Draft Minutes (v2) for IPY Joint Committee 5 Meeting, 28th February to 2nd March, 2007, Paris, France
(Circulated 26th April, 2007)

JC Invited members

Ian Allison  Michel Béland  Jeronimo Lopez-Martinez
Kjell Danell  Eberhard Fahrbach  Grete Hovelsrud
Vladimir Kotlyakov  Igor Krupnik  Tillmann Mohr
Chris Rapley  Robin Bell  Qin Dahe

Ex-Officio Members

Carthage Smith (ICSU)
Eduard Sarukhanian (WMO)
Colin Summerhayes (SCAR)
Tom Gross (alternate IOC representative)
Volker Rachold (IASC)

Observers

Johannes Huber (Executive Secretary, Secretariat of the Antarctic Treaty)

Apologies

Edith Fanta
Yoshiyuki Fujii
Keith Alverson (IOC)
Karsten Klepsvik (Arctic Council, Observer)

International Programme Office

David Carlson (Director)
Cynan Ellis-Evans
Odd Rogne
Nicola Munro (Minutes)

Invited Participants

Mark Parsons – Co-chair of IPY Data Management and Policy Sub-committee (SCDPM)
Taco de Bruin – Co-Chair of IPY Data Management and Policy Sub-committee
Sandra Zicus – Co-chair of IPY Education and Outreach Sub-committee (SCEOC)
Chen Zhenlin - International Cooperation Department, China Meteorological Administration
Minutes

1. Welcome and Introductions

The fifth meeting of the ICSU (International Council for Science) and WMO (World Meteorological Organisation) IPY (International Polar Year) Joint Committee (JC) was held at the ICSU building in Paris, starting at nine o’clock in the morning on Wednesday, 28th February, 2007. Thomas Rosswall (ICSU Executive Director) welcomed all participants of the JC5 meeting to ICSU and noted that it was in this ICSU building (51 Bd de Montmorency) where the first IPY Planning Meeting was held back in 2003. He also commented on how impressed he had been with the enthusiasm of all involved in IPY and how proud ICSU and WMO were to be a part of this IPY.

Ian Allison also noted that this was a very special occasion as the IPY would be officially launched on 1st March, 2007. He also commented that the JC were very grateful to ICSU and WMO for giving them the opportunity to carry out this impressive programme.

After the introductions, apologies were made for Yoshiyuki Fujii, Keith Alverson and Edith Fanta who were unable to make the meeting. Tom Gross represented IOC (Intergovernmental Oceanographic Commission) at this meeting in place of Keith Alverson. There was also a request that the JC co-chairs send a letter of support to Edith Fanta on behalf of the JC and IPO.

ACTION: JC co-chairs to send a letter of support to Edith Fanta. Deadline: March 9th

Ian Allison mentioned that two late papers had been submitted (these were circulated to all participants at the meeting), one from Colin Summerhayes (Implementation Plan for the Multidisciplinary Action Group of SCAR’s SSG/PS Pan-Antarctic Observations Systems (PAntOS) and a report from the Russian IPY National Committee submitted by Vladimir Kotlyakov.

2. Discussion of the Agenda

Participants were invited to review the provisional agenda. Ian Allison mentioned that MaryLise Chanin (former member of ICSU council) would join the meeting for agenda item 9 when discussing the programme for the IPY Opening Ceremony. He also mentioned that Sandra Zicus, one of the co-chairs for the IPY Education, Outreach and Communication sub-committee (SCEOC), would join the meeting to provide a brief update on recent activities under agenda item 10.1. Mark Parsons and Taco de Bruin, co-chairs of the IPY SCDPM, would join the meeting on Friday morning for agenda item 12 to report on the recently held SCDPM meeting.

Grete Hovelsrud asked to give a brief report on ISAC activities (International Study for Arctic Change) under agenda item 15. Igor Krupnik requested that the JC revisit the item from JC4 regarding an ethical guidelines document for IPY.

It was then agreed by all participants that the JC adopt the provisional agenda for the meeting.

3. Approval of JC 4 Minutes

As there were no further comments on the minutes from the JC 4 meeting, the JC agreed to accept the JC 4 minutes (IPY-JC5/Doc 3.1 (v3) as a true record of JC 4 meeting, held in Longyearbyen, Svalbard, 26th – 28th September, 2006.

3.1 Review of status of action items from JC 4 meeting

A list of action items (IPY-JC5/Doc 3.1 (v3) from the JC 4 meeting were circulated to all members on 20th November 2006. Ian Allison went through the actions that have not yet been completed. These are as follows:
JC 4 – Agenda item 5: Connection to Al Gore
Grete Hovelsrud commented that Al Gore is going to Oslo in March and will be meeting with the Director from CICERO. CICERO staff to follow up connection in March. Dave Carlson commented that a couple of people from the IPY Early Career Scientists network had attended the Al Gore lectures and had mentioned IPY there when meeting Al Gore.

JC 4 – Agenda item 6a: Data Coordinator for IPY.
Dave Carlson reported that thanks to Canada, Germany and Norway, funding for a data coordinator was now in place. Discussions are currently taking place regarding the appointment of this person.

JC 4 – Agenda item 6b: Name for indigenous representation on SCOBS.
This action has now been completed, Lene Kielsen Holm from Inuit Circumpolar Council, Greenland will be approached officially to sit on the Sub-committee for Observations (SCOBS).

JC 4 – Agenda item 6d: Publications policy.
This item will be discussed later under JC5 agenda item 8 (brainstorming session).

JC 4 – Agenda item 7c: Post IPY Events.
The task group (CEE, GH, C. Summerhayes, VR, JLM, ES, ICSU) assigned to this action have written a report which has been submitted (IPY-JC5/Doc 7). This action is in progress.

JC 4 – Agenda item 8a: Ethical Guidelines.
There have been several discussions taking place since the last JC meeting regarding this item. Currently, there is a short statement which consists of two paragraphs. Igor Krupnik strongly feels that this is not enough. It was decided that the original working group (IA, CR, IK and MB), review this statement and re-write it during the course of JC 5. This will then be circulated to all members for further comments which should to be sent to Ian Allison by 16th March.

ACTION: IPO to circulate draft ethical guidelines to all members. Final comments to be sent to Ian Allison by 16th March, 2007.

JC 4 – Agenda item 14: Bios and photos
ACTION: The JC members are reminded to send bios and photos to the IPO to add to the new IPY website under the ‘Who’s Who’ section.

4. Chair’s Briefing (Ian Allison)
Ian Allison gave a brief overview of the issues to be discussed during this meeting. He noted that a lot of hard work has gone into IPY from the science community, which stems from a very good foundation put in place by the IPY Planning Group, led by Chris Rapley and Robin Bell. However, it is now important that the JC consider their future roles. To date, JC meetings and activities surrounding these have been focussed on building the programme. The JC now have to maintain the momentum during IPY and to promote the science and to get support.

Ian also mentioned the ‘Scope of IPY Science’ document which has now been printed by WMO. He thanked Cynan Ellis Evans, the IPO, Ed Sarukhanian and WMO for helping to put this document together and commented that IPY will be assessed and judged on what the JC and the science community have set out to do in this science plan. The JC need to continue to support and develop an IPY legacy as it is hoped that polar science will become a major part of global science.

Igor Krupnik commended Ian Allison for the great leadership he has shown in the development of the ‘Scope of IPY Science’ document and this was acknowledged by the JC as a whole.
5. Status of IPY Project Funding

The IPO monitors project funding through:

**IPY Funding survey** – This is active on the Danish Polar Centre (DPC) at http://www.ipy.dk/Documents/FundingStatus.pdf and is compiled by Henning Thing at the DPC. The Funding Survey spreadsheet (FSS) listed at the above location shows the current status of project funding. Projects are tracked depending on the level of funding that they have received to date. This is recorded as follows:

- Substantial funding (65/170 scientific projects)
- Partial funding (10 – 20% planning money) (49/170 scientific projects)
- Withdrawn (1 project)
- No response (55/170 scientific projects)

**IPY Data Survey** – All project coordinators were asked to fill out the IPY Data Survey compiled by the Sub-committee for Data Policy and Management (SCDPM) and hosted at the National Snow and Ice Data Centre (NSIDC) website. This survey also has a question regarding funding. This information has been collected and added to the FSS on the Danish website.

**Direct personal response** – Many project coordinators correspond directly with the IPO regarding their funding situation. Dave Carlson collates this information and adds it to the FSS on the Danish website.

So far, the IPO knows of one project which has been withdrawn from the programme. There are many projects that may already have funding, however, the IPO has not yet been informed of this therefore the projects show in the FSS as currently having no funding. Dave Carlson urges JC members to encourage fellow project coordinators to submit their funding information. Dave expects that there will be more response in the next few months once funding decisions have been relayed to the project coordinators (e.g. USA)

**ACTION:** JC, as members of the science community should solicit for information on national and science funding and pass this information to the IPO.

**ACTION:** DC to provide JC with a list of the projects where there has been no response to the funding survey so that members can follow up in their own community. Any new information to be sent directly to DC at the IPO. **Deadline: March 16**

6. Status of National Funding

Dave Carlson reported that the IPO also tracks the status of national funding. The current total of new science money available for IPY is approximately US$250 million. However, the IPO is aware of 3 other sources of further funding from Denmark, USA and Germany. None of these three have been included in this total.

Following on from this update, JC members proceeded to report on the status of national funding where applicable:

**Germany:**
Eberhard Fahrbach reported that the German Government had been requested to improve the funding for IPY. Eberhard to provide further information on status of German funding as it becomes available.

**USA:**
Robin Bell and Igor Krupnik reported on the funding situation in the USA. They are confident that there will be money (approximately US$65 million). Igor Krupnik noted that there is also funding
available from sources other than the National Science Foundation in the US (NSF) so the total is likely to be more than the US$65 million. Igor suggested that the US IPY National Committee be charged with tracking the funding situation in the USA.

Russia:
Vladimir Kotlyakov reported that Russia had approved US$10 million for IPY activities in the Arctic in 2007. Eduard Sarukhanian also reported that Russia will send two ice-breakers, two research vessels of ice-breaker type, and three ordinary research vessels to support polar research. Total to date from Russia is US$ 40 million for both the Arctic and Antarctic for 2007. Ed Sarukhanian reported that the Russian Ministry of Finance is now looking at funding for 2008.

Vladimir Kotlyakov also reported that the Russian National Committee will meet at the Russian Academy of Science (RAS) on 30th March, 2007 where he will give a presentation on IPY. Russia will have a launch of IPY on the 25th May, 2007 in Moscow for the Polar Society; this will be an Arctic Day celebration.

Sweden:
Kjell Danell reported on the Swedish funding situation from research councils. No number has been given yet, however, Sweden hopes to supply more information at their launch on 1st March. Kjell commented that there are also other agencies within Sweden which will also hopefully provide some funding for IPY.

Spain:
Jeronimo Lopez-Martinez reported that Spain has dedicated 8 million euros for the 2 IPY years, 4.5 million euros for science and 3.5 million euros for logistics. 17 of the 33 proposals that were submitted to a special call for IPY-related projects were finally funded.

China:
Qin Dahe gave an update on the major Chinese investigations taking place during IPY. These include:

Antarctica: Prydz Bay-Amery Ice Shelf-Dome A (PANDA) (IPY Full coordinated proposal #313)

This multi-disciplinary project aims to establish a long-term environmental observing system which will focus on meteorology, glaciology, ecology and oceanography. It is a truly international project with collaboration from China, Japan, Australia, USA and other nations.

China is also involved in Arctic investigations which include:
- Influence of Pacific water on Arctic sea ice and water structure
- Ice-ocean-atmosphere interactions under rapid change of sea ice cover
- Influence of freshwater on sea ice distribution
- Mechanisms of climatologic effect of the Arctic rapid change on mid-latitudes

The Chinese Education and Outreach programme will focus on a TV programme, teaching materials and press conferences to keep the media updated on progress.

The total Chinese budget for IPY is approximately USD 20 million.

Australia:
Ian Allison reported that there is no new dedicated money for science, however the three main marine science projects (CASO, CAML and Antarctic Sea Ice) have been given logistic support. Australia have also committed AUS$ 45 million to build an international air transport system.

6.1 Need/Strategies for Extension of IPY

The following has been stated in discussion paper, IPY-JC5/Doc 6.1:
'Funding for a number of national IPY programmes and individual endorsed projects remains uncertain or has been delayed beyond the 1\textsuperscript{st} March 2007 launch. Even nations with very positive overall IPY programmes (e.g. Canada) have seen substantial procedural delays. Suggestions have been made by several individuals and groups to extend IPY for a further 6 to 12 months to compensate for the delayed start of some projects.'

The JC discussed the implications of an extension and the main discussion points were as follows:

There was a strong feeling amongst JC members that the JC must not go away from the concept of IPY as a snapshot of concentrated science. It was felt that it is too early to declare any changes at this stage. It would be more appropriate to address this issue once again in 2008, mid-way through IPY.

A suggestion from Dave Carlson was to use a more liberal definition of IPY. Instead of having criteria to say projects have to start within these two years, the JC could say that any project that begins or ends within the two years is a part of IPY. This would then relax the pressure on science.

Ed Sarukhian commented that ICSU and WMO had discussed this issue briefly and came to the following conclusions:

- An extension should not be announced at this stage.
- Once IPY begins, ICSU and WMO are in a better position to work on the idea of an extension based on the science and not money.
- There is a need for additional time to establish the IPY legacy

Carthage Smith also agreed that this issue should be re-addressed in 2008, mid-way through IPY.

Igor Krupnik asked the JC to recognise that IPY will continue past 2009. If committees are disbanded in 2009, there is a real risk that the assessment part of IPY and writing of related publications would be lost. This issue needs to be addressed. Dave Carlson agreed that the JC need to do an assessment and noted that there are many models on which this could be based.

Robin Bell suggested that the issue regarding an extension be a significant agenda item on the agendas for the next two JC meetings. This would then allow the JC to keep track on the progress of the science. She also recommended that a statement be published after each meeting reporting on the current status of IPY science.

Following on from these discussions, the recommendations stated in paper IPY-JC5/Doc 6.1 were revised to the following:

- \textit{That the formal IPY period remain 1 March 2007 to 1 March 2009}
- \textit{That the JC monitor and assess progress against the implementation of IPY projects and observations, and that it briefly reports against this progress at future JC meetings and after the 2008 SCAR/IASC/IPY conference.}
- \textit{That any requirement to extend the period of endorsed IPY projects or activities be reviewed as part of this ongoing assessment.}

\textbf{6.2 JC role with respect national funding processes}

Paper IPY-JC5/Doc 6.2 (from Dave Carlson) states the following:

‘Efforts to procure funds continue in several nations. The overall IPY programme would benefit, in some cases enormously, by the success of those efforts. The JC has in the past considered what collective actions it might take to encourage national funding of IPY projects. The JC should reconsider its interests and responsibilities in light of the current situation.’
Dave Carlson commented that there has been very little response to previous letters sent from the JC to various IPY representatives within national programmes. Therefore, any statements the JC wishes to make would be better going to press, science and the public.

Following on from brief discussions, the recommendations in IPY-JC5/Dc 6.2 were revised to the following:

- **The JC does not favour any further generic funding letters to national funding agencies from the JC or from WMO or ICSU. Any further correspondence on funding would need consideration on a case by case basis.**

- **In general, the JC would not advocate with national funding agencies on behalf of individual projects. The IPY should take appropriate actions only when requested by project coordinators from more than one IPY project. These collective requests should only be acted upon by the IPY JC in concert with the relevant individual National Committee.**

7. Post IPY Events and Conferences

Prior to the last JC meeting (JC 4) a letter was sent to the National Committees to solicit ideas for venues for a possible IPY Conference. The IPO received a proposal from Norway and at JC 4 a task group (CEE, GH, C. Summerhayes, VR, JLM, ES, ICSU representative) was established to look further into the possibility of an IPY conference in 2010.

The task group submitted a report for this meeting (IPY-JC5/Dc 7). This paper includes:

- An overview of post IPY strategies regarding events, conferences and actions to be considered by the JC.
- Recommendations and guidance to Norway about the organisation of the 2010 IPY conference. The JC were asked to review and approve the content to be transmitted to the organisers.
- Suggestions regarding the location of the next Open Consultative Forum (OCF).

The proposal from the task group is that a specific IPY conference should be planned every two years with the first taking place in 2008 at the SCAR/IASC meeting in St Petersburg, the next in 2010 and a third conference in 2012. Cynan Ellis-Evans has additionally identified many other conferences that will be taking place in the next four years that potentially could include sessions on IPY progress and results. Jeronimo Lopez Martinez mentioned that the Antarctic Treaty Consultative Forum (ATCM) takes places every year and that this always has sessions on science. Jan Huber commented that IPY will be on the formal ATCM agenda for the next four years.

- **Recommendation 1: That there should be a clearly identifiable IPY conference every two years between 2008 and 2012 and that associated international meetings be utilised to further disseminate data and outcomes of the IPY.**

Ed Sarukhanian noted that according to the JC Terms of Reference, the JC finishes at the end of 2009. However, as there are plans for a 2010 IPY conference and another in 2012, it would be logical for the activities of the JC to possibly conclude in 2012 and not 2009. Some continuation post 2009 is essential. Therefore, the second recommendation has been revised to:

- **Recommendation 2: The Joint Committee requests that ICSU and WMO, as sponsors of IPY, consider providing the opportunity for the JC to have major involvement in preparing the IPY conference in 2010, and involvement in preparing an IPY conference in 2012.**
As mentioned previously, Norway has offered to host an IPY Conference in Oslo at a new exhibition centre (Lillestrom Exhibition Centre). The JC agreed to accept the offer from Norway, and recommendations 3 and 4 from IPY-JC5/Doc 7 were adopted:

- **Recommendation 3**: That the JC accept the offer from Norway to host an IPY meeting in Oslo in 2010.

- **Recommendation 4**: That the JC specify that the meeting focus on the themes identified (in the paper IPY-JC5/Doc 7) and that the organisers plan for a scale of participation of around 3000 participants.

A preliminary letter of acknowledgement has already been sent to Norway from the IPO. The JC needs to send an official letter, specifying the areas of IPY science that should be addressed in the 2010 conference and the need for JC/IPO involvement in the Scientific Organising Committee. The original task group (which consists of CEE, GH, C. Summerhayes, VR, VK, JLM, ES and a representative from ICSU) will be candidates for representation of the JC/IPO on the Scientific Organising Committee for the 2010 conference. The composition of this Committee is to be discussed with the Norwegians promptly and once formed the Committee would represent the JC in developing the conference detail planning.

**ACTION:** JC to review list of themes highlighted in paper IPY-JC5/Doc 7. Input from all JC members by 9th March 2007. Send to Dave Carlson at IPO. IPO to draft official acceptance letter to Norway and send by March 30th.

**ACTION:** The 2010 Scientific Organising Committee to start negotiations with the Norwegians immediately on details of the 2010 conference (venue, schedule, agenda etc.)

The JC needs to agree on a date and location for the next IPY Open Consultative Forum (OCF). Dave Carlson noted that it is important that the JC take the OCF to the scientists. Therefore it needs to be tied to other scientific meetings, for example the Antarctic Earth Science meeting in Santa Barbara in Sept/Oct 2007 as suggested by Colin Summerhayes. Robin Bell, an organizer of this meeting, commented that an OCF in conjunction with this could aim to get feedback from relevant projects. A listing of IPY relevant conferences prepared by the Post-IPY Planning sub-group provides a start point for picking suitable OCF venues. The JC members could usefully provide information on which meetings they will be attending this year as a basis for identifying possible OCF venues.

With the above points in mind the JC agreed to the following:

- The OCF is to be held separately to the JC meetings unless the JC meeting is also tied to a main meeting (e.g. SCAR/IAISC meeting in St Petersburg, 2008).
- Not all JC members need to attend an IPY OCF: 2 or more members could provide information and receive feedback at a forum, and report back to the rest of the group at the following JC meeting.
- In most cases, one or more JC members will be attending the relevant science conferences. JC members need to look at the list of conferences circulated by the Post IPY planning sub-group and provide information to the IPO on which meetings they will be attending as a basis for identifying possible OCF venues.

Currently, there is no date determined for the next IPY OCF.

**ACTION:** JC members to review the list of conferences from Cynan Ellis-Evans which was circulated at the meeting and send suggestions for possible venues for the next OCFs. Deadline: End of March, 2007

8. Brainstorming: Forging stronger links among IPY projects
Brainstorming session Chair: Robin Bell. Rapporteur: Odd Rogne
See also: The agenda papers by Ian and Dave: IPY-JC5/Doc 8 & Annex

Broad Core Areas
Present honeycomb can be grouped into 15-20 broad core areas. Bring Project coordinators together in each of these new, broad core areas in order to build synergies between projects, for instance by organising workshops.

Which Broad Core Areas?
Various views on how these areas should be structured:
- Use the same broad areas as in the Scope document,
- Themes/cross-cutting issues (climate change, human health, ecosystems etc.) and thereby encourage interdisciplinary.

Multidisciplinary Expeditions
Use opportunities arising which may not imply extra travelling and expenses. Several research vessels carry projects from different disciplines. Presentations/workshops onboard is easy to organise and project participants are eager both to present their project and their findings or progress.

Other Ideas
- Bring Project Coordinators to an Open Forum and thereby creating interaction between them as well as responding to an audience
- Find a mechanism for bringing disciplinary champions together on a common or cross-cutting theme
- Focus on multidisciplinary (JC is the only body who can take such initiatives)
- Bring people together with a clear goal and a mandate
- Facilitate smaller meetings through IASC and SCAR
- Synthesis and integration workshops can be a useful mechanism (when they have some outcomes)
- Franchise out these activities when we have made up a plan
- ‘Arctic Social Indicators’ mentioned as an example interaction tool for relevant IPY groups and projects
- Paradigm shifts: We need to help disciplinary projects develop into multidisciplinary answers to societal or broader issues

Conclusion: A Task Force to develop these ideas further, and a plan for taking them forward.

ACTION: Task force (EFahrbach, JLM, RB, CR, GH, CSummerhayes) to develop ideas for developing links among IPY projects and report back at the JC 6 meeting.

Members: CB (Chair), JL-M, GH, CR.

9. Launch Ceremony
Dave Carlson briefly went through the planned programme for the IPY Opening Ceremony (IPY-JC5/Doc 9 V3). He noted that HSH Albert II, Prince of Monaco would attend the Opening Ceremony and would be met by Carthage Smith and representatives from the Palais de la Decouverte. All participants would receive an IPY press pack and the ‘Scope of IPY Science’ document. Dave also reported that the Opening Ceremony would be web cast and available on the Arctic Portal’s website at www.arcticportal.com.

ACTION: IPO to ask National Committees to send all national launch materials to the IPO for archiving by end of April, 2007

10. Information reports – Sub-committees
Reports from each sub-committee were submitted and circulated to all members prior to the meeting. Meeting participants were asked to note the reports.

10.1 Report from Education and Outreach Sub-committee (SCEOC) (Paper:IPY-JC5/Doc 10.1)

Sandra Zicus (Co-chair of the SCEOC) joined the JC meeting to report on the recent activities of the SCEOC. The SCEOC last met in Bremerhaven in October 2006. Sandra reported that this was a very productive meeting which saw the Education, Launch and Media working groups established. The main priority in the lead up to March 2007 was the launch of IPY. Each Working Group held fortnightly conference calls to discuss their various activities. For example, the Education group worked to get schools involved in classroom activities (launching of a virtual balloon, experiments etc.), all of which were posted on the website. The media group worked to get press releases together and the launch group helped organise the launch with the help of ICSU and Palais de la Decouverte.

The SCEOC and IPO have also created a new IPY website and have started to build a database of teachers, media contacts, etc. interested in IPY. However, their main concern now is how to maintain the momentum. The Sub-committee wants to address the following issues in particular:

- Building a synergy with the Youth Steering Committee (YSC)
- Addressing how to involve university education within IPY
- Establishing material resources to use in local and state wide conferences etc.
- Developing stronger links with non–English speaking countries particularly in South America, Africa and Asia
- Following project ‘stories’ to pass to journalists

The Sub-committee hope to develop long term strategies for the working groups at their next meeting which they hope to hold late April or early May depending on funds.

Actions from the SCEOC report have been listed under Agenda item 10.4.

10.2 Report from the sub-committee on Observations (SCOBS) and Space Task Group (STG) (Paper: IPY-JC5/Doc 10.2)

Tillmann Mohr gave a brief presentation on the recent activities of the SCOBS and STG. Further information can be found in the report submitted by the SCOBS (Eduard Sarukhanian) (IPY-JC5/Doc 10.2). Below is a summary from Mohr’s presentation.

A core group meeting of SCOBS took place in Beijing on the 25 October 2006 to consider the status of the SCOBS activities and to prepare a review of existing IPY-related data flows for various domains (atmosphere, ocean, cryosphere, etc.) Following on from this meeting, SCOBS and the SCDPM then held a joint meeting on the 26th October, 2006 to discuss further the designing of the IPY data flows. It recognized that one of the priority tasks for SCDPM should be to provide the coordinators of IPY projects with useful information on data sources, (meta) data submission templates, etc. The meeting decided to establish an “info-base” with these and other elements.

The Space Task Group (STG) was formed under SCOBS supervisions in December 2006 by Space Agencies as a response to the letter addressed to them by the Executive Heads of ICSU and WMO. The first meeting of STG (STG 1) took place at the WMO Headquarters 17-19 January, 2007 with participation from the following Space Agencies:

- Chinese Meteorological Administration (CMA),
- Centre National d'Etudes spatiales (CNES),
- Canadian Space Agency (CSA),
- Deutsches zentrum für Luft- und Raumfahrt (DLR),
• European Space Agency (ESA),
• European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT),
• National Aeronautics and Space Administration (NASA), and
• Federal Service for Hydrometeorology and Environmental Monitoring of Russian Federation (ROSHYDROMET).

There was also additional representation from World Climate Research Programme (WCRP-CliC), Global Inter-agency IPY Polar Snapshot Year (GIIPSY) and the IPY-Joint Committee.

The main issues arising from STG 1 included how to satisfy the requirements collected from the IPY science community and how to leave an IPY legacy of bipolar snapshots, based on satellite data, comprising a series of scientific firsts (examples of these can be found in IPY-JC5/Doc10.2). STG 1 has introduced the concept of IPY data portfolios. Each Agency will determine what data will be made available to IPY scientists as part of its portfolio. The intention is to provide open and easy access to these portfolios for scientific use. The content of the portfolios will evolve through the STG coordination of planning, acquisition, downlink and processing during IPY and beyond, as a legacy.

Another important task of SCOBS is to establish through the JC and IPO, a dialog with GEO (Group for Earth Observation), WCRP, GCOS (Global Climate Observing System), GOOS (Global Ocean Observing System), AC (Arctic Council), ATCM, ICARP II (second International Conference on Arctic Research Planning) to secure the provision for the legacy of observing systems established during the IPY. This dialog to secure provision for the legacy of IPY observing systems will include:

• Collecting information on the real implementation of observing systems of the IPY projects during 2007.
• Establishing a mechanism for early assessment of benefits acquired from new observations, in order to prepare for the support of the long-term reinforcement of networks in Polar Regions. This mechanism should consist of representatives from the main partners involved in IPY including the satellite community.
• Co-organising a GEO-IPY legacy workshop in 2008 with participation from representatives of the JC, GEO, WMO, ICSU, IOC, WCRP/CLIC, GCOS, GOOS, GTOS (Global Terrestrial Observing Systems), Arctic Council, ATCM, ICARP-II and other international programmes and organisations.

The future work programme of SCOBS will involve:

• Further implementation of actions and recommendations developed by STG I (these are listed in paper IPY-JC5/Doc 10.2, pg 8 & 9).
• Completion of the assessment of IPY observing systems, including Earth and space domain and traditional knowledge
• Identification of potential (IPY) and actual (operational) satellite data sources
• Establishment of an IPY legacy mechanism.

Actions for the JC following on from the presentation from the SCOBS are listed under agenda item 10.4

**10.3 Report from the Youth Steering Committee (YSC)** (Paper: IPY-JC5/Doc 10.3)

The YSC submitted a report to the IPY Joint Committee (Paper: IPY-JC5/Doc 10.3) which was noted by the JC. This report included an update on their recent activities which includes the setting up of the YSC website at [www.ipyyouth.org](http://www.ipyyouth.org), preparation for the launch of IPY, the establishment of the Association of Polar Early Career Scientists (APECS) and an update on the polar contests. The YSC will also shortly release their first electronic newsletter.

The YSC had no actions for the Joint Committee.
10.4 Sub-Committee Issues requiring action/decisions from the JC

Actions from the SCEOC report:

1. Use of the ‘International Polar Year – 2007-2008’ full title. SCEOC want to find a way of not focusing on the years so much as they feel this causes confusion in press releases etc. Therefore, SCEOC want to know if it is possible to ‘drop’ the years and only use “International Polar Year”:

The JC agreed that it was reasonable to only use “International Polar Year”, however, only in non-formal circumstances.

2. Develop more opportunities for interaction between national committees, especially across regional boundaries, to aid community building, information flow, and support outreach activities:

The JC fully support this action.

3. IPY Branding Policy:

The JC support and approve the IPY Branding Policy submitted by SCEOC.

4. Seek funding for the 2nd SCEOC meeting in April/May 2007. This meeting will look at ways to develop strategy for continued momentum throughout IPY:

ACTION: JC members to look at possible funding sources for an EOC meeting.

Actions and recommendations from the SCOBS report:

Actions:

STG1 A5: Action on JC to send letter to project coordinators on behalf of the STG. This letter should include a summary of STG 1 and also a reminder for project coordinators to fill out the data survey.

JC is reluctant to send more letters to Project coordinators. The suggestion is to provide a status report from the JC to all involved in IPY highlighting the current status and main concerns. The lack of response to the data survey would be mentioned in this status report.

Recommendations:

The JC fully support STG1 R1, R3, R4 and R5 and pass the challenge back to the relevant working group experts to make these happen.

STG1 R2: At the IPY Science Conference (2010) a specific issue should be to look at initial results from IPY projects and in particular to consider defining long term solution for appropriate high-level geophysical products** - where sustained processing and archiving is deemed necessary. This conference shall consider whether and how the basic observational network should be maintained.

** in this context STG understands that this applies to geophysical products that result from multi-temporal data.

The JC support this recommendation and task this to the 2010 Conference Task Group, which is chaired by Jeronimo Lopez Martinez.
STG1 R6: Recommendation to the JC to contact IPY National Committees to motivate survey responses from all funded IPY participants who did not send in a completed data requirements survey.

STG1 R7: Recommendation to the JC to implement on IPY website a top level link to ‘data availability’ with sub links to pages containing in-situ, airborne/shipbourne and satellite data. STG can formulate appropriate links to URLs where data may be accessed.

R6 and R7 are shared recommendations for IPO and DIS. JC support this partnership.

STG1 R8: Recommendation to JC to decide how to interact with GEO to develop long-term perspective on implementation of a sustained observing system for the polar regions, as a legacy of IPY.

The JC recommend that a GEO representative be invited to the next JC meeting.

ACTION: JC co-chairs with WMO to invite a GEO representative to next JC meeting (JC 6).

The JC recognise that the Sub-committees are working very hard and thank all members on the sub-committees for their work and enthusiasm.

11. Brainstorming: JC activities to maintain IPY momentum and visibility during implementation

Brainstorming session Chair: Grete Hovelsrud. Rapporteur: Cynan Ellis-Evans

See also: The agenda papers by Ian: IPY-JC5/Doc 11

Visibility - The discussion initially focussed on how to increase visibility. Earlier JC meetings had identified a task for the JC to write articles for targeted publications. Two social science articles have been published but the JC needs to build on this and complement the publications being produced by individual projects. There were suggestions of an article to EOS (already previously discussed at JC), to Science, Nature, etc. The feeling was that the JC could target several journals into which they would put annual (or whatever other timescale) reports/assessments of IPY progress – Polar Record was suggested as having a brief for studies from both poles. The ICARP conference report (which has many useful references to IPY) will be hopefully published at ASSW 2007.

Could the IPO help coordinate activities by asking projects producing material to pass these on to the IPO to possibly be put up on the International website or alternatively link such materials across project websites? Some projects have yet to devise a website, however there is an offer from the Arctic Portal group to build IPY websites for free. Next phase of the International website will have a multimedia database to catalogue and sort all sorts of material. It would probably be sensible to have the materials remain with the projects and then have a link into the multimedia catalogue.

There was some discussion for the need to get the ear of governments and it was concluded that this came down primarily to getting IPY into the media as often as possible. The issue of IPY postage stamps was raised. It was concluded that all this promotion of IPY was the responsibility of the EOC Sub-Committee and that the JC should not take the lead other than in individually promoting IPY at all opportunities and collectively writing JC articles for targeted journals.

A draft policy for IPY publications has been produced by Colin Summerhayes, Volker Rachold and Gisbert Glaser, drawn from existing policies of SCOR, SCAR and ICSU and circulated at JC5. This document was not considered by the JC during this meeting but both Cynan Ellis-Evans and Dave Carlson (IPO) were content with the draft.
Momentum – It was felt that to maintain momentum the JC needed to link projects to develop greater interdisciplinarity and Dave Carlson had previously already suggested some possible groupings of projects around large clusters e.g. Arctic land. It was suggested that IPY multidisciplinary meetings should be organised with speakers from outside the discipline giving a plenary presentation. Over the coming year there are a number of national and international activities planned that could perhaps be used to address the multidisciplinarity issue.

It was also suggested that the JC need to assess where the IPY has got to in its implementation at regular intervals along the timeline and, if possible, publish brief reports on progress. This will require the input of the projects, but will they send in highlights? Could they be attracted by being put up for an IPY result/achievement of the past 3 months which then gets publicised?

**ACTION:** Proposed that there be an agenda item at subsequent JC meetings to assess IPY progress.

**Momentum combined with Visibility** - There was a suggestion for a bi-monthly collection of information on what the projects anticipate will be coming out in the near future. This information could be collated and supplied as a two page document to the media. This was felt might be too frequent and anyway would be best tasked to the EOC sub-committee. There was concern that this would end up going through press officers and not get to the scientists.

An alternative suggestion was to collect 6 monthly assessments and turn these into a paper to go to a suitable journal. If we produce good assessment reports then the projects will be more likely to supply the necessary material. Publishing in Nature, Science or EOS Trans would ensure got publicised to media and scientists. The JC were informed that Nature is about to do a special feature on IPY focussed on IPICS and ANDRILL. *(Note: Nature and Science have had special IPY issues. Nature, Vol 446, 8 March 2007; Science, Vol 315, 16 March 2007)*

Another proposal was to provide newsletters to subscribers every few months – again this requires getting projects to submit articles, photographs, etc. This activity would require someone (possibly on contract) to edit the submissions. The idea was raised of using the experience within the JC to develop assessments within each person’s area of expertise and then contact the IPO regularly with updates. However it was not clear that the JC covers all the IPY bases and the IPO only has strong links into comparatively few projects though all projects have some form of dialogue with the IPO. Another idea was for JC members to phone project leaders on some form of regular basis to get an informal update.

**Conclusion** - This discussion reached few significant conclusions. It highlighted the potential problem of getting timely information from the projects to contribute to momentum and visibility. It was felt that whilst visibility was a task largely for the EOC sub-committee there were some specific contributions to be made by the JC and the issue of maintaining momentum was certainly for the JC to address. The chair concluded that the topic of how the JC could usefully contribute to maintaining momentum and IPY visibility should be pursued further by a small sub-group, reporting back to the next JC meeting. It was suggested that Colin Summerhayes chair the group, other members to include Eduard Sarukhanian, Volker Rachold, Igor Krupnik and that a member of the Data Committee be involved as they are also addressing the problem of obtaining relevant information from projects and reporting/publicising this information.

**ACTION:** Task Group (C.Summerhayes, ES, VR, IK and a member of the SCDPM) to provide a paper for JC 6 meeting, looking at how the JC could contribute to maintaining the momentum and visibility throughout IPY.

**ACTION:** ‘Maintaining momentum and visibility throughout IPY’ should be made an agenda item at subsequent JC meetings.

Mark Parsons and Taco de Bruin (Co-chairs of the SCDPM) joined the JC meeting on Friday morning (2\textsuperscript{nd} March) to report on the activities of the SCDPM.

The SCDPM held their second official meeting at ICSU, Paris on the 27\textsuperscript{th} and 28\textsuperscript{th} February, 2007. A preliminary report on this meeting was circulated to all JC members at the meeting (IPY-JC5/Doc 12 (i)). Following on from this report, the main activities of the SCDPM include:

- The identification of a data coordinator, Oystein Godoy, for operational data supported by Norway, Canada and Germany at the Norwegian Meteorological Institute.
- An overall IPYDIS coordination office at the WDC for Glaciology, Boulder is likely to be partially supported by the US National Science Foundation (NSF).

The Data Committee in collaboration with the IPO and the SCOBS has posted a Web-survey for all the IPY projects to provide their plans for data preservation and access and their needs for satellite observations. So far, approximately 50 responses have been received. It is thought that part of the lack of response is due to delays in funding.

The SCDPM has developed a data infrastructure model of an IPY Master Directory, which is a repository of metadata for discovering data, linked to a system of distributed data centres. Metadata requirements and submission mechanisms will need to continue to evolve in response to the diverse requirements of IPY projects and data.

The SCDPM has defined provisional requirements for IPY data centres. These requirements will likely evolve in response to work by WMO, the ICSU ad hoc Strategic Committee on Information and Data, and planned IPY data centre workshops.

With regards to funding, the SCDPM are cautiously optimistic that continued support for IPY data management will emerge over time. A major challenge will be to address the short term needs to ensure that no data are lost in the interim. Several data management efforts related to IPY are likely to be funded in the near future including efforts to support the Arctic Observing Network and the management of local and traditional knowledge.

The SCDPM endorses the principle of open access to scientific literature as a means to enhance equitable global science and are working with the CODATA Global Information for Commons for Science Initiative to facilitate this open access.

The SCDPM will support both SCAR and IASC to help develop coordinated and sustained Arctic and Antarctic data management efforts.

Following on from this report from the SCDPM, the following concerns were raised:

- It is very important to ensure that all IPY data is fully accessible. There is a need to combine the research data and operational data. Both are integral parts in forming a data system. Research is required to look into the feasibility of how to best serve interdisciplinary data.

- The concern about the social science community and the importance of being able to capture the local knowledge and local observations was also raised.

- The lack of response to the data survey - this means that the current picture of project data management plans is still very much incomplete. There appears to be an unwillingness to fill out the survey mainly due to the fact that many projects still do not know whether they will get funding or not. Another issue is that some projects want to hold on to their data for at least 2 years, however, the SCDPM need to ensure that this data is easily accessible as soon as possible.
There is a need to follow up with projects that have not filled in the survey and it is hoped that the new data coordinator will take on this task.

It was also felt that project coordinators may not be fully aware of what is expected. The SCDPM need to ensure that people understand exactly what is required of them. All project coordinators signed up to the IPY data policy. It was also felt that the WDC’s have not been clearly identified yet. It is important that this is done and that they are ready to start receiving the data from IPY projects.

Carthage Smith noted that the policy needs to be "universal and equitable access", where scientific information is concerned, as "open access" was a more limited term. He also reported that ICSU does have responsibility for the WDC system, which was established to meet the needs of IGY, 50 years ago. ICSU was now in the process of restructuring this system and IPY could be a major catalyst to make this happen. ICSU has set up an ad hoc Scientific Committee on Information and Data (SCID) to oversee the reform of the WDCs and this included several people involved with IPY. The existing WDC’s would not be able to cope with all IPY data in their current form and the aim was to develop a better and more inclusive system. This should address not only the needs of IPY but also ICSU's other international interdisciplinary programmes. It was noted that there would be a critical meeting of the WDC Directors in Bremen in May and IPY would be a sub-topic at this meeting. It would be a good time for the JC to address the WDC's.

The SCDPM put forward the following recommendations:

**Recommendation 1: JC to send a letter to the WDC Panel asking them to help engage the WDC’s as active supporting participants of IPY.**

**Recommendation 2: Endorse the concept of open access to literature by requesting relevant journals to consider open access to IPY publications (perhaps after some period of time) and to accept Science Commons addenda to copyright assignments that allow authors to self archive and distribute their publications.**

With regards to the first recommendation, the JC agreed that a letter should be sent to the WDC’s and that this letter should come from JC co-chairs (a draft letter was provided by Mark Parsons and Taco de Bruin).

**ACTION: Letter from co-Chairs to WDCs (IA and MB in consultation with ES and CSmith). Deadline: 31st March, 2007. All letters to be copied to the Joint Committee members for their information.**

It was also felt that an IPY status report be released after each JC meeting. This could highlight the main issues and concerns. This first status report should encourage all project coordinators to complete the data survey and remind them of the IPY data requirements and policy. Tillmann Mohr also recommended that the JC request status reports from the endorsed and funded projects every six months.

**ACTION: Report from JC to world and project coordinators on the current status of IPY and the main concerns (to include information/reminders on the data survey and funding surveys). (DC, MB, IA, OR, KD). Deadline: 31st March.**

With regards to recommendation 2, Mark Parsons commented that this was more for information than a recommendation. The SCDPM are not saying that IPY must adopt the open access publishing model. However, they would like to see this model encouraged and that open access to all journals be considered.

Following the above discussions, the SCDPM reported on its immediate future plans. These included having biannual meetings over the next two years with partial support from CODATA.
The SCDPM plans to conduct data management training workshops for IPY data centres and data managers in conjunction with these meetings. The SCDPM also hopes to coordinate some of these meetings with future JC meetings. The SCDPM will develop a set of data management milestones for the Data Committee, data coordinators and IPY data centres.

13. Legacy

Odd Rogne gave a report from the most recent Heads of the Arctic and Antarctic IPY Secretariats (HAIS 2) meeting which was held at the Danish Polar Centre, in Copenhagen, 1st and 2nd February, 2007. (HAIS 2 papers and agenda are listed on the IPY website at http://classic.ipy.org/national/).

Members of HAIS are national representatives who are active members in planning and implementation of IPY programmes within their own nation. International organisations such as Arctic Ocean Sciences Board (AOSB), Forum of Arctic Research Operators (FARO), European Polar Board (EPB), IASC and International Arctic Social Sciences Association (IASSA) have been invited as observers.

The two main activities of this group so far have been to develop a forum for exchange of information, collaborative opportunities (including bilateral side meetings for solving IPY implementation issues), direct communication with the IPO etc, and to look at IPY legacies (beyond the project level). Further information on the HAIS activities can be found in the Summary Report on HAIS 2 (IPY-JC5/Doc 13).

HAIS are very interested in and keen to contribute to the IPY legacy issue and will look into stimulating the development of IPY legacies beyond the project level. HAIS would also like to offer the JC assistance in developing such legacies and would like the JC to define how it would like to use HAIS.

HAIS plan to hold a short side meeting to ASSW on 15th March. Their next full meeting will be in September.

13.1 Review proposed planning of legacy, planning activities etc.

HAIS submitted a paper to the JC looking at the next steps and leadership to identify and secure IPY legacies (Paper: IPY-JC5/Doc 13.1) (A supplementary paper was submitted and circulated at the JC5 meeting by Colin Summerhayes (IPY-JC5/Doc 13.1 (i). This paper describes the SCAR Pan-Antarctic Observations System – PantOS).

In IPY-JC5/Doc 13.1, HAIS state that “it is evident that effectively harnessing the efforts, resources, and momentum of IPY to ensure that its impact is substantive and long lasting will require strategic planning and leadership.” Legacy has always been a part of the IPY vision and was identified in the IPY Framework Document.

Conclusions from the IPY legacy discussions are as follows:
The IPY JC has a leadership role in the efforts to discuss and secure the IPY legacies. However, there are other groups that are also well placed to support this effort. They include IASC, SCAR, the OECD Global Science Forum and HAIS.

There are three components of the IPY legacy:

Scientific Legacy (this includes new and enhanced long-term, multi-disciplinary observing systems and networks, new observational technologies, comprehensive polar data sets with unprecedented access, improved understanding of processes in the total Earth system and comprehensive baseline data for assessment of future change.)
Collaborative Legacy (this includes new models for enhancing collaboration and joint funding, new and improved methods of exchanging data and information and new political paradigms for international science.)

Human Legacy (development of the next generation of polar researchers and leaders, enhanced involvement of Arctic residents in Arctic science and increased awareness and interest of students, the public and decision-makers in polar issues.)

It is important to also bring in the interaction with GEO. Colin Summerhayes made the point that GEO reports go to the G8 Ministerial Meeting so there is an opportunity to capitalize on this. The JC do have a role in ensuring the long term multi-disciplinary observations system and need to ensure that data sets are made available. There should also be equal contributions from all aspects of the science, including the social sciences.

The JC need to recognise that there are certain politics in the North and these partners must be included in any IPY legacy discussions. Any future discussions should also include policy.

Activities that focus and encourage IPY legacies should not displace existing initiatives, but should rather provide a forum for this discussion during and after IPY.

Recommendations from HAIS are:

Recommendation 1: Issue a clear statement declaring that priority will be placed on securing IPY legacies

Recommendation 2: Recognise the support that HAIS will provide in supporting post-IPY planning and identification of IPY legacies. A working group of the HAIS has agreed to develop an overview paper that would consider and evaluate various legacy outcomes and mechanisms for achieving them. This work will be discussed at the next meeting of HAIS, to be held during ASSW in March 2007 and could be brought to the IPY JC at their next meeting.

Following on from these recommendations the JC agree to setting up a task group to provide an overview of legacy for the next JC meeting. This group should also provide the HAIS group with a list of bullets for legacy items which they will then discuss at the HAIS meeting at ASSW (Arctic Science Summit Week). The JC also task the SCOBS to review and report on the Observing networks legacy. A clear statement should be put in the ‘Status report’ as well.

ACTION: To look at the long term and define the objectives of structuring IPY legacies. Initial task group (IK, IA, RB, MB, EF, CR and KD) to provide a legacy overview for the next JC meeting. The aim is to include other experts within this group as well. Deadline: JC 6 meeting.

ACTION: SCOBS to review and report on the Observing networks legacy and to suggest revisions to ToR to reflect this change (TM, ES, C.Summerhayes). Deadline: JC 6 meeting

14. Reports from Arctic Council (AC) and Antarctic Treaty Secretariat (ATS)

The observer members from the AC and ATS were invited to give a brief update on their recent activities. As there was no representation from the AC at this meeting, the update provided by the AC in the IASC newsletter (IPY-JC5/Doc 15 (i) will be taken as their update.

Jan Huber reported that the next Antarctic Treaty Consultative Meeting (ATCM) will not have a whole day set aside for IPY as they had done for the last ATCM held in Edinburgh, 2006. However, IPY will be on the agenda and will continue to be for the next two years at least. At the
upcoming ATCM (end of April) both Chris Rapley and Dave Carlson will be giving lectures on IPY. Jan also reported that the ATS now has a special IPY page on their website.

Jan reported that if the JC decide that they would like their next meeting to take place in South America, the ATS would be ready to provide assistance and provide meeting venues etc. He also added that a meeting in Buenos Aires would have added value as it could include South American National Committees in a side meeting to the JC meeting.

15. Reports from IASC and SCAR

The JC noted both reports submitted by IASC and SCAR. Further information on IASC and SCAR activities can be found in papers IPY-JC5/Doc 15 (i) – IASC and IPY-JC5/Doc 15 (ii) – SCAR.

16. National Committee reports

The following National Committees submitted reports which were noted by the Joint Committee:

Austria:
Wolfgang Schöner submitted a brief report (IPY-JC5/Doc 16 (i) to the JC. This report outlines the joint Russian-Austrian contribution (FERMAP) to the IPY 2007-2008 which is designed to determine the present environmental status on the Franz Joseph Land archipelago and to track past and present change in its natural environment.

Canada:
The Canadian IPY National Committee has submitted a brief report (IPY-JC5/Doc 16 (ii) highlighting their key IPY activities. They also list a number of concerns which the JC noted.

Portugal:
The Portuguese IPY National Committee submitted an update on their Science and Education IPY activities including an update on their major education programme ‘LATITUDE60’ (IPY-JC5/Doc 16 (iii).

Spain:
The Spanish IPY National Committee submitted a report (IPY-JC5/Doc 16 iv) which includes details on the Spanish infrastructure capacities during IPY, planned research activities, polar national data centre and cultural events.

UK:
The UK National Committee submitted a report (IPY-JC5/Doc 16 v) which includes details of their national launch event and information on UK funding.

Russia:
Vladimir Kotlyakov circulated a report (IPY-JC5/Doc 16 vi) from the Russian National Committee at the meeting. This report highlights among other things, the tasks set for the Russian National Committee and the announcement of their new website which can be found at http://ipyrus.aari.ru

16.1 National Committee issues requiring decisions from the JC

There were no major issues that came out of the National Committees for the Joint Committee to address. The Joint Committee however, thank the National Committees for submitting the reports and request the IPO send letters of thanks.

ACTION: IPO to send letters of thanks to the National Committees which submitted reports for JC 5. Deadline: 16th March, 2007

17. Update on the IPO activities
17.1 IPO Funding

Dave Carlson gave a brief update on the IPO funding (IPY-JC5/Doc 17.1). He reported that there are no real changes from the last budget shown at JC4. However he notes the recent contribution from the UK Royal Society received in January 2007.

He commented that the main priorities for funding are data coordination (real time position) and for travel for the sub-committee co-chairs. Money has also recently gone into the development of the IPY website and for conference calls for the sub-committees.

The JC approved the IPO budget. However, it requested that the next budget be in a more standard format and more detailed, providing what requirements the IPO has for funding. It also requested that the budget include ‘needs met’ and ‘needs not met’ to make it easier for the Joint Committee to solicit funds for particular activities. It was also noted that there needs to be the basis for a proper auditing process in place.

**ACTION: DC to update future IPO budgets to make them clearer and easier to understand, and more detailed.**

17.2 IPO Work Plan

Dave Carlson submitted papers IPY-JC5/Doc 17.2i and IPY-JC5/Doc 17.2ii respectively outlining planned activities of IPO for January-April 2007, and May-August 2007. Robin Bell commented that the JC need to have more involvement in setting priorities for the IPO and the meeting had a short discussion on this topic. Robin suggested that the IPO need to focus more on efforts to enhance global links and to include tracking of project status and funding as a priority in its work plan.

The meeting also suggested that individual JC members should give presentations about IPY at relevant meetings they would attend in order to reduce the work and travel load for IPO staff, and to reduce IPO travel costs.

On conclusion of this agenda item Ian Allison, on behalf of the JC, thanked the IPO for the hard work and significant contribution to IPY from all staff.

18. Other Business

**Scope of IPY Science document:**

Ed Sarukhian reported that 3000 copies of this document had been printed. 100 copies had been sent to Strasbourg for the European launch on 26th February, 50 were sent to the UK for the UK launch, also taking place on the 26th February. Attendees were invited to let Ed know of other organisations, National Committees or individuals who should receive a hard copy of this document. The document will then be distributed from WMO. Ed noted however, that as only 3000 copies have been printed WMO are unable to send large numbers of copies to any one National Committee or organisation. The Scope document has also been placed on the website as a pdf and can be downloaded from there.

**International Union of Geodesy and Geophysics (IUGG):**

A Union Symposium on International Years is being held as part of the IUGG General Assembly (Perugia, Italy, 2-13 July 2007). This session, organised by Michael Kuhn, will include papers by invitation only. Invitations have been extended for papers on e-GY/IPY data issues (by Mark Parsons) and on the IPY 2007-2008 overview (currently attributed to Dave Carlson). Alternatively, Ian Allison who will also attend this meeting, could present an overview based on the “Scope of IPY Science” document.
**ACTION:** IA to enquire whether an alternative presentation is acceptable at this session, and if so to submit an abstract.

**OCF:**
The JC members were asked to note if they will be attending any of the meetings on the list circulated by Cynan Ellis-Evans. They should send this information to Dave Carlson, along with details on any additional relevant meetings not on Cynan’s list.

19. **Closure of meeting**

19.1 **Next meeting**

The Joint Committee agreed that the next JC meeting (JC6) will take place in Europe, and possibly in Stockholm, Sweden. Neither the venue nor date have been finalised, but JC members are asked to keep the week of the 22nd October free.

**ACTION:** WMO to determine date and place for the next JC meeting (JC6), in time period 22 to 26 October, 2007.

The JC agree that JC7 will take place in St Petersburg before the SCAR/IASC conference in July 2008.

**ACTION:** Dave to contact the Tinker Foundation with regards to a future meeting in South America for the South American National Committees and JC.

19.2 **Assessment of meeting**

It was felt that the preparation of papers for JC 5 was much better and the meeting definitely benefited from this. The JC recommend that the paper from Odd Rogne (IPY-JC5/Doc 19.2 (v2) be used as guidance for future JC meetings. Therefore, as stated in the JC5 Roadmap discussion paper, Michel Beland will be chairing the next meeting.

Ian Allison felt that the first brainstorming session went well. However the second session was probably too close a subject to the first session and perhaps should have been held on the second day instead of having two brainstorming sessions on the one day.

The JC agreed that there shouldn’t be any break out sessions. The JC need to work out of session and then bring forward ideas to the brainstorming sessions. It was felt more background information would be useful for the brainstorming sessions if possible.

19.3 **Review of Action Items**

The action items were reviewed and agreed upon at the end of JC 5.

**ACTION:** IPO to circulate list of actions by March 9th, 2007.

**Closing remarks:**

The JC note that this will be the last time the JC will hold a meeting in the current ICSU building as ICSU will be moving to a new location in August 2007. It was noted that the first ever IPY planning meeting was also held in this building.

The meeting closed at 1630 on Friday 2nd March, 2007. The JC moved a vote of thanks to the JC Co-chairs which was accepted with acclamation.
**Annex 1**

**LIST OF ACRONYMS**

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>AC</td>
<td>ARCTIC COUNCIL</td>
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<td>ACIA</td>
<td>ARCTIC CLIMATE IMPACT ASSESSMENT</td>
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<td>AGU</td>
<td>AMERICAN GEOPHYSICAL UNION</td>
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<td>AMAP</td>
<td>ARCTIC MONITORING AND ASSESSMENT PROGRAMME</td>
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<td>ASSW</td>
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<td>CENTRE NATIONAL D'ETUDES SPATIALES</td>
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<td>COMNAP</td>
<td>COUNCIL OF MANAGERS OF NATIONAL ANTARCTIC PROGRAMMES</td>
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<td>CANADIAN SPACE AGENCY</td>
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<td>DEUTSCHES ZENTRUM FÜR LUFT- UND RAUMFART (GERMAN AEROSPACE CENTRE)</td>
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<td>EUROPEAN GEOPHYSICAL UNION</td>
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<td>ELECTRONIC GEOPHYSICAL YEAR</td>
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<td>EOC</td>
<td>EDUCATION, OUTREACH AND COMMUNICATION</td>
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<td>EUROPEAN ORGANISATION FOR THE EXPLOITATION OF METEOROLOGICAL SATELLITES</td>
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<td>FORUM OF ARCTIC RESEARCH OPERATORS</td>
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<td>GLOBAL CLIMATE OBSERVING SYSTEM</td>
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<td>GIIPSY</td>
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<td>NSF</td>
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NSIDC  NATIONAL SNOW AND ICE DATA CENTRE
OCF   OPEN CONSULTATIVE FORUM (IPY)
ROSHYDROMET  FEDERAL SERVICE FOR HYDROMETEOROLOGY AND
              ENVIRONMENTAL MONITORING
SCDPM  SUB-COMMITTEE FOR DATA POLICY AND MANAGEMENT
SCEOC  SUB-COMMITTEE FOR EDUCATION AND OUTREACH AND
        COMMUNICATION
SCOBS  SUB-COMMITTEE FOR OBSERVATIONS
SCAR   SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH
ToR    TERMS OF REFERENCE
UNEP   UNITED NATIONS ENVIRONMENT PROGRAMME
UNESCO UNITED NATIONS EDUCATIONAL SCIENTIFIC AND CULTURAL
         ORGANISATION
WCRP   WORLD CLIMATE RESEARCH PROGRAMME
WDC    WORLD DATA CENTRE
WOCE   WORLD OCEAN CIRCULATION EXPERIMENT
WMO    WORLD METEOROLOGICAL ORGANISATION
Annex 2

IPY Joint Committee 5 Meeting

The fifth meeting of the ICSU-WMO IPY Joint Committee meeting will be held at ICSU, Paris, starting on Wednesday 28th February, 2007 at 0900 and will finish on Friday 2nd March, 2007 at 1800 (2 full days). The IPY Opening Ceremony will take place on Thursday 1st March at the Palais de la decouverte, Paris starting at 1030.

Provisional Annotated Agenda

Wednesday 28th February

1. Welcome and Introductions (0900 - 0910)

The fifth meeting of the IPY Joint Committee for the ICSU-WMO International Polar Year 2007-2008 will be opened by the IPY JC co-chair, Dr Ian Allison. Carthage Smith (??) will welcome the participants on behalf of ICSU and will provide some practical information about the meeting arrangements. If there are participants in attendance who have not been at a prior JC meeting, a brief round of introductions will be made.

Paper: List of participants: IPY-JC5/Doc 1
Required JC action: Note

2. Discussion of the Agenda (0910 - 0920)

The participants will be invited to review the provisional agenda and agree on the organization of the meeting.

Paper: Provisional annotated agenda: IPY-JC5/Doc 2 (v2.3)
Required JC action: Approve

3. Approval of JC 4 Minutes (0920 - 0930)

Draft minutes from JC 4 (as of 13th November, 2006, v3.0) have been circulated without any additional comments. Any final suggestions for amendments to those minutes should be raised and discussed.

Required JC Action: Approve

3.1 Review of Status of Action items

A list of action items from JC 4 (as of 20th November, 2006, v3.0) has been circulated. Reminders were sent out as requested at JC 4 meeting. The Chair will report on those actions from JC 4 which have not been addressed elsewhere in the provisional agenda for JC 5.

Required JC action: Note

4. Chair’s briefing (Ian Allison) (0930 – 0940)

The Chair will give a brief overview of the major issues for this meeting and the main outcomes to be discussed and decided such as keeping the momentum going throughout IPY, possible extension of IPY by 6 months and the legacy of IPY.

Papers: None
Required JC action: Note

5. Status of IPY Project Funding (0940 – 0945)
Dave Carlson will update participants on the status of IPY project funding. Dave will present up-to-date information on projects with substantial funding or partial funding. A current status list can be found on the Danish IPY website at http://www.ipy.dk/Documents/FundingStatus.pdf.

Papers: IPO Project Funding chart: IPY-JC5/Doc 5 – (Available at JC5 meeting, not before).
Required JC action: Note


Dave Carlson to update participants on the status of IPY national funding.

Papers: None
Required JC action: Note

- 6.1 Need/Strategies for extension

Joint Committee to consider impact of probable funding schedules (and delays) on duration of IPY activities.

Papers: Discussion paper on need of/strategies for an extended IPY: IPY-JC/Doc 6.1
Required JC action: Recommend

- 6.2 JC Role with respect national funding processes

Joint Committee to discuss its possible role(s) with respect to national funding processes and national committee activities.

Papers: Discussion paper on JC role with respect national funding processes: IPY-JC5/Doc 6.2
Required JC action: Recommend

Coffee Break: 1100 – 1115

7. Post IPY Events and conferences (1115 –1145)

Jeronimo/Cynan to provide an overview of progress so far. Also need to discuss the date and venue of the next Open Consultative Forum (OCF).

Required JC action: Recommend

8. Brainstorming: forging stronger links among IPY projects (1145 - 1230)

Joint Committee to discuss activities individuals might take to stimulate, support and sustain connections among IPY projects.

Required JC action: Decide

Lunch: 1230 – 1315 (Overlap with Data Management Sub-committee lunch)

9. Launch Ceremony (1315 - 1400)

Dave Carlson to provide a brief overview of events, schedule and last minute preparations for the IPY Opening Ceremony. Discussions to also include pre-planned answers for media questions (e.g. in relation to IPCC report, 2007/2008 issue if necessary etc) –

Papers: IPY Opening Ceremony Programme: IPY-JC/Doc 9 (v3)
Required JC action: Note

10. Information reports – Sub-committees (1400 - 1500)
Participants are asked to note the reports tabled for the meeting by IPY subsidiary bodies. Issues arising from these reports requiring JC action should be discussed under agenda item 10.4. Please note, data sub-committee update is covered under agenda item 13.

10.1 Report from Education and Outreach Sub-committee

The JC are asked to discuss and approve the actions highlighted in the EOC sub-committee report. These include developing further opportunities for interaction between national committees, help in seeking funding for the next EOC meeting planned for April 2007 and the IPY Branding Policy.
Required JC action: Note

10.2 Report from Sub-committee on Observations (SCOBS) and Space Task Group (STG)

Tillman Mohr to provide a brief update on the recent activities of the SCOBS and the on the first meeting of the Space Task group which took place.
Required JC action: Note

10.3 Report from the Youth Steering Committee (YSC)

The YSC have submitted a brief report to the JC. This includes information on recent Youth activities, the Youth website and the Youth Polar contests.
Required JC action: Note

10.4 Sub-committee issues requiring decision from JC

Any issues/actions arising from the Sub-committee reports to be discussed under this item.
Required JC action: Decide

Coffee break – 1500 – 1530

11. Brainstorming: JC activities to maintain IPY momentum and visibility during implementation, (1530 – 1615/1630)

Joint Committee to consider activities and actions to sustain a high scientific profile for IPY during the period of operations (e.g. IPY publications etc.).
Papers: Discussion paper from Ian Allison: IPY-JC5/Doc 11
JC required action: Decide

Thursday 1st March

JC meeting suspended due to official IPY Opening Ceremony. Schedule for this day is as follows:

Morning: IPY Opening Ceremony to be held at the Palais de la decouverte, starting at 1030 CET.
Afternoon: JC members to attend the IPY French National Committee launch event at the Senate – Palais du Luxembourg at 1400 (15, rue de Vaugirard – 75006, Paris). Transport from Palais de la decouverte to the Senate to be provided.
Evening: To be confirmed

Friday 2nd March

(JC meeting resumes at 0900 at ICSU).
12. Data (0900 – 1040)

Short introduction by Data Sub-committee co-chairs (Mark/Taco) including a brief update on the recent data sub-committee meeting (27/28 February, 2007). Other items that may be discussed include for example, a review of the overall strategy revisions matched to funding realities from the sub-committee report, practices related to compliance issues, practices on open access to IPY literature and the IPY Policy/practise on citations for data provisions.

Required JC action: Note

- 12.1 Sub-committee issues requiring decision from JC

Any issues/actions arising from the Data Sub-committee report to be discussed under this item.
Required JC action: Decide

Coffee Break – 1040 – 1100

13. Legacy (1100 - 1200)

In many venues and settings, attention turns already to IPY legacies: observational systems, data, education, next generations of polar scientists, funding and political collaborations, and others. The Joint Committee will consider its own role and possible partnerships with respect to these ideas and activities.

Papers: Summary from Heads of the Arctic and Antarctic IPY Secretariats (HAIS) meeting (OR): IPY-JC5/Doc 13
Required JC action: Note

- 13.1 Review proposed planning legacy, planning activities etc.

Required JC action: Approve

- 13.2 JC role in coordinating these ideas

Papers: None
Required JC action: Recommend

14. Reports from Arctic Council (AC) and Antarctic Treaty Secretariat (ATS) (1200 - 1215)

Observer members from AC and ATS are invited to give a brief update on recent IPY related activities here.

Papers: Reports if available otherwise brief updates at meeting.
Required JC action: Note

15. Reports from IASC, SCAR etc. (1215 – 1230)

Required JC action: Note

Lunch 1230 – 1330 (Overlap with an ad hoc EOC meeting lunch)

16. National Committee reports (1330 - 1400)

Austria
Wolfgang Schöner (Austrian IPY National point of contact) has submitted a brief report to the JC outlining the joint Russian-Austrian contribution (FERMAP) to the IPY 2007-2008 which is designed to determine the present environmental status on the FJL archipelago and to track past and present change in its natural environment.


**JC required action: Note**

**Canada**

The Canadian IPY National Committee has submitted a brief report highlighting their key IPY activities. They also list a number of concerns that the JC are asked to note.


**JC required action: Note**

**Portugal**

The Portuguese IPY National Committee has submitted an update on their Science and Education IPY activities including their major education programme ‘LATITUDE60’.


**JC required action: Note**

**Spain**

The Spanish IPY National Committee has submitted a report which includes details on the Spanish infrastructure capacities during IPY, planned research activities, polar national data centre and cultural events.


**JC required action: Note**

**UK**

The UK National Committee has submitted a brief report. This includes details of their upcoming national launch event (26th February) and information on UK funding.


**JC required action: Note**

16.1 National Committee issues requiring decisions from the JC

Any issues arising from the National Committee reports to be discussed under this item such as the list of Canadian National Committee concerns highlighted in their report (IPY-JC5/Doc 16 (ii))

**Required JC action: Decide**

17. Update on IPO activities (1400 - 1430)

Dave Carlson to provide an update on the recent and future activities of the IPO.

**Required JC action: Note**

17.1 IPO Funding

Participants are asked to recommend further sources of funding and to solicit additional national contributions to the Trust Fund. Urgent requirements are for a Data coordinator, sub-committee support (travel for co-chairs), web site, teacher materials. Information provided in IPY Budget.


**Required JC action: Approve**

17.2 IPO Work Plan

Dave to provide a brief overview of upcoming IPO activities. These include EGU, several teacher IPY related conferences etc.

**Paper: IPO work plan: January to April, 2007: IPY-JC5/Doc 17.2 (i)**

Required JC action: Note/Approve

Coffee 1500-1530

18. Any Other Business (1530 - 1600)

Participants are invited to raise other items of business requiring JC attention.

19. Closure of meeting (1600 – 1700)

   19.1 Next meeting

Participants will be invited to consider arrangements for the next session.

Required JC action: Decide

   19.2 Assessment of meeting

Participants will be invited to provide assessment of the efficiency of the meeting, particularly in consideration of the new set of meeting procedures for JC5. Participants are also asked to review the JC ‘Roadmap’ discussion paper circulated by Odd Rogne.


Required JC action: Comment/Decide

   19.3 Review of Action items

The Chair will review the action items arising from this meeting, noting those responsible for the actions and the required completion dates.

Paper: To be provided at meeting

Required JC action: Note

CLOSE