for ICSU/WMO in the oversight mechanisms.

11. “Scientific organizations such as SCAR and IASC should maintain a watching brief during the implementation phase of IPY in order to be able to provide high-level guidance concerning scientific direction.”

The PG agreed, adding that scientific organisations like SCAR and IASC could be consultants and active members of steering committees or project offices.

12. “Operational organizations such as COMNAP and FARO should maintain a watching brief during the implementation in order to be able to advise concerning operational issues that might arise and be outside the capability of the particular project participant.”

The PG agreed, adding that operational organisations, including the space agencies, could be consultants to IPY projects.

13. “In the latter phases of implementation there will be a need for a mechanism for synthesizing the results of the constituent projects within the relevant broad IPY theme. The core people for this task would logically be the scientific leaders of the different projects, augmented by representatives from SCAR, ICSU and the relevant national committees. This mechanism could perhaps be organized under ICSU and WMO.”

The PG agreed that the synthesis of the results would be an important IPY component requiring careful planning by the joint ICSU-WMO body.

14. For several years after IPY, and during the analysis phase annual intervals should be conducted by representatives from the national committees to review progress toward IPY science. At an appropriate point in time - perhaps 2010 -, this they would review the results of the 2007/08 work and make recommendations for future polar science efforts.

The PG agreed that recommendations for future polar science efforts would undoubtedly result from the synthesis work.

General Discussion

The PG discussed several possible models for implementing IPY and managing IPY programmes and projects, and the possible roles for ICSU and WMO. The main points were as follows:

- The Karl Erb paper suggested a funding agency model, where the funders of the projects would have prime responsibility for establishing project offices and steering/overseeing projects. There was no role for the Planning Group, or ICSU/WMO (No. 10).
- There were already infrastructures and major players in “co-ordination” roles. These could be utilised in some way: WMO, ICSU, National Committees, Unions and similar groups (e.g. SCAR, IASC, IUGG, IOC, and ECRP), Arctic Council, ATCM, Operators (e.g. COMNAP, FARO), National and International Funding Agencies, and Space Agencies (e.g. ESA, NASA).
- The main components of the IPY Implementation structure could include a Forum or Council (of major players), a joint ICSU-WMO Committee, a Secretariat (to provide

support), and Project Offices, Boards and/or Steering Committees. Major players could be represented on project boards or steering committees.

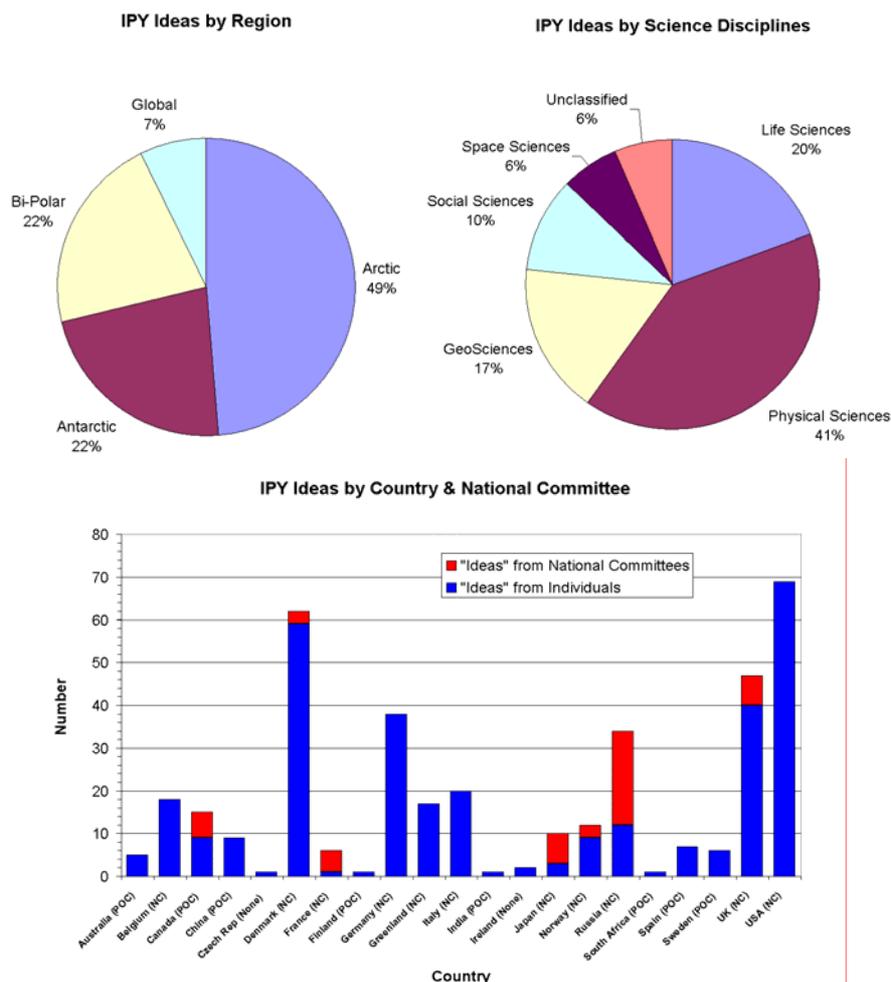
- Project Offices could be constituted in different ways. For example, some could be funded by national agencies, or some come under the auspices of SCAR/IASC.
- WMO would continue to have its own internal planning groups to co-ordinate WMO activities amongst the national meteorological agencies.

The PG decided that it would have to develop some different models, and consult with the community to gather feedback for its September meeting.

ACTION: Chris Rapley, Robin Bell, Ed Sarukhanian and Leah Goldfarb to work closely together to write a draft paper by 18 June 2004 outlining some different models/options for implementing IPY, taking into account the issues raised by Karl Erb, links with other programmes and initiatives, and issues concerned with an IPY Secretariat and IPY financial support and corporate sponsorship. Complete Implementation White Paper by 12 July 2004

13. Statistics on IPY Ideas

The PG reviewed some statistics provided by Tim Moffat and Cynan Ellis-Evans on all the submitted IPY ideas resulting from the first and second calls:



12. IPY Web Site

The PG reviewed progress with the development of the IPY web site: www.ipy.org. Cynan Ellis-Evans reported that the site would be using the new ICSU design and would go live in about a week

Saturday 3rd April

IPY PLANNING CONTINUED

Outline Science Plan

The PG finalised the basic structure and contents of the Outline Science Plan:

1. Executive Summary	To summarise the main points, including the duration of the IPY, the scientific themes and range of possible and planned activities and initiatives.
2. Introduction/Scope	To describe the purpose of the Outline Science Plan document and introduce the IPY.
3. IPY Concept and Rationale	To include the motivation/justification/rational for the IPY (e.g. the Why? Questions), and the historical dimension.
4. IPY Planning Process	To include a short description of the planning process to date, and the proposed next steps. Some elements (e.g. PG's terms of reference and membership) to be put into appendices.
5. IPY Objectives/Goals/Themes	To include IPY objectives, the characteristics of core activities, and the scientific themes distilled from the ideas from the polar science community
6. IPY Emerging Vision	To include the legacy elements and impacts of IPY on polar science and associated communities.
7. Appendices	To include lists of National Committees, points of contact and contributors; and a summary of ideas submitted, and WMO's planned activities.

ACTION: Chris Rapley and Robin Bell to lead and complete the drafting of the Outline Science Plan to the specifications/content agreed at the PG3 by 15 April 2004.

ACTION: Ian Allison and Bob Bindshadler to write the "IPY Emerging Vision" section of the OSP by 15 April 2004.

ACTION: Chris Rapley and Robin Bell to prepare an OSP presentation in Microsoft PowerPoint by 15 April 2004.

ACTION: Planning Group to prepare second OSP draft prior to the PG4 meeting with a view to finalising the OSP by 27 September 2004.

Timeline

The PG reviewed the IPY planning timeline in terms of Community activities (e.g. IPY presentations to ASSW, Arctic Council, ATCM and SCAR/COMNAP) and the completion of PG tasks and objectives (e.g. Outline Science Plan, Implementation Plan, Data Policy, Reports to ICSU).

IPY Dates

The PG discussed the dates for the IPY. The PG decided that the official period of the IPY would be from 1 March 2007 until 1 March 2009 to allow observations during all seasons, and the possibility of two summer field seasons, in each polar region. It was anticipated that the core activity would take place in 2007/2008.

Outreach and Engaging the Community

IPY Outreach Plan

The PG discussed a short paper by Hanne Petersen on the development and implementation of an Outreach Plan to promote public awareness of IPY. The PG decided to establish an Outreach Group comprising Hanne Peterson, Ed Sarukhanian (or WMO nominee) and Gino Casassa, to develop ideas further.

ACTION: Outreach Group to develop an IPY brochure/flyer in time for the SCAR meeting in July 2004, to prepare an outreach section for the report to the ICSU Executive Board in October 2004 (taking account of any ideas submitted by the Community), and to explore the possibilities for IPY sponsorship and funding.

IPY Logos and Graphics

The PG reviewed some ideas for IPY logos and general graphics for use on web sites. The PG decided that there was a need for a “symbolic” logo along the same lines as the IYPE one, and adopted the suggestion of Werner Janoschek to have a logo design competition. The PG also decided that Bob Bindschadler should lead on all other IPY graphics.

ACTION: Outreach Group to develop proposals for an IPY Logo Competition.

ACTION: Bob Bindschadler to continue to develop “graphics” for IPY web sites and outreach activities.

IPY Postage Stamps

The PG felt IPY offered the same opportunities for special postage stamps, as did the International Geophysical Year in 1957-58.

ACTION: Outreach Group to explore the possibilities for IPY Stamps.

Planning Group Support Office

The PG discussed the provision of administrative support to the Planning Group and the establishment of an IPY Secretariat.

The ICSU Executive Board was concerned about the level of support given to the Planning Group. The Chair had committed substantial BAS resources to providing the engine power for gathering and summarising the ideas for an IPY and to keep the PG functioning. The UK's Natural Environment Research Council (NERC) had offered up to £160K per annum to help with IPY planning. However, this was a problem as the PG was dissolving in the autumn.

The PG appreciated the support given by BAS; the IPY concept and planning process would not have progressed without it. However, Olav Orheim felt that because the PG was chaired and supported by members of BAS, some cynics in the community would see the IPY as a UK-led initiative with a strong Antarctic emphasis. In order to dispel these views, it was important that the ICSU-IPY Secretariat was chosen in an open and transparent way through open competition.

The issues concerning the establishment of an IPY Secretariat would be dealt with in the Implementation White Paper.

Date of Next Meeting

The next (and final) meeting of the PG would take place on 15-17 September 2004. Another Discussion Forum would be planned for the 13/14 September. The Second Draft of the Outline Science Plan would be written by the 3 September.