



The International Arctic Science Committee

The 1994 IASC Meeting

Report

2 - 6 May, 1994
Ilulissat, Greenland

Additional copies available from:

The Secretariat
International Arctic Science Committee
Post Office Box 5072, Majorstua
0301 Oslo
Norway
Fax: int. + 47 - 22 - 95 96 01



The 1994 IASC Meeting Report

Ilulissat, Greenland

2 - 6 May, 1994

Contents

Item	Page
Executive Summary	i
Participants	1
1. Opening and Reporting Session.....	3
1.1 Welcome and practical information	3
1.2 Application from Switzerland for membership on Council	3
1.3 Adoption of the agenda	3
1.4 President's report	3
2. General	5
2.1 Reviewing the IASC science agenda.....	5
2.2 Arctic Science Conferences	6
2.2.1 Arctic Science Conference	6
2.2.2 International Conference for Arctic Research Planning - 1995	6
3. Science Initiatives	9
3.1 Global Change	9
3.2 Effects of Increased UV-Radiation in the Arctic	10
3.3 ISIRA - The International Science Initiative in the Russian Arctic	10
3.3.1 ISIRA, Disturbance and Recovery of Arctic Terrestrial Ecosystems.....	10
3.3.2 ISIRA, LOICZ - Land Ocean Interactions in the Coastal Zone.....	11
3.3.3 ISIRA, Data guides, translation	12
3.3.4 ISIRA, Organization.....	13
3.4 Human and Social Sciences.....	13
3.5 Arctic Glaciology	13
3.6 Working Group for Geophysical Compilation and Mapping	14
3.7 Working Group for Marine Geology.....	14
3.8 IDDEA - International Data Directory of Environment in the Arctic.....	15
3.9 Workshop on Arctic Ocean Studies - Arctic Ocean Grand Challenge.....	15

3.10	Other Initiatives.....	16
	3.10.1 Arctic Encyclopedia.....	16
	3.10.2 Guide to Arctic Research Stations.....	16
	3.10.3 Arctic Co-operation in Space Geodesy and Geodynamics	17
	3.10.4 CASP - Cooperative Arctic Seismological Program	17
	3.10.5 The Victor Project	17
4.	Regional Board Meetings.....	19
5.	Administrative Issues	21
5.1	Election and term of service	21
	5.1.1 Election of a new vice president.....	21
	5.1.3 Term of service.....	21
5.2	Election Papers.....	21
5.3	Strengthening the secretariat.....	22
5.4	IASC Handbook.....	22
6.	IASC Economy	23
6.1	IASC general fund - financial report for 1993.....	23
6.2	IASC general fund - draft budget for 1994.....	23
6.3	Standing finance committee.....	23
7.	Other Business.....	25
7.1	Relations to other organizations.....	25
	7.1.1 SCAR.....	25
	7.1.2 IPA - the International Permafrost Association	25
	7.1.3 IGBP - WCRP	26
7.2	Reports from Arctic Intergovernmental Co-operation	26
	7.2.1 The Arctic Environmental Protection Strategy (AEPS)	26
	Second Ministerial Conference	26
	AMAP - the Arctic Monitoring and Assessment Programme	27
	CAFF - Conservation of Arctic Flora and Fauna.....	28
	7.2.2 The Nordic Council's Arctic Conference	28
	7.2.3 The Northern Forum	28
	7.2.4 Summary Report from PICES - North Pacific Science Organization	29
7.3	Information on major arctic scientific cruises.....	29
7.4	Managers of national arctic science programs.....	29

7.5	European Collaboration in Polar Research.....	30
7.6	Reports from other arctic science organizations	30
	7.6.1 AOSB - Arctic Ocean Sciences Board	30
	7.6.2 IUUCH - International Union of Circumpolar Health	30
	7.6.3 ECOPS - European Committee on Ocean and Polar Sciences	30
	7.6.4 MAB/NSN - Man and the Biosphere / Northern Science Network	31
7.7	The changing scene of international science in the arctic	31
8.	Next IASC Meetings.....	33
9.	Closing	33
10.	Information Section.....	33
	 LIST OF APPENDIXES	 35



The 1994 IASC Meeting Report

Ilulissat, Greenland

2 - 6 May, 1994

EXECUTIVE SUMMARY

The 1994 IASC Meeting was held 2 - 6 May in Ilulissat, Greenland, and was a joint meeting of Council and the Regional Board.

Switzerland had applied for membership on Council, and Council unanimously agreed to welcome the Swiss Polar Research Committee as the fifteenth national member organization in IASC.

Reviewing the IASC Science Agenda and establishing science priorities had been one of the main topics at the first meeting of the new Executive Committee. Council revised the paper, setting out IASC criteria by which it gives priority to scientific programmes. As to **presentation** of the science priorities, these will be grouped into:

- Arctic Processes of Relevance to Global Systems
- Impacts of Global Changes in the Arctic Region and its Peoples
- Natural Processes within the Arctic
- Resource Use / Ecosystem Dynamics

An *International Conference for Arctic Research Planning - 1995*, as suggested by the US member, was agreed upon and initial planning discussed. The conference will focus on the IASC priority themes as listed above.

The outcome of the conference will be an implementation plan for the IASC science agenda.

A preliminary invitation for an Arctic Science Conference in 1998 was received from Norway.

GLOBAL CHANGE:

Council was informed that a new working group had been appointed with representatives from all sciences and most of the major arctic global change programmes; that the Reykjavik report, *Scientific Plan for a Regional Research Programme in the Arctic on Global Change*, was in print; and that an *Arctic Global Change Programme Office* had been set up at the Arctic Centre, Rovaniemi, Finland.

Council decided that a workshop should be held on *IASC Science Priorities in Global Change Research in the Arctic*, in connection with a meeting of the new working group, and that a number of representatives from relevant organizations should be invited.

EFFECTS OF INCREASED UV-RADIATION IN THE ARCTIC:

IASC had tasked the SAC of SCOPE to work out a report summarising present knowledge, and a science plan covering effects on humans, terrestrial and marine ecosystems, and effects on northern societies and settlements. This would be done through two workshops and in cooperation with arctic experts. Their report is expected in March, 1995, and implementation of research needs will be discussed at the *1995 Arctic Science Planning Conference*.

The 1994 IASC Meeting Report

ISIRA - THE INTERNATIONAL SCIENCE INITIATIVE IN THE RUSSIAN ARCTIC:

Three activities had been given priority:

- *Disturbance and Recovery of Arctic Terrestrial Ecosystems*, an international workshop to be held in September, 1995 to identify possible cooperative research projects;
- A LOICZ-type project called *The Laptev Sea Geosystem*, building on bilateral cooperation, but suggested to be developed into a co-ordinated multilateral programme;
- Data, guides, translation: A Russian seismic data project had been initiated as a test project for transforming Russian arctic data to digital form. Guides to Russian arctic science and translation were considered in connection with both the activities mentioned, and supplemented by a special initiative.

HUMAN AND SOCIAL SCIENCES:

Council recognized the need for stronger input from these sciences into IASC projects, and agreed to invite IASSA to become an advisory group to IASC.

IASC WORKING GROUP ON ARCTIC GLACIOLOGY:

Council decided to formally appoint a working group based on terms of reference and a draft science plan worked out by an ad-hoc group. The group will finalize the science plan and convene a workshop on arctic mass balance at the University of Silesia in Poland, 19 - 21 September, 1994.

WORKING GROUP FOR GEOPHYSICAL COMPILATION AND MAPPING:

This group had issued a draft version of a shaded relief map of arctic bathymetry and topography, and planned a digital rendition of GEBCO sheet 5.17. See also the Russian seismic data project mentioned under ISIRA.

WORKING GROUP FOR MARINE GEOLOGY:

This working group had two proposals that were merged into the *Laptev Sea Geosystem* as mentioned under ISIRA.

IDDEA - the International Data Directory of Environment in the Arctic:

IDDEA is planning an international directory of environmental databases in the Arctic. A special Steering Committee had initiated this planning, and had asked IASC to adopt it as an IASC project. IDDEA was adopted.

LATE PROPOSALS:

CASP - Cooperative Arctic Seismological Program and Victor Project (International Arctic Under-Ice Expedition) were both tabled at the meeting, but expressions of interest by IASC members would have to be delayed until after national consultations.

THE REGIONAL BOARD had held a meeting 15 - 16 November, 1993. Within IASC they will consider regional issues and be supportive to implementing IASC projects. They had been tasked to consider a "Code of Conduct for Research in the Arctic" by the Executive Committee. Dr. Gerald Lock, Canada, was elected as new chairman of the Regional Board.

The 1994 IASC Meeting Report

NEW VICE PRESIDENT: Dr. Dieter K. Fütterer, Germany was elected as a new Vice President of IASC to replace Dr. Eileen Buttle, UK.

ADMINISTRATIVE ISSUES: an *IASC Handbook* had been published. The IASC General Fund was implemented in 1993, and almost all countries had been able to get these payments included in their budgetary systems. The General Fund covers some common expenses (except for the secretariats) which cannot be referred to national funding.

RELATIONS to SCAR, IGBP, WCRP, IUCH, AOSB, AEPS, ECOPS, IPA and Northern Forum were discussed, and steps for developing these relations were agreed upon where appropriate.

Finland extended an invitation to the 1995 IASC meeting, to be held in Rovaniemi, Finland, 24 - 26 April, 1995.



The 1994 IASC Meeting Report

Ilulissat, Greenland

2 - 6 May, 1994

REPORT

Participants:	Canada:	E. Fred Roots, Council Gerald S. H. Lock, Regional Board
	Denmark:	Jens Peder Hart Hansen, Council and Regional Board
	Finland:	Pentti Mälkki, Council Riitta Mansukoski, alternate for Regional Board
	France:	Claude Lorius, Council
	Germany:	Dieter Fütterer, Council
	Iceland:	Magnús Magnússon, Council and Regional Board
	Japan:	Takao Hoshiai, Council
	The Netherlands:	Louwrens Hacquebord, Council
	Norway:	Arnoldus Schytte Blix, Council Olav Orheim, Regional Board
	Poland:	Krzysztof Birkenmajer, Council
	Russia:	Igor S. Gramberg, Council Boris Melnikov, Regional Board
	Sweden:	Bert Bolin, Council Anders Karlqvist, Regional Board
	Switzerland:	Anne-Christine Clottu Vogel, Council
	United Kingdom:	Eileen Buttle, Council
	USA:	Oran R. Young, Council Robert W. Corell, Regional Board
Observers:	Denmark:	Karsten Secher Jørgen Taagholt
	Poland:	S. Maciej Zalewski
	Russia:	Garrik E. Grikurov
	Sweden:	Dick Hedberg
	Switzerland:	Atsumu Ohmura
	USA:	Loren Setlow Gunter Weller
	Danish Polar Center:	Iris Madsen
	IASC Secretariat:	Odd Rogne, Executive Secretary Maryanne Rygg

A list of full names and addresses is included as **Appendix I**.

1. OPENING AND REPORTING SESSION

1.1 WELCOME AND PRACTICAL INFORMATION

The President, Professor Magnús Magnússon, welcomed participants to the 1994 IASC Meeting, which was a joint meeting of Council and the Regional Board.

Participants were welcomed to Greenland by Dr. Jens Peder Hart Hansen, Chairman of the Commission for Scientific Research in Greenland, the local organizer and the national member organization of IASC.

1.2 APPLICATION FROM SWITZERLAND FOR MEMBERSHIP ON COUNCIL

As this was an application for membership on Council, only Council members participated in the discussion.

Switzerland had applied for membership in early October 1993, and Council members had shortly thereafter received the application for consideration. All comments back to the Secretariat from Council members had been positive.

The Executive Committee had agreed that a representative from the Swiss Polar Research Committee should be invited to this meeting, and that the Swiss application should be placed on the agenda immediately after the opening of the meeting.

The Swiss representative gave a survey of Swiss polar research, and presented a justification for their application both as to meeting the formal requirements in the IASC Rules and Procedures, and from a more scientific point of view.

Council unanimously agreed that Switzerland was qualified for membership on IASC Council, and welcomed the Swiss Polar Research Committee as the fifteenth national member organization.

Action: Rogne

1.3 ADOPTION OF THE AGENDA

The agenda as distributed in advance was adopted. However, a few additional items were included under 3.10 and some papers were tabled which gave additional information on the agenda items listed.

1.4 PRESIDENT'S REPORT

Due to the postponed election of President and Executive Committee, the report covered only the period from October, 1993. The President had attended the Regional Board meeting in Washington D.C., USA in November 1993 and also visited the National Academy of Sciences Polar Research Board as well as the Division of Polar Affairs in the US State Department.

The 1994 IASC Meeting Report

Developing the new Executive Committee as a team in which each member had specific tasks, had been one of his efforts. The new Executive Committee had had an in-depth discussion on the need for strong focusing of the IASC science agenda, and both this issue and other actions were fully covered in the agenda papers to the 1994 Meeting.

Copies of *IASC Highlights 1991 - 1994* were tabled. This paper gives a brief survey of IASC achievements during the period mentioned. Please refer to **Appendix II** for further details.

2. GENERAL

2.1 REVIEWING THE IASC SCIENCE AGENDA

As reported by the President, this issue had been one of the main topics at the Executive Committee meeting. A paper had been drafted with their recommendations and sent to all Council members for discussion in the national committees prior to the 1994 IASC Meeting.

The paper was discussed in depth, and a small working group was tasked to revise the document. The group prepared a revision of the paper setting out IASC criteria by which it gives priority to scientific programmes. With two further amendments (adding *in the context of internationally agreed programme* and giving a separate bullet point to the concerns of the arctic peoples), the paper was agreed. There was a long discussion about how to present science agenda priorities and conference themes, reflecting their origins (Global Change, ISIRA, Reference to Policy), but avoiding confusion. Finally it was agreed as follows:

I. Arctic Processes of Relevance to Global Systems

- Mass balance of glaciers and ice sheets
- Terrestrial ecosystems.

II. Impacts of Global Changes on the Arctic Region and its Peoples

- Regional cumulative impacts
- Human dimensions
- Effects of increased UV-radiation.

III. Natural Processes within the Arctic

- Marine/coastal/riverine systems
- Disturbance and recovery of terrestrial ecosystems

IV. Resource Use / Ecosystem Dynamics

As in Oran Young's paper, to be refined by further consultation with the community.

ISIRA would attach to each programme where the Russian Arctic is involved, and especially to III.

Council agreed to the revised text as shown in Appendix III. The presentation of the science priorities (item 2 in the appendix) will be rewritten and thereafter reviewed by the Executive Committee according to the four themes listed above. Action: Rogne

The 1994 IASC Meeting Report

2.2 ARCTIC SCIENCE CONFERENCE

2.2.1 Arctic Science Conference

According to the *IASC Founding Articles*, "An Arctic Science Conference will be convened periodically by the IASC to identify key scientific questions and issues".

At the last council meeting, "Council concluded that 1997 would be a suitable year, and tasked the new Executive Committee to initiate planning for a conference as an immediate priority".

However, our US member suggested an *International Conference for Arctic Research Planning - 1995* (see item 2.2.2 for further details) prior to the Executive Committee Meeting.

The Executive Committee "appreciated this generous offer, which also included financial resources needed to put on a successful conference. It was also agreed that a planning conference as suggested would be most useful, and would not preclude a possible science conference in 1997".

As for an *Arctic Science Conference* in 1997, Council members had been asked for invitations at this meeting. An invitation or proposal should contain:

- A basic funding commitment in the order of \$100,000.
- Some information on other national support such as an organizing group, etc.

There were no invitations for an Arctic Science Conference in 1997. However, a preliminary invitation for a conference to be held in Tromsø, Norway in 1998 was received from Norway.

Council accepted the preliminary invitation from Norway, and noted that the year 1998 could fit well considering the Planning Conference to be held in late 1995. Council further asked the Norwegian member to confirm the invitation prior to the next IASC meeting in April, 1995.

Action: Blix, Orheim

2.2.2 International Conference for Arctic Research Planning - 1995

As mentioned under the previous item, a proposal for an *International Conference for Arctic Research Planning - 1995* was received from our US member in late autumn 1993, and a positive response had been given by the Executive Committee, which also made some comments to the proposal. The US Polar Research Board had considered the comments made, and a slightly revised proposal (see **Appendix IV**) had been circulated as a late paper.

At the meeting the US member presented the following issues:

- Selection of conference themes / science priority initiatives.
- Composition of committees.
- Timetable of conference preparations.

The 1994 IASC Meeting Report

Council decided that an International Conference on Arctic Research Planning should be held as proposed by the US member, and expressed their appreciation for preparation of the proposal and for the funding support.

Council agreed that the product of the 1995 conference should be an implementation plan/strategic plan for the next phase of the IASC Science Agenda, rather than a conventional set of conference proceedings.

Council further agreed to the suggested conference themes, all of which except for “Resource Use - Ecosystem Dynamics” had been agreed upon as priorities under 2.1, Reviewing the IASC Science Agenda. Council noted that “Resource Use - Ecosystem Dynamics” would provide a particularly good opportunity for strengthening the dialogue between the scientific community and the policy community, and agreed that this theme should be prepared equally to the other themes.

Council agreed to the suggested “Program Steering Committee” and the “Local Organizing Committee”, and tasked the IASC Executive Committee to approve any other members on the “Program Steering Committee”, if needed.

Action: Young, Rogne

3. SCIENCE INITIATIVES

3.1 GLOBAL CHANGE

A progress report by Dr. Gunter Weller, Chairman of the IASC Working Group on Global Change, had been distributed as an agenda paper, and is enclosed as Appendix V to this report.

Council noted that:

- A new Working Group had been appointed, including representatives from all sciences and most of the major arctic global change programmes as agreed at the last Council meeting.
- The Reykjavik report: *Scientific Plan for a Regional Research Programme in the Arctic on Global Change* was distributed at the meeting in its final draft version, and that it would be printed in the near future.
- An *Arctic Global Change Programme Office* had recently been set up at the Arctic Centre, University of Lapland, Rovaniemi, Finland, and that its terms of reference had been agreed upon.
- A bi-polar brochure had been published by the Global Change Center at the University of Alaska, Fairbanks and that it had been endorsed by the presidents of IASC and SCAR.

As for 1994, Dr. Weller proposed an *Impacts Assessment Workshop* to be held in conjunction with the first meeting of the new working group in October.

During the discussion, the proposal for an *Impacts Assessment Workshop* was merged with the need for agreeing on science priorities in global change research in the Arctic. Please find enclosed as Appendix VI the paper *IASC Science Priorities in Global Change Research in the Arctic* for further details.

Council decided on the following priorities for IASC action on global change research in the Arctic:

1. ***Terrestrial Ecosystems***
2. ***Mass Balance of Glaciers and Ice Sheets,***
3. ***Regional Cumulative Impacts, and***
4. ***Human Dimensions.***

Council noted that the social sciences or the human dimensions of global change in the Arctic needed to be strengthened, and decided to ask IASSA for advice and help in formulating appropriate research priorities in global change, especially on themes 1, 3 and 4 mentioned above, to be pursued by IASC.

Council further decided that a workshop should be held involving the IASC Global Change Working Group and invited experts, including members of SCAR, IASSA, START and IPA. The workshop should initiate a process leading to an implementation strategy for the priorities mentioned, and this process should be completed at the 1995 Arctic Science Planning Conference.

Action: Weller, Hacquebord

The 1994 IASC Meeting Report

3.2 EFFECTS OF INCREASED UV-RADIATION IN THE ARCTIC

At the 1993 Council meeting it was agreed to ask the Scientific Advisory Committee (SAC) of SCOPE/IUPAB for advice on what initiatives would be appropriate for increasing our knowledge of the effects of increased UV-B radiation on arctic biota.

The SAC of SCOPE confirmed that an initiative was both timely and justifiable, and they agreed to work out a report summarising present knowledge, and a science plan covering effects on humans, terrestrial and marine ecosystems, and possibly also effects on northern societies and settlements.

Two workshops were planned to work out this report, one in Copenhagen 14 - 15 April, 1994 in cooperation with the Commission for Scientific Research in Greenland, and a final and closed workshop at the end of the year.

Dr. Jens Peder Hart Hansen reported from the workshop in Copenhagen, concluding that this work is well in progress for terrestrial and marine ecosystems, while for human health a small extra workshop is needed before the final workshop. Although a good social scientist was engaged, additional social scientists would be welcomed.

Council was informed that the report - at least in draft version - would be available before the next Council meeting.

Council confirmed the planning decisions made by the Executive Committee, and decided that this initiative and implementation of research as recommended in the expected report, should be included in the discussions at the 1995 Arctic Science Planning Conference.

Action: Rogne

3.3 ISIRA - THE INTERNATIONAL SCIENCE INITIATIVE IN THE RUSSIAN ARCTIC

At the last Council meeting, it was agreed that ISIRA "was an important initiative to which IASC should give priority. A special group should be identified as soon as possible to carry this initiative forward and report to the Executive Committee." Dr. Fred Roots was appointed as Chairman of the group.

Members of the ISIRA Working Group were nominated during summer/early autumn 1993, and the first meeting had been held 18 - 19 November, 1993. The report from that meeting, and a list entitled *ISIRA - Russian Priorities* received after the meeting, together with an annotated list entitled *Proposals to ISIRA received after 15 November, 1993* had been included in the agenda papers.

The Executive Committee had recommended a strong focusing of activities, and the discussions at this meeting followed these priorities:

3.3.1 Disturbance and Recovery of Arctic Terrestrial Ecosystems

The aim of this project is to organize an international workshop in Rovaniemi, Finland 24-30 September, 1995 to identify possible cooperative research projects. Attendance by invitation, except members of IASC who can secure their own funding. Some basic funding had already been granted by NATO. However, some additional funding is required, and contacts with other sources are being pursued. Work is also ongoing to identify key scientists to be invited to the workshop.

The 1994 IASC Meeting Report

The Executive Committee had recommended that cooperative projects evolving from this workshop be linked to GCTE/IGBP, and that priority be given to a few well-focused projects. Professor Robert M. M. Crawford, UK had been appointed Chairman of the Organizing Committee. The GCTE Core Office had been informed about this initiative.

Council agreed to the recommendations made by the Executive Committee, and asked the Organizing Committee to inform the IASC Executive Committee when the initial plans for the workshop are ready. Action: Rogne

3.3.2 LOICZ - Land Ocean Interactions in the Coastal Zone

The Russian Arctic coastal zone, including the deltas of the big rivers and other processes, offers unique sites for studying both natural processes and impacts of man. A LOICZ-type project¹ had been suggested as the LOICZ goals and objectives were very suitable for this area, and as planning activity could build on the LOICZ science plan.

The Executive Committee had agreed to this proposal, and recommended that:

- a project should be implemented on one site, for instance the delta of one of the larger Russian rivers;
- as Canada is developing a LOICZ project in their part of the Arctic, comparative studies should be an interesting opportunity; and
- the Executive Secretary was tasked to contact the Chairman of LOICZ Scientific Steering Committee, Dr. Patrick M. Holligan, and ask for further advice and guidance.

A late paper tabled at the meeting reported the recommendations from Dr. Holligan, including an invitation for a joint planning group.

Council was also informed about a number of proposed and/or already started projects within the geosciences that could act as nuclei of and could form significant components of such a more comprehensive, but well-focused LOICZ-related study within ISIRA. Out of these projects, *The Laptev Sea Geosystem* was farthest developed, see Appendix VII.

Council decided that it would be open to co-operation in an effort to plan a LOICZ project in the Arctic (with an emphasis on the Russian Arctic), but would at present give priority to developing a more limited LOICZ-type project into an international effort.

Further, Council agreed to adopt "the Laptev Sea Geosystem" as an ISIRA project, and subject to approval of Russian authorities, develop the ongoing bilateral project into a co-ordinated multi-lateral programme. This could be achieved both through initial workshops and later in the context of the 1995 Arctic Science Planning Conference. Preliminary interest was expressed by several members.

In general, bilateral projects would be easiest to implement. Workshops were recommended for coordinating bilateral projects in the same area, for developing the overall science plan, and for bringing together involved scientists including those not coming under bilateral agreements, but who have some other funding. Council agreed to develop the appropriate rules and procedures for such an approach using "The Laptev Sea Geosystem" as a first case, and to do so in close contact with Russian authorities.

¹ LOICZ: one of the core programmes under IGBP/Global Change

The 1994 IASC Meeting Report

Members of IASC who are interested in this project area were asked to make their interest known to the Executive Secretary. Provided there is sufficient interest and subject to approval by the Russian authorities, a multinational workshop will be convened.

Action: Gramberg, Fütterer, Rogne

3.3.3 Data, guides, translation

Russian scientists and their contribution to world science are not well known in the West. Improving this situation is a basic requirement for meaningful scientific cooperation. Information on leading Russian arctic scientists and institutes, as well as translation of the most important publications, need to be addressed - see **Appendix VIII, Guides to Russian Arctic Science** for a more specific proposal on guides and translation.

Another need identified was the need to transform the considerable amount of Russian arctic data from analog to digital form.

The Executive Committee had recognized these needs and recommended that this work should be organized around the special science projects under ISIRA, and that they constitute a part of the preparation for a workshop (guides to Russian arctic scientists and institutes) or an integral part of the projects (translation, data).

Guides, translation

In addition to the recommendations from the Executive Committee, IASC had received an offer to take on the guides/translation project.

Council decided that this offer should be further clarified and finally approved by the Executive Committee.

Action: Rogne

Data

The Executive Committee had recommended that a Russian arctic seismic data project should be initiated as a test project, and that one Russian and one western scientist should be identified to carry this project forward. A NATO grant was suggested as a possible source of funding. Drs. Yuri G. Kiselev, Russia and Ron Macnab, Canada had been nominated.

A proposed application for funding called *Recovery and Preservation in Digital Form of Russian Arctic Ocean Seismic Data* had been distributed as a late paper, see **Appendix IX**.

The proposal received favourable comments. However, the suggested benefits for commercial participants (p. 2, first paragraph, last sentence) would not be in accordance with the IASC principle that all results should be public. Further, the proposers should be asked to look at the differences in Russian and western salaries.

With the comments mentioned, Council agreed that this was a good approach and proposal, and recommended that an application be sent to NATO after the necessary corrections are made, and that other funding sources be explored.

Action: Rogne, Macnab

The 1994 IASC Meeting Report

3.3.4 Organization

The Executive Committee had earlier discussed a possible new organizational structure for ISIRA, namely a steering committee and a scientific working group for each major project.

Council agreed that scientific working groups for each project would be needed in due time. However, the present general ISIRA Working Group should be maintained, noting the guidance given by the Executive Committee.

3.4 HUMAN AND SOCIAL SCIENCES

There have been various proposals on how the human and social sciences should be incorporated in the work of IASC.

At the last Executive Committee meeting it was agreed to propose IASSA as an advisory group to IASC, an arrangement similar to that with IUCH, and tasked Dr. Oran Young to draft a proposal to Council accordingly. This proposal is enclosed as Appendix X.

Council agreed to invite IASSA to become an advisory group to IASC, and to request IASSA to appoint a contact person if they accept the invitation.

Action: Rogne

3.5 ARCTIC GLACIOLOGY

An ad-hoc group had earlier discussed terms of reference and a science plan by correspondence, and their first meeting had been held in Cambridge, UK in September, 1993. At this meeting they had agreed on the terms of reference and the elements of a science plan.

Finalization of the science plan had proceeded after the meeting, and a draft is enclosed as Appendix XI together with the terms of reference.

Council agreed that:

- *an IASC Working Group on Arctic Glaciology should be formally appointed. Council members should be asked to confirm their representative in this group. The group should be appointed for a four-year term.*
- *the suggested terms of reference were approved.*
- *Council noted with approval that the draft science plan was related to Global Change, and expected to receive a final version after the Working Group held its annual meeting this year. Council further encouraged this group to contact and develop a relation to the SCAR Working Group on Glaciology.*
- *Council agreed to support the proposed workshop with up to \$3500.*

The 1994 IASC Meeting Report

3.6 WORKING GROUP FOR GEOPHYSICAL COMPILATION AND MAPPING

A report from the working group is enclosed as **Appendix XII**. Participants at the 1994 IASC meeting also received a new shaded relief map of arctic bathymetry and topography in draft version. **Council members were asked to send any comments directly to Mr. Ron Macnab**. When the map is ready for publishing, more detailed information will be made available through *IASC Progress*.

Council noted plans for a digital rendition of GEBCO sheet 5.17, and plans to release the basic grid into the public domain, as this could be useful to several arctic marine science groups.

Council confirmed the nomination of Dr. Victor A. Poselov, Russia, as the Seismic Coordinator for this working group.

As to *Recovery and Preservation in Digital Form of Russian Arctic Ocean Seismic Data* (Appendix IX), the outcome of that discussion is reported under 3.3.3.

3.7 WORKING GROUP FOR MARINE GEOLOGY

This working group was established last year and the activities have mainly been at communication level. Together with the Working Group for Geophysical Compilation and Mapping, this working group has been testing an e-mail newsletter.

Two draft proposals had been received:

- *The Laptev Sea System*, a draft by Dr. Leonard Johnson, Chairman of the Working Group for Marine Geology, and
- *Quaternary River Discharge in the Arctic Ocean and Climate Change*, a draft by Dr. Dieter K. Fütterer. This draft had also been presented at the AOSB meeting, and a programme with this title is under planning by AOSB, as described in the latest report from AOSB.

As both drafts were focused on research in the Russian Arctic, they were discussed under ISIRA. Please see this report item 3.3.2 LOICZ and Appendix VII.

Council noted that there were more plans than resources for research in arctic marine geology, and the working group could be useful in agreeing on priorities.

As reported under 3.3.2: ***Members of IASC who are interested in participating in "the Laptev Sea Geosystem" were asked to make their interest known to the Executive Secretary. Provided sufficient interest and approval of the Russian authorities, a multinational workshop will be convened.***

Action: Rogne

The 1994 IASC Meeting Report

3.8 IDDEA - INTERNATIONAL DATA DIRECTORY OF ENVIRONMENT IN THE ARCTIC

GRID-Arendal and USGS Arctic Environmental Data Directory (AEDD) had initiated the planning of an international data directory for environmental data in the Arctic. An international workshop and a meeting of an Interim Steering Committee had been held. This initiative is almost identical to the *Catalogue of Arctic Scientific Databases* which was discussed earlier within IASC. The Executive Secretary and others within IASC had been involved in developing the IDDEA proposal, see a summary enclosed as Appendix XIII.

Based on the discussions in the Interim Steering Committee, its Chairman Mr. Svein Tveitdal had sent a letter to IASC asking if IASC was interested in adopting IDDEA as a formal IASC activity and views on organizational structure and terms of reference for the proposed IDDEA Council and Executive Committee.

The IASC Executive Committee had earlier commented very positively on this proposition.

Council agreed to adopt this initiative as an IASC project based on the understanding that:

- a. the IDDEA Steering Committee is open to one representative from each country providing directory information on relevant arctic data;*
- b. costs associated with establishing the service and meetings of the Steering Committee are covered by participants. However, IASC would be positive to promoting IDDEA both through its information publications and otherwise, as indirect assistance to the Steering Committee in obtaining funding and support.*
- c. appointing and guiding the Scientific Advisory Board would be the prime concern for IASC, in consultation with the Steering Committee.*

The Executive Secretary was tasked to report the outcome of a meeting with IDDEA to the Executive Committee, who also would appoint any members from IASC.

Action: Rogne

3.9 WORKSHOP ON ARCTIC OCEAN STUDIES - ARCTIC OCEAN GRAND CHALLENGE

At the last Council meeting, it was decided that: *IASC should join in this tripartite initiative. However, it was expected that one of the partners would take the lead and that all IASC members will be invited.*

ECOPS was the lead organization, with AOSB and IASC as partners.

In the autumn of 1993, IASC was formally invited by ECOPS to become a co-organizer and to appoint an IASC member to the Planning Committee. Dr. Gendrikh V. Alekseev, AARI, St. Petersburg, was appointed as the IASC representative.

The workshop has turned into a European research conference, and is called: *Arctic Ocean Grand Challenge*. It will be held 2 - 7 September in Helsinki, Finland. A conference announcement has been widely distributed.

Council noted this item.

The 1994 IASC Meeting Report

3.10 OTHER INITIATIVES

3.10.1 Arctic Encyclopedia

A proposal for an *Arctic Encyclopedia* had been received from Dr. Boris Melnikov, Russia, and it had been discussed at the Regional Board meeting in November, 1993 and at the last Executive Committee meeting.

The Regional Board had suggested that the proposal be further developed by:

- a. Considering users/market potential, and financial implications;
- b. Considering whether or not the scientific community will make voluntary contributions to make the economy of the project viable;
- c. The proposal could be combined with an updated Polar Atlas approach, but with a strong scientific basis, i.e.:
 - state of arctic knowledge, and highly referenced;
 - ample illustrations fit for overhead-copying, which are often needed.

The Executive Committee had *found the proposal interesting, but they were uncertain if the demand for a traditional encyclopedia would cover the costs. This question could only be answered by a publisher.*

The alternative proposal of combining the idea with an updated Polar Atlas (which was published in 1978) approach, as discussed at the Regional Board meeting, was anticipated to be easier to implement and possibly also more in demand.

The project had been discussed with a western publisher, but with a negative outcome due to uncertainties whether or not the income would cover the costs.

Dr. Melnikov presented a more detailed proposal at the meeting, and proposed that the idea be approved at this meeting and that a few persons were nominated to make a more accurate cost estimate and explore funding.

Council concluded that this initiative had to be a commercial operation and the name of a polar publisher and a contact person was given.

As to the *Polar Atlas* suggested earlier, the report back was that the earlier publisher could be willing to explore it further, but was uncertain about the expected demand and they would need some extra funding for publishing a new edition.

Further deliberations were left to the Executive Committee.

Action: Melnikov

3.10.2 Guide to Arctic Research Stations

A minor initiative was suggested at the Council meeting last year to collect some standard information in a common format on all arctic research stations and sites.

During follow-up it was discovered that a group around MAB/NSN had already started a similar initiative, and there was no need to duplicate their efforts. At a later stage IASC may wish to publish a more general and selective guide.

Council noted the development.

The 1994 IASC Meeting Report

3.10.3 Arctic Co-operation in Space Geodesy and Geodynamics

Last year's Council decision had been reported to the group. A letter had been received recently from the group saying that due to unforeseen circumstances, a proposal would have to come later.

3.10.4 CASP - Cooperative Arctic Seismological Program

A late proposal for an international high arctic seismic network and data center, etc. had been received and tabled at the meeting, see Appendix XIV.

Some preliminary investigations had revealed that there were some networks covering parts of the Arctic, and Council members added stations not mentioned in the documents.

However, Council decided that it would be premature to make a decision at this meeting. Council members should be asked for written comments, and these should be discussed at the next Executive Committee meeting before an answer is given.

Action: Rogne

3.10.5 The Victor Project

A proposal called *Victor Project* (International Arctic Under-Ice Expedition) had been received late and was tabled at the meeting.

The Victor Project is an earlier US-Russian project idea that did not succeed in obtaining national funding, and the proposal was to make it an international project both scientifically and financially. The project is organized around a special logistical opportunity (use of a Russian submarine).

Council noted this rather expensive logistical opportunity. However, Council members felt a need to consult their national committees before any further comments could be given.

Action: Rogne

4. REGIONAL BOARD MEETINGS

The Regional Board had held a meeting 15 - 16 November, 1993 in Washington, D.C. and another short meeting in Ilulissat.

The Chairman of the Regional Board, Professor Anders Karlqvist, reported from both meetings, and a summary from the Washington meeting was enclosed in the agenda papers.

Professor Karlqvist emphasized the supportive role of the Regional Board, their discussion on an Arctic Science Conference and the importance of implementing some IASC projects in the near future, including ISIRA.

The Regional Board was very pleased to work closely with Council through holding joint meetings, and they could provide a link to some arctic organizations if requested by Council.

The Regional Board would take on the *Code of Conduct* task given them by the Executive Committee.

Later, the Regional Board held a very brief meeting in Kangerlussuaq at the end of the stay in Greenland. Due to time limitations, only a few issues could be discussed.

As to IASC in general, the Regional Board emphasized *quality of science* as the main priority. Further, the Regional Board confirmed its strong support for the 1995 Arctic Science Planning Conference, notably basket 4 due to its link to the arctic policy community.

The Regional Board noted that some of the concerns mentioned by Dr. Fred Roots in his closing remarks at the joint meeting, could be relevant for a discussion in the Regional Board. Any further discussion was postponed until his talk was available in print.

As to a Code of Conduct for Doing Research in the Arctic, the Regional Board agreed that all available examples of such codes should be collected and a discussion paper should be worked out. As a possible plan for progress, a final recommendation at the 1995 Conference should be considered.

At this last meeting, Professor Karlqvist was heartily thanked for his service as the first chairman of the Regional Board, and Dr. Gerald Lock was unanimously elected as his successor for a three-year period.

5. ADMINISTRATIVE ISSUES

5.1 ELECTION AND TERM OF SERVICE (COUNCIL MEMBERS ONLY)

5.1.1 Election of a new vice president

Council had been informed that Dr. Eileen Buttle, UK, regretfully had to resign from IASC after this meeting.

Dr. Buttle had been an active and highly respected member of Council, and she had also been elected as Vice President last autumn. Dr. Buttle was thanked for her valuable contribution to the development of IASC.

As a consequence of Dr. Buttle's retirement, there was a need for electing a new Vice President.

Council unanimously elected Dr. Dieter K. Fütterer of Germany as the new Vice President of IASC.

5.1.3 Term of Service

As the appointment of the new Executive Committee was done by correspondence after the last Council meeting, the term of service had not been discussed. According to our *Rules and Procedures*, item 4.3:

The appointed officers serve for a term of approximately four years, with some limited flexibility due to varying meeting dates. A staggered system of appointment to the Executive Committee is adopted to provide continuity, with two members of the Executive Committee to be replaced every second year. In the event that a designee is replaced by the national scientific organization, then Council shall appoint a new officer to the vacated position.

Council decided that the terms of service of the new Executive Committee would be four years, i.e. until the 1997 IASC meeting. A staggered system would be introduced by retirement or otherwise. A first step of a staggered system has already occurred due to the retirement of Dr. Eileen Buttle and the election of Dr. Dieter Fütterer as a new member of the Executive Committee.

5.2 ELECTION PAPERS (COUNCIL MEMBERS ONLY)

As mentioned in a letter from Dr. Anders Omholt to all Council members some months ago, all confidential notes and communications related to the recent election of a new President and Vice President had been left with the Secretariat in a sealed envelope.

Council decided that these papers should be disposed of unopened.

The 1994 IASC Meeting Report

5.3 STRENGTHENING THE SECRETARIAT

A proposal by the previous Executive Committee to the Norwegian government to increase the Secretariat staff by one person had not been successful for the 1994 budget. The new Executive Committee had decided that the proposal should be repeated for the 1995 budget, emphasizing that it had the full support of the Executive Committee. It had been suggested that some specific activities of IASC should be mentioned to attract attention and justify the needs.

Appropriate action had been taken by the President and the Executive Secretary.

Council agreed to the decision by the Executive Committee, and noted the actions taken.

5.4 IASC HANDBOOK

A draft of a first edition of the *IASC Handbook* had been reviewed by the Executive Committee, which had decided that the handbook should be printed after some minor changes were made.

The Handbook is divided into two parts: One containing mostly permanent information (Founding Articles, rules, etc.), and the other part consisting of information which changes frequently (address lists, etc.).

Copies of the handbook had been mailed a few days before the IASC Meeting directly to participants, and a copy was on display at the meeting.

Council was pleased to note that the handbook was printed, and decided that IASC publications should in the future be published in a number series.

6. IASC ECONOMY

6.1 IASC GENERAL FUND - FINANCIAL REPORT FOR 1993

A detailed financial report was included in the agenda papers together with comments by the Executive Secretary.

The IASC General Fund had been established in 1993, and the income had been uncertain until early autumn. As a consequence, few commitments could be made before the end of the year.

However, almost all countries had been able to get these payments into their budgetary system, and as a consequence the net result for 1993 was positive.

Council approved the Financial Report for 1993, and noted that there was a surplus that could be used for expenses in 1994 and a conference fund.

6.2 IASC GENERAL FUND - DRAFT BUDGET FOR 1994

A detailed draft budget, or a specification of expected income and expenses as of March, 1994 had been included as an agenda paper.

Council members commented on the items listed, and tasked the Executive Secretary to work out a revised budget using a program budget approach. The revised budget should be approved by the Executive Committee.

6.3 STANDING FINANCE COMMITTEE

At the last Council meeting, it was agreed to establish a SFC consisting of three members. Drs. Hacquebord and Lorius were appointed, and one member was to be appointed by the new Executive Committee. This person would act as chairman of the group.

However, the Executive Committee had agreed that there was no need for a special SFC, as the Executive Committee would "run the IASC economy". Dr. Eileen Buttle had been appointed as the Executive Committee member to take over the advisory tasks of the SFC.

Council agreed that there should be a one-person Standing Finance Committee (SFC), but the task should be to consider the budget and financial dispositions made by the Executive Committee and advise Council, i.e. a qualitative audit on how effectively the expenditures have been used. Dr. Claude Lorius was appointed for this task.

7. OTHER BUSINESS

7.1 RELATIONS TO OTHER ORGANIZATIONS

7.1.1 SCAR

The IASC-SCAR relationship had been discussed at the last Council meeting based on recommendations from a group. The contents of these recommendations had been forwarded to SCAR by letters exchanged with the President and the Executive Secretary of SCAR, also covering reciprocal invitations to the meetings of the two organizations.

The Executive Committee had appointed **Professor Bert Bolin** as the IASC observer to the next SCAR Delegates Meeting to be held in Rome, Italy in late August/early September this year. Professor Bolin is the national SCAR delegate for Sweden, and the IASC observer role will not require any funding from IASC.

The following had been given as terms of reference by the Executive Committee: *Consider which activities at the SCAR meeting will be of interest to IASC, and which activities of IASC to be of interest to SCAR, and express any relevant views on a personal basis at the meeting. He was further asked to report or to suggest action on any items of mutual interest at the next IASC meeting (i.e. the Executive Committee meeting in November).*

Council appointed Professor Bert Bolin, supplemented by Dr. Claude Lorius as necessary, as IASC observers at the SCAR Delegates Meeting in Rome.

Council agreed that bi-polar cooperation should be further developed, and encouraged SCAR to discuss such opportunities. Council agreed that real cooperation could be initiated at working group level, and authorized Dr. Weller to invite a SCAR representative to the meeting on Arctic Global Change Priorities, including an Impacts Assessment Workshop.

Further, the new IASC Working Group on Arctic Glaciology should be asked to invite a representative from the SCAR Working Group on Glaciology to their meetings.

Action: Bolin, Lorius, Weller, Rogne

7.1.2 IPA - the International Permafrost Association

IASC had been informed that IPA had appointed Dr. Hugh M. French (Vice President of IPA) as the IPA liaison with IASC. A letter had been received from Dr. French expressing:

- the IPA willingness to assist in any IASC activities;
- two issues of potential common concern:
 - support of arctic monitoring or measurement stations, and
 - gathering, rescue and retrieval of data, especially from the Russian Arctic.

The Executive Committee had noted the contact established, and had tasked the Executive Secretary to act as the information link to IPA.

The 1994 IASC Meeting Report

Another letter had later been received from Dr. Hugh French, mentioning their work on establishing a Global Geocryological Database, their global change activities, and their interest in ISIRA projects. This letter was tabled at the meeting, and further information on IPA activities was part of a small exhibition at the meeting.

Council noted the positive and cooperative interest expressed by IPA, including their comments to the Global Change Report. Council agreed that IPA should be invited to join in IASC activities when it is of mutual interest, and that a representative of IPA be invited to the IASC Global Change Workshop (priorities and impact assessment).

Action: Rogne, Weller

7.1.3 IGBP - WCRP

A discussion on the IASC relation to IGBP and WCRP was added to the agenda. The general conclusion was that IASC should establish closer links with the IGBP Secretariat, the IGBP core programme offices, START and the WCRP.

Council agreed on the following actions:

- *IASC President to visit the Executive Director of IGBP, and others.*
- *Invite relevant core programme representatives to IASC Global Change working group meetings, and establish contacts with core offices when we consider such programmes.*

Action: Magnusson, Weller

7.2 REPORTS FROM ARCTIC INTERGOVERNMENTAL COOPERATION

7.2.1 The Arctic Environmental Protection Strategy (AEPS)

The *Arctic Environmental Protection Strategy (AEPS)* is an intergovernmental programme, established in 1991 and participated in by all eight arctic countries, of cooperation and joint actions to protect the arctic environment from deterioration or damage caused by human activities. It has four major components: the *Arctic Monitoring and Assessment Programme (AMAP)*, the *Conservation of Arctic Flora and Fauna Programme (CAFF)*; the *Programme for Protection of the Arctic Marine Environment (PAME)* and the *Programme of Emergency Prevention, Preparedness and Response (EPPR)*. The AEPS reports to the Ministers of Environment of the respective arctic countries, who review its progress at two-year intervals. IASC, UNEP, and the three main arctic indigenous organizations (Inuit Circumpolar Conference, Saami Council, and Association of Small Peoples of the Russian North) are accredited observers to AEPS.

- **The Second Ministerial Conference on AEPS (Arctic Environmental Protection Strategy), held in Nuuk, Greenland in September 1993.**

IASC had been invited as observer to this meeting, and the President had asked the Executive Secretary to be present.

A special issue of *IASC Progress* on AEPS and IASC had been worked out, and this issue together with other relevant IASC information papers (including the ISIRA paper) had been made available to the participants.

The 1994 IASC Meeting Report

The IASC/ICES audit on the implementation plans for AMAP had been very well received, and it had been proposed that IASC should be asked to organize a similar audit when their assessment plan is ready.

During the preparatory meetings (held immediately prior to the Ministerial Meeting, but not open for observers) a proposal on working out a code of conduct for doing investigations and research in the Arctic had been suggested. However, agreement had not been reached.

The general impression of the meeting was slow progress in the AEPS work, mainly due to some countries being reluctant or unable to mobilize necessary resources. Denmark had offered to establish a small secretariat for the participation of arctic indigenous peoples on AEPS.

The following documents had been enclosed to the agenda for this IASC meeting:

- The Nuuk Declaration on Environment and Development in the Arctic.
- Report from the meeting, and
- An Annex on Participation of indigenous peoples.

These documents are **not** included in this report. However a copy of the American Code of Conduct is enclosed as **Appendix XV**, as an example of a national code of conduct.

At the Executive Committee meeting, it had been agreed that the Regional Board should be asked to discuss a Code of Conduct that could serve as a model for all arctic countries and be applicable to all research undertaken in the Arctic.

Council noted the report, and confirmed the decision by the Executive Committee as to a Code of Conduct for Research in the Arctic.

Action: Regional Board

➤ **AMAP - The Arctic Monitoring and Assessment Programme**

IASC had been invited to the AMAP Working Group meeting in the beginning of March this year. The President had tasked the Executive Secretary to attend, and especially to consider "points of contact between AMAP and IASC".

AMAP has two main activities: Monitoring the Arctic environment, especially as to contamination, and an assessment of the arctic environment with a state of the arctic environment report to be issued at regular intervals.

At this AMAP meeting, the AMAP working group had mainly discussed the assessment part with the main conclusion that there will be two reports:

- A State of the Arctic Environment Report, a general report intended for the general public, and
- An AMAP Assessment Report, i. e. a more comprehensive and scientific report.

As to the **AMAP - IASC relationship**, a brief working paper had been written by the Executive Secretary, see **Appendix XVI**.

The 1994 IASC Meeting Report

A very recent response to the suggestions had been received from AMAP, concluding that they would be interested in all proposals mentioned in the working paper.

Council agreed that:

- *a representative of AMAP is to be invited as an observer to the meetings of the IASC Working Group on Global Change, and to relevant workshops.*
- *The Russian member of AMAP is to be invited to IASC workshops and conferences concerned with the Russian arctic environment.*
- *As to identifying experts on climate change and UV-radiation, this question was left to the President and the Executive Secretary.*

Action: Weller, Magnusson, Rogne

➤ **CAFF - Conservation of Arctic Flora and Fauna**

IASC had been invited to the 1993 meeting of the CAFF Working Group, and had been represented by the President, whose report was distributed to Council members in August 1993. The IASC representative had participated in discussions of the scientific aspects of programmes relating to habitat protection; identification of human-caused threats to arctic flora and fauna; endangered species; and the application of traditional knowledge in circumpolar conservation. The progress report from CAFF to the AEPS Ministers is included in the declaration from the Nuuk meeting (Section 7.2.1).

7.2.2 The Nordic Council's Arctic Conference

IASC had been invited as an observer to this conference which was held in Reykjavik, Iceland 16 - 17 August, 1993. Dr. Anders Karlqvist, Chairman of the Regional Board, had been appointed to represent IASC, and to inform about IASC. Dr. Fred Roots, past President of IASC, had been invited as a keynote speaker.

All arctic countries had been invited to this conference, and representatives from most of them attended. This conference was mainly for parliamentarians.

Informal feedback received had been very positive as to the IASC contribution. A comprehensive report (154 pages) had been published after the conference.

7.2.3 The Northern Forum

A brief memo on the Northern Forum had been worked out, see **Appendix XVII**.

The Executive Committee had made the following comment to the memo:
The Executive Committee noted the ongoing activities and the projects initiated by the Northern Forum. If the Northern Forum discusses and develops what they see as political priorities of the North, this could be of interest to IASC to the extent that these priorities have a science component.

Council agreed to the comments of the Executive Committee.

The 1994 IASC Meeting Report

7.2.4 Summary Report from PICES (North Pacific Marine Science Organization)

PICES is a marine science organization created by international treaty between Canada, China, Japan and the United States in 1992. IASC has always been invited to attend their annual meeting. At their second meeting, Dr. Norbert Untersteiner had been asked to represent IASC, and some information material had been prepared by the Secretariat for distribution at the meeting.

A copy of the summary report was enclosed in the agenda papers.

7.3 INFORMATION ON MAJOR ARCTIC SCIENTIFIC CRUISES

Please find a short paper enclosed as **Appendix XVIII**, suggesting that IASC collect information on major scientific cruises and list the information in a special section of *IASC-Progress*.

Both the Regional Board and the Executive Committee had endorsed this proposal, and the Secretariat has initiated the implementation.

The meeting was informed that the International Ship Operators Meeting (ISOM) had established a database on research cruises, and that AOSB recently had recommended to ISOM that information on arctic research cruises be included as a separate section of this database.

The Executive Secretary was asked to contact the AOSB and ISOM secretariats, as they collect similar information.

Action: Rogne

7.4 MANAGERS OF NATIONAL ARCTIC SCIENCE PROGRAMS

Reference has been made during earlier IASC meetings to COMNAP (Council of Managers of National Antarctic Programs), and a question about the need for a similar body in the Arctic has been raised.

The Executive Secretary wrote a working paper giving some background information on the establishment of COMNAP and comments on the needs for the Arctic, see **Appendix XIX**. The paper had been on the agenda of the Regional Board and the Executive Committee. The preliminary conclusion based on comments at these meetings and a few other comments had been:

These functions are not so clearly defined for the Arctic as for the Antarctic, at least in some countries engaged in arctic research. Antarctic national organization is usually concentrated in one national institute, whereas there are several operators for the Arctic in many countries.

Council noted this information and agreed to the conclusion.

The 1994 IASC Meeting Report

7.5 EUROPEAN COLLABORATION IN POLAR RESEARCH

A special polar meeting or workshop was organized by ESF and ECOPS in Granada Spain at the end of September, 1993. The meeting was attended by several members of IASC Council as well as the Executive Secretary. A report from the meeting was enclosed in the agenda papers.

Council noted that:

- A European Polar Forum (EPF) had been established, formally linked to ECOPS and a planned ECOPS Secretariat in Strasbourg at the ESF headquarters.
- EPF covers both polar regions, and was intended to improve European collaboration in polar research.
- EPF had expressed an interest in the Russian Arctic, and a LOICZ-type project had been mentioned.

7.6 REPORTS FROM OTHER ARCTIC SCIENCE ORGANIZATIONS

7.6.1 AOSB - Arctic Ocean Sciences Board

A report was given by Dr. Pentti Mälkki, Chairman of the AOSB, and a prepublication copy of the report from the AOSB meeting 8-10 March, 1994 was distributed.

Following the report, an oral proposal on the AOSB becoming an advisory body to IASC on arctic oceanography was discussed and supported.

Council decided that the Executive Secretary should bring this up with the AOSB Secretariat, with the intention of establishing such a relation formally.

7.6.2 IUCH - International Union of Circumpolar Health

A report was given by Dr. Jens Peder Hart Hansen, past president of IUCH.

IUCH consists of four adhering bodies and a number of affiliated members. The main activities are those of several working groups, a journal is published (*Arctic Medical Research*), and conferences on circumpolar health questions are held regularly.

IUCH is an advisory body to IASC on arctic health issues.

7.6.3 ECOPS - European Committee on Ocean and Polar Sciences

A report was given by Dr. Claude Lorius, member of ECOPS.

A series of European research conferences had been held. In early September a conference on *Arctic Ocean Grand Challenge* will be held in Helsinki, Finland (in cooperation with AOSB and IASC). These conferences and workshops will be summarized at a major conference in Bremen, Germany, 12 - 16 September, 1994, called: *European Conference on Grand Challenges in Ocean and Polar Sciences*.

The 1994 IASC Meeting Report

7.6.4 MAB/NSN - Man and the Biosphere / Northern Science Network

A report was given by Dr. Fred Roots, Chairman of MAB/NSN, giving information on the four ongoing projects. Further, the MAB/NSN secretariat had been moved from Rovaniemi to the Danish Polar Center in Copenhagen.

7.7 THE CHANGING SCENE OF INTERNATIONAL SCIENCE IN THE ARCTIC

Dr. Fred Roots pointed to several changes going on in the Arctic region that would have impacts on IASC and its activities. He also brought up the issue of IASC as a science organization vs. a science service organization. His talk has been typed and distributed separately to participants at the meeting.



8. NEXT IASC MEETINGS

Finland provided an invitation to the 1995 IASC Meeting in Rovaniemi. The last week of April was agreed upon as most suitable, with 24-26 April, 1995 as the preliminary dates.

Council accepted with thanks the invitation, and agreed on 24-26 April, 1995 as the preliminary dates for the next meeting.

The next meeting of the Executive Committee will be held 15 - 16 November, 1994 in Oslo, Norway, as agreed earlier.

9. CLOSING

The Commission for Scientific Research in Greenland, assisted by the Danish Polar Center, were heartily thanked as excellent hosts for the 1994 IASC Meeting.

10. INFORMATION SECTION

A separate information section was added to the agenda, including the following:

- Global Change and Arctic Terrestrial Ecosystems - An international conference held in Oppdal, Norway in August 1993 with 130 participants.
- 5th World Wilderness Congress, held in Tromsø, Norway in September-October, 1993.
- Oil and Gas Exploration and Production in Arctic and Sub-Arctic onshore regions. Guidelines for Environmental Protection. A joint paper by IUCN (International Union for Conservation of Nature) and the E & P Forum (the Oil Industry International, Exploration and Production Forum).

These reports were not discussed at the meeting. These documents as well as others mentioned in this report but not included as Appendixes, are available from:

The IASC Secretariat
Post Office Box 5072, Majorstua
0301 Oslo, Norway

Fax: int. + 47 - 22 95 96 01