

REPORT OF GOVERNING COUNCIL MEETINGS

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The Governing Council met on October 11, 16 and 17, under the Chairmanship of Dr. Hyung-Tack Huh. Drs. Alexander S. Bychkov and Stewart (Skip) M. McKinnell served as rapporteurs.

All Contracting Parties were represented at the three sessions (*GC Endnote 1*). The Chairman of the Science Board, Ms. Patricia Livingston, and the Chairman of the Finance and Administration Committee, Dr. Richard J. Marasco, were in attendance during part or all of each session.

Agenda Item 1. Opening remarks

At the first session, the Chairman welcomed the delegates and noted that for this Annual Meeting Dr. Richard J. Beamish represented Dr. Laura Richards (Canada); Mr. Hai-Qing Li represented Mr. Jing-Guang Li (China); Mr. Qian-Fei Liu represented Mr. Zheng-Ping Tang (China); Mr. Koji Harunari represented Mr. Yukiya Amano (Japan); Dr. Jin-Yeong Kim represented Mr. Sung-Ho Joo (Korea); Dr. Vladimir I. Radchenko represented Dr. Sergey E. Dyagilev (Russia); and Dr. John E. Stein represented Dr. James W. Balsiger (U.S.A.).

The Chairman asked Parties to confirm their members who would attend the Finance and Administration Committee meeting (*F&A Endnote 1*).

Agenda Item 2. Adoption of agenda

The Chairman reviewed the agenda and suggested the order in which to take up the various items. Dr. William G. Doubleday proposed the adoption of the agenda without changes, seconded by Dr. Vera Alexander. This report summarizes the treatment of each agenda item during the

course of the three sessions.

Agenda Item 3. Appointment of Executive Secretary and Assistant Executive Secretary

The Chairman briefed Council on the recent changes in the PICES Secretariat. Dr. Alexander S. Bychkov was appointed as the Executive Secretary, effective June 1, 1999, and subsequently, Dr. Stewart M. McKinnell was appointed as the Assistant Executive Secretary, effective September 7, 1999. Dr. Huh stated with confidence that they will advance the work of the Secretariat as a team. Drs. Bychkov and McKinnell expressed their thanks for the support given by Council.

Dr. Bychkov reviewed the process of selecting the new Assistant Executive Secretary. He noted that the response to the advertisement was overwhelming. The Secretariat received 13 applications from highly competent individuals, representing all the PICES member countries, all with unique talents and assets. The fact that so many distinguished candidates applied for the position to become part of our team suggests that in a mere eight years, PICES has become an influential and inspiring spawning ground for marine scientific research and international cooperation, and has a potential to grow to highly reputable authority.

Agenda Item 4. Preliminary Report on Administration

The Executive Secretary summarized the activities of the Secretariat since the PICES Seventh Annual Meeting (*GC Endnote 2*).

Agenda Item 5. Relations with other international organizations and observers from such organizations

Letters of invitation to attend PICES VIII were sent to inter-governmental and non-governmental organizations on the agreed Standing List of Organizations and Programs, and the following sent observers:

Global Ocean Observing System (GOOS)
Dr. Ned Cyr
International Pacific Halibut Commission (IPHC) Dr. Steven R. Hare
Intergovernmental Oceanographic Commission (IOC)
North-East Asian Regional GOOS (NEAR-GOOS) Prof. Jihui Yan
North Pacific Anadromous Fish Commission (NPAFC) Dr. Yukimasa Ishida
Scientific Committee on Oceanic Research (SCOR) Dr. Suam Kim

Council approved the additions to the Standing List of International Organizations and Programs, and a selected subset of organizations and programs that are considered to have the highest priority for PICES with respect to scientific cooperation and facilitation in the coming year (See Agenda Item 10, Decision 99/S/6 and Appendix C for details).

Agenda Item 6. Membership and observers from other countries

Non-member countries were not officially represented as observers at this year's Annual Meeting. The Secretariat did not receive proposals from non-member countries to accede to the PICES Convention in 1999.

The Executive Secretary informed Council that in June 1999, letters were sent to Dr. Marco Polo Bernal Yarahuan (Director, Unidad de Educacion en CyT del Mar) and Dr. Mario Martinez Garcia (Director General, Centro de Investigaciones Biologicas del Noroeste). They were invited as observers from Mexico to attend the PICES Eighth Annual Meeting. Their

response suggests that they are interested in PICES activities and attending our Annual Meeting, but other commitments prevent their participation this time. Mexican scientists are already involved in PICES activities. It was reported that two scientists from Mexico have received partial travel support to attend the Annual Meeting in Vladivostok, and Dr. Daniel Lluch-Belda (CICIMAR) is serving as one of the convenors for the Beyond El Niño Conference (March 2000).

Dr. Ned Cyr

Accordingly Council adopted the following resolution:

The Governing Council of PICES is pleased by the possibility of having Mexico accede to the PICES Convention. The Chairman should pursue this matter vigorously by sending a letter to appropriate authorities to encourage the Mexican Government to move ahead, and by making high-level personal contacts. (Decision 99/A/5).

Agenda Item 7. Tenth Anniversary of PICES

The Convention for a North Pacific Marine Science Organization entered into force on March 24, 1992, and the First Annual Meeting of the Organization was held in October 1992, in Victoria, Canada. Council discussed various activities and events that are being proposed to commemorate the tenth anniversary of PICES, and agreed to form a PICES Anniversary Steering Committee consisting of the PICES Chairman, Executive Secretary, Science Board Chairman, F&A Chairman, Dr. Warren Wooster and a Canadian representative from the Institute of Ocean Sciences, Sidney (subsequently identified as Mr. J. Roderick Forbes). A plan for celebratory events is to be developed by January 1, 2000, and circulated to all Contracting Parties (Decision 99/A/6).

It was generally accepted that all

celebrations commissioned by Council require additional funding. The recommendation was approved that Council send a request to the Contracting Parties for voluntary contributions to support the Tenth Annual Meeting and special events related to the PICES' tenth anniversary (Decision 99/A/6).

Agenda Item 8. PICES Intern Program

Council reviewed the proposal to establish a PICES Intern Program. This document was prepared by the Secretariat and revised by the Finance and Administration Committee. Council agreed that the Intern Program would improve the way the Organization functions. Council made editorial changes and approved the PICES Intern Program as amended (*GC Endnote 3*) (Decision 99/A/7).

The Program will start in 2000, and Contracting Parties should submit their nominations to the Executive Secretary by March 1, 2000. The U.S.A. proposed to contribute CDN \$7,000 in addition to their annual assessment to support the Program. Council agreed to invite voluntary contributions from all Contracting Parties, following the lead of the U.S.A.

Agenda Item 9. Report of Finance and Administration Committee

The Finance and Administration Committee met under the chairmanship of Dr. Richard J. Marasco, who presented the report to the Governing Council (see F&A Report for text). The report was approved by Council.

9.1 Audited accounts for fiscal year 1998

At the recommendation of the Finance and Administration Committee, Council accepted the audited accounts for 1998. Council agreed to retain the existing auditor *Flader & Greene* for another year (Decision 99/A/1).

9.2 Budget

9.2a Estimated accounts for fiscal year 1999

The estimated accounts from September 1 to December 31, 1999 were reviewed by the Finance and Administration Committee and

approved by Council (Decision 99/A/2).

9.2b Budget for fiscal year 2000

Council approved the total budget of CDN \$590,000 and a transfer of CDN \$58,400 from the 1999 Working Capital Fund surplus to the General Fund to limit the 2000 fees for each Contracting Party to CDN \$88,600 (Decision 99/A/2(i)).

9.2c Forecast budget for fiscal year 2001

Council received the forecast budget for 2001 as an information item for Parties (Decision 99/A/2(ii)).

The following guideline was generally accepted to assist Contracting Parties to prepare their funding requests to cover annual contributions, and the Executive Secretary to develop future budgets:

For planning purposes it would be reasonable for Parties to expect that the projected budget and annual contributions will increase at the rate of inflation in Canada, currently about 3% per year. Justification and finalization of the budget will occur at the Annual Meeting prior to the beginning of the new PICES fiscal year.

The Japanese Government considers that, as many member countries are under severe financial condition, in order to continue financial contribution to international organizations, the budget of international organizations should be the minimum necessary. Therefore, the Japanese Government is requesting to many international organizations to keep basically nominal zero increase of budget, and PICES cannot be an exception.

Council agreed to establish a Fund-Raising Committee to seek outside funding

consistent with the goals of the Organization (Decision 99/A/8).

9.2d Working Capital Fund

The Working Capital Fund is forecast to be CDN \$175,594 at the end of 1999. Thus, the Fund will have a surplus of CDN \$75,594. Council approved that CDN \$58,400 be transferred to the General Fund to reduce the fees for each Party and that the residual surplus of CND \$17,194 be transferred to the Trust Fund (Decision 99/A/2(iii)).

9.2e Home Leave Relocation Fund

The status of the Home Leave Relocation Fund was reviewed. It was noted that all expenses will be recovered from the income tax levies from foreign staff to adjust the Fund to a maximum level of CDN \$110,000 at the end of the fiscal year. No action was taken by Council on this matter.

9.2f Trust Fund

The Trust Fund is forecast to be CDN \$71,336 at the end of 1999. With the recommended transfer of CDN \$17,194 from the Working Capital Fund (Decision 99/A/2(iii)), net funds available in the Trust Fund for the year 2000 is estimated to increase to approximately CDN \$88,530.

Council confirmed that the practice of transferring surpluses from the Working Capital Fund to the Trust Fund should continue in future years (Decision 98/A/2(iii)). It was noted and generally accepted that surpluses of the magnitude of CDN \$10,000 or more will unlikely exist in the future. So, PICES should explore other options for the Trust Fund replenishment, or activities that are currently supported by the Trust Fund will need to be reduced accordingly.

9.3 Annual contributions

Council discussed historical statistics on the payment schedule of annual fees to the Organization, and approved the recommendation that the Chairman send a letter to appropriate authorities from each Contracting Party (designated by national delegates). The letter will request prompt payment of annual contributions by the first day of the PICES fiscal year (January 1), as stated by Regulation 5(ii) of Financial Regulations (Decision 99/A/3).

9.4 Time and place for the Ninth and Tenth Annual Meetings of the Organization

Council approved the proposal by Japan that PICES IX be held from October 23-28 in Hakodate, Japan. Meetings of Working Groups, Task Teams and any other groups will be held during the week before the meeting. Council also accepted the recommendation to have the Secretariat hold PICES X in Victoria, Canada (Decision 99/A/4).

Agenda Item 10. Report of Science Board

The Science Board met under the chairmanship of Ms. Patricia Livingston, who presented the report to the Governing Council (see Science Board Report for text). Council approved the Science Board Report. Details are given in the Appendices A-D.

- a. Planned and proposed meetings in 2000
Council approved new inter-sessional meetings and proposed Workshops (Decision 99/S/1) to be held at PICES IX. Council also confirmed dates for the previously approved inter-sessional meetings (Decision 99/S/1).
- b. PICES supported travel

Council modified and approved the recommended prioritised list for travel support (Decision 99/S/2), and directed the Executive Secretary to provide as much support as funds permit.

c. Proposed PICES publications in 2000-2001

Council endorsed the list of publications proposed (Decision 99/S/3).

d. Working Groups and proposed new groups

Council approved the proposal concerning existing Working Groups and the establishment of new PICES groups (Decisions 99/S/4 and 99/S/5). It was generally agreed that the Advisory Panel/Group definition should be clarified and included in the Handbook for Chairmen and Convenors.

e. Relations with other organizations and programs

Council approved the additions to the Standing List of International Organizations and Programs, and a selected subset of organizations and programs that are considered to have the highest priority for PICES with respect to scientific cooperation and facilitation in the coming year (Decision 99/S/6). It was generally accepted that this list will be used in part to assist the Executive Secretary and Science Board Chairperson in decisions regarding travel to meetings of other international organizations.

f. PICES Annual Meetings

Council reviewed, modified and accepted the changes to the structure of the PICES Annual Meetings proposed by the Science Board, with an addition that includes the promotion of inter-

committee scientific sessions by selection of an annual meeting “theme” by the Science Board (Decision 99/S/7). The potential themes should be discussed by Committees and reflected in the Science Board Strategic Plan. It was suggested that Committees have to choose cross-cutting issues for “theme” sessions and that session of limited interest have to be schedule as poster sessions. It was also emphasized that bringing regional programs for the marginal seas into PICES would result in wider participation in PICES Annual Meetings.

In the discussion initiated by China that followed, it was noted that PICES activities should go beyond the dissemination of knowledge through scientific meetings and publications. It was suggested that the Science Board and Executive Secretary should explore other opportunities for facilitating collaborative marine research in the North Pacific and building up the research networks, for example by supporting scientific proposals, organizing multinational programs and cruises, and training courses.

Agenda Item 11. Other business

11.1 PICES Bureau

Council discussed the formation of a PICES Bureau and agreed with the recommendation of the F&A Committee that a new administrative body is not necessary at this time. As the PICES Chairman provides leadership in long-term planning for the Organization and monitoring progress towards PICES objectives, he/she may call a mid-term meeting of PICES officers for that purpose. The meeting could be held at a convenient and cost-effective location to be determined by the Chairman in consultation with the Executive Secretary.

11.2 Special invitation

His Majesty, the King of Sweden, participated in the opening session of the 1999 Annual Science Conference of ICES (International Council for the Exploration of the Sea) in Stockholm. Canada suggested to examine the possibility of inviting a

member of Imperial Family of Japan to open the PICES Ninth Annual Meeting in Hakodate and speak about the relationship between Japan and the sea. It was agreed that once the possibility is established, the Chairman will send the appropriate formal letter of invitation letter from PICES.

Appendix A. Decisions

99/A/1: Auditor

Council accepted the audited accounts for 1998 and agreed to retain *Flader and Greene* as auditor for another year.

99/A/2: General account

Council accepted the estimated accounts of 1999 and agreed to the following actions:

- (i) *2000 Budget.* The budget of CDN \$590,000 was approved. The amount of CDN \$58,400 will be transferred from the Working Capital Fund to reduce the total contribution to CDN \$531,600, setting the 2000 fees at CDN \$88,600 per Contracting Party.
- (ii) *Forecast 2001 Budget.* The forecast budget for 2001 was reviewed and will be further considered during PICES IX.

The following guideline was generally accepted^{*)} to assist Contracting Parties to prepare their funding requests to cover annual contributions, and the Executive Secretary to develop future budgets:

For planning purposes it would be reasonable for Parties to expect that the projected budget and annual contributions will increase at the rate of inflation in Canada, currently about 3% per year. Justification and finalization of the budget will occur at the Annual Meeting prior to the beginning of the new PICES fiscal year.

- (iii) *Working Capital Fund.* The forecast surplus in the fund is \$75,594. Council approved a transfer of CDN \$58,400 to the General Fund for 2000, and that the residual surplus of \$17,194 be transferred to the Trust Fund.

^{*)} Japanese delegates made an

independent statement regarding this decision (see Agenda Item 9.2c for details).

99/A/3: Annual contributions

The Chairman will send a formal letter to appropriate authorities from each Contracting Party (designated by national delegates) requesting prompt payment of annual contributions by the first day of the PICES financial year (January 1), as stated by Regulation 5(ii) of Financial Regulations.

99/A/4: Future Annual Meetings

Council approved the proposal by Japan to host the Ninth Annual Meeting in Hakodate, October 23-28, 2000. Council further agreed to have the Secretariat host the 2001 meeting in Victoria, Canada. The dates of PICES X will be confirmed at next year's Annual Meeting.

99/A/5: Membership

The Chairman will send letter(s) to appropriate authorities and establish personal contacts to encourage the Mexican Government to accede to the PICES Convention.

99/A/6: PICES Tenth Anniversary

Council agreed to form a PICES Anniversary Steering Committee consisting of the PICES Chairman, Executive Secretary, Science Board Chairman, F&A Chairman, Dr. Warren Wooster and Canadian representative from the Institute of Ocean Sciences (TBD). A plan for celebratory events is to be developed by January 1, 2000, and circulated to all Contracting Parties for comments.

The Chairman will send a formal letter to all Contracting Parties for voluntary contributions to support the Tenth Annual Meeting and special events related to the PICES' tenth anniversary.

99/A/7: PICES Intern Program

Council approved the PICES Intern Program as attached (*GC Endnote 3*). The Program will start in 2000, and Contracting Parties should submit their nominations to the Executive Secretary by March 1, 2000.

99/A/8: Fund-Raising Committee

Council agreed to establish a Fund-Raising Committee to seek outside funding consistent with the goals of the Organization. The committee should be represented by all Contracting Parties (membership to be determined), the Executive Secretary and chaired by the F&A Chairman, Dr. Richard J. Marasco, and will work by correspondence.

99/S/1: Inter-sessional Meetings, Working Group and CCCC Program Workshops

The following new inter-sessional meetings, Working Group and CCCC Program workshops are to be convened (see Acronym List at the end of the Annual Report):

- a. An NPAFC-hosted workshop (organized by NPAFC and PICES) on "Factors affecting production of juvenile salmon: comparative studies on juvenile salmon ecology between the East and West North Pacific Ocean" on October 29th, 2000, in Tokyo, Japan;
- b. A BASS Workshop on "Development of a conceptual model of the Subarctic Pacific Basin Ecosystem(s)", a MODEL Workshop on "Strategies for coupling higher and lower trophic level marine ecosystem models", a MONITOR Workshop on "Progress in monitoring the North Pacific", a REX workshop on "Trends in herring populations and trophodynamics", and a Technical Workshop on "The basis for estimating

the abundance of marine birds and mammals, and the impact of their predation on other organisms", October 2000 (immediately prior to PICES IX), in Hakodate, Japan;

- c. An NIES-hosted Symposium/Workshop on "North Pacific CO₂ data synthesis" (co-sponsored by PICES and JST/CREST), October 2000 (4 days, immediately prior to PICES IX), in Tsukuba, Japan;
- d. A Planning Workshop on "Designing the iron fertilization experiment in the Subarctic Pacific" (co-sponsored by PICES and CRIEPI), October 2000 (2 days immediately prior to PICES IX), in Tokyo, Japan;
- e. A CREAMS/PICES Workshop on "Oceanography of the East Asian Marginal Seas", May 2000, in Vladivostok, Russia.

The following inter-sessional meetings were previously approved and will occur after PICES VIII (Decisions 98/S/2 and 98/S/7):

- f. A CCCC/MODEL Workshop on "Lower trophic level modeling", January 31-February 3, 2000, in Nemuro, Japan;
- g. A conference "Beyond El Niño: A conference on Pacific climate variability and marine ecosystem impacts, from the Tropics to the Arctic" (co-sponsored by PICES, IATTC, IPHC, ISC, NPAFC and SCOR), March 23-26, 2000, in La Jolla, U.S.A.;
- h. A mini-workshop on "Zooplankton ecology of the North Atlantic and North Pacific" in conjunction with the meeting of the ICES Working Group on Zooplankton Ecology, April 17-19, 2000, in Honolulu, U.S.A.

99/S/2: Travel support

- a. PICES will provide full travel support (or equivalent) for one invited speaker per Scientific Committee or Program to attend the PICES Ninth Annual Meeting;
- b. Membership and Co-Chairmen for PICES Working Groups are normally identified inter-sessionally. For new working groups to develop working plans shortly after their formation, PICES will support up to a maximum of 2 persons annually to travel for inter-sessional planning;
- c. PICES will cover the travel costs of the Science Board Chairman to attend the ICES Symposium on "100 Years of Science under ICES", August 1-4, 2000, in Helsinki, Finland;
- d. PICES will cover the travel costs of one person to attend the SCOR General Meeting in October, 2000, in Washington, DC, U.S.A.
- d. Selection of papers presented at the Beyond El Niño Conference in a special issue of Progress in Oceanography in 2001;
- e. Selection of papers presented at the CCCC/MODEL workshop on "Lower trophic level modeling" in a special issue of Fisheries Oceanography in 2001;
- f. Review and results from the PICES/WG 13 Technical/CO₂ Intercalibration Workshop in a bilingual (Japanese/English) report published by the National Institute for Environmental Studies, Japan (at no cost to PICES).

99/S/4: Future of current Working Groups and Scientific Programs

99/S/3: Publications

The following publications were approved:

- a. Final report of WG 11 on Consumption of Marine Resources by Marine Birds and Mammals, Proceedings of the 1999 MONITOR and REX Workshops and 2000 MODEL Workshop, and Bibliography of Japan/East Sea in the PICES Scientific Report Series;
- b. Progress reports of WG 8 on Practical Assessment Methodology, WG 12 on Crabs and Shrimps, and WG 13 on CO₂ in the North Pacific in the 1999 Annual Report;
- c. Selection of papers presented at the 1999 Science Board Symposium on "the Nature and impacts of North Pacific climate regime shifts" in a special issue of Progress in Oceanography;
- a. WG 8 on Practical Assessment Methodology will remain for one more year to complete collation, editing and publication of results from the MEQ Practical Workshop.
- b. WG 10 on Circulation and Ventilation in the Japan/East Sea will be disbanded. The WG 10 report will be published on the PICES web page as a revisable document.
- c. WG 11 on Consumption of Marine Resources by Marine Birds and Mammals will be disbanded.
- d. WG 12 on Crabs and Shrimps will remain for one more year to complete collation, editing and publication of results (no further meetings of the Working Group are required).
- e. WG 14 on Effective Sampling of Micronekton will remain established for at least two more years. Dr. Richard D Brodeur (U.S.A.) is recommended as Co-Chairman to replace Dr. Bruce

Robison (U.S.A.). To account for gaps in expertise and/or national representation, additional members from Korea and China are requested.

- f. Revised terms of reference for MONITOR Task Team were approved (see Appendix B (i) for terms of reference).

- c. WG 15 (under MEQ) on the Ecology of Harmful Algal Blooms in the North Pacific (see Appendix B (iv) for terms of reference);

- d. WG 16 (under FIS) on Climate Change, Shifts in Fish Production, and Fisheries Management (see Appendix B (v) for terms of reference).

99/S/6: Relations with other organizations and programs

The annual revision of the Standing List of International Organizations and Programs was endorsed in order to facilitate relations with other organizations and programs, and identify priorities for interaction in the coming year (See Appendix C for the revised list).

99/S/5: New PICES groups

The following new groups will be organized:

- a. Advisory Panel (under BIO) on Marine Mammals and Birds with a lifespan of 5 years, renewable by vote of BIO (see Appendix B (ii) for terms of reference);
- b. Advisory Panel (under CCCC/MONITOR) on the Continuous Plankton Recorder survey in the North Pacific with a lifespan of 2 years, renewable with prospect of future funding for the CPR program (see Appendix B (iii) for terms of reference);

99/S/7: PICES Annual Meetings

In order to enhance the PICES scientific meetings and focus efforts on promoting an interdisciplinary ecosystem approach, the changes in the structure of PICES Annual Meetings were approved (See Appendix D).

Appendix B. Working Group and Task Team Terms of Reference

i) Monitor Task Team (revised)

addressed;

- 1. Review existing activities of PICES member nations and to suggest improvements in the monitoring of the Subarctic Pacific to further the goals of the CCCC Program;
- 2. Consult with REX, BASS and MODEL Task Teams and TCODE on the scientific basis for designing the PICES monitoring system. Questions of standardization and intercalibration of measurements, particularly in the area of biological collections, should be

- 3. Assist in the development of a coordinated monitoring program to detect and describe events, such as El Niño, that strongly affect the Subarctic;
- 4. Develop a PICES-GOOS action plan for how PICES should take an active and leading role in further development and implementation of GOOS at a North Pacific level. The action plan would:
 - i. identify existing ocean observations in the coastal and open North Pacific

that are relevant to GOOS;

- ii. develop a PICES-GOOS implementation plan based on existing routine observations and augmented by new observations as appropriate;
 - iii. provide a structured plan on how to transfer relevant CCCC program activities to a PICES-GOOS program.
5. Advise and support the CCCC Implementation Panel and Science Board on GOOS-related matters, including representing PICES at key GOOS planning meetings.

ii) Advisory Panel on Marine Mammals and Birds

1. Provide information and scientific expertise to BIO, CCCC Program, and, when necessary, to other scientific and technical committees with regard to the biology and ecological roles of marine mammals and seabirds;
2. Identify important problems, scientific questions, and knowledge gaps in assessing the roles of marine mammals and seabirds in marine ecosystems;
3. Assemble relevant information on the biology of marine mammals and seabirds and disseminate it to the PICES community through scientific reports and symposia;
4. Develop strategies to improve collaborative, interdisciplinary research with marine mammal and birds researchers and the PICES scientific community.

iii) Advisory Panel on the Continuous Plankton Recorder (CPR) Survey in the North Pacific

1. Review and advise on the most appropriate locations, timing and frequency of CPR routes for “A Continuous Plankton Recorder Monitoring Program for the eastern North Pacific and Southern Bering Sea” currently funded through the North Pacific Marine Research Initiative;
2. Provide technical advice on parameters to be measured for additional monitoring initiatives;
3. Advise on linkages to other potential initiatives in the North Pacific and elsewhere.

iv) Working Group 15: Ecology of Harmful Algal Blooms in the North Pacific

1. Identify the various species involved, and the timing, frequency, and duration of harmful algal bloom events;
2. Develop a regional database of relevant observational parameters associated with bloom events, including maps, bibliography, existing programs and data sets, and expanded list of researchers in the area;
3. Investigate links between bloom events and environmental factors, trophic interactions and possible anthropogenic stress (e.g., eutrophication);
4. Assess the economic, health-related, and environmental impacts arising from harmful algal bloom events in order to improve the ability to predict the occurrence of these events and thus minimize their overall impacts;
5. Suggest areas where critical data are missing and where future research is

necessary;

6. Facilitate regional collaborative research efforts at various levels to address these problems.

v) Working Group 16: Climate Change, Shifts in Fish Production, and Fisheries Management

1. Identify key examples of species that have been affected by climate and ocean changes;

2. Investigate and assess the impact of inter-annual and decadal-scale physical changes in relation to fishing effects;

3. Describe or hypothesize the mechanisms linking climate and ocean changes to changes in the populations dynamics;

4. Using these mechanisms and indices of climate change, examine the possibility of long-term forecasting of changes in population dynamics and ecosystem structure.

Appendix C. Revised standing list of international organizations and programs

PICES is expanding its relationships with international scientific organizations and programs around the world. At the same time, there is the need to improve integration, coordination, and communication with regional scientific research efforts in the North Pacific that are aligned with the PICES ecosystem research focus. These regional programs may involve several PICES member countries and cover international areas of high biological importance. Annually, the Science Board

examines and revises the Standing List of International Organizations and Programs. Additionally, it selects a subset of organizations and programs that are considered to have the highest priority (marked by *) for PICES with respect to scientific cooperation and facilitation in the coming year. This list will be used in part to assist the Executive Secretary and Science Board in decisions regarding travel to meetings of other international organizations.

APEC	Marine Resources Conservation WG (MRC), Asia Pacific Economic Cooperation
APFIC	Asia-Pacific Fisheries Commission
CLIVAR*	Climate Variability and Predictability
ECOR	Engineering Committee on Oceanic Resources
FAO	Food and Agriculture Organization
GESAMP	Group of Experts on Scientific Aspects of Marine Pollution
GIPME	Global Investigation of Pollution in the Marine Environment
GIWA*	Global International Waters Assessment
GLOBEC*	Global Ocean Ecosystem Dynamics
GOOS*	Global Ocean Observing System
GOOS-LMR*	GOOS Living Marine Resources
IASC	International Arctic Science Committee
IATTC*	Inter-American Tropical Tuna Commission
ICES*	International Council for the Exploration of the Sea
ICSU	International Council of Scientific Unions
IGBP*	International Geosphere-Biosphere Program
IGOSS	Integrated Global Ocean Services System
IOC*	Intergovernmental Oceanographic Commission

IODE	International Oceanographic Data and Information Exchange
IPHC*	International Pacific Halibut Commission
ISCTNP*	Interim Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean
JGOFS*	Joint Global Ocean Flux Study
NAFO	North Atlantic Fisheries Organization
NASCO	North Atlantic Salmon Conservation Organization
NEAR-GOOS*	North East Asian Regional GOOS
NOWPAP	Northwest Pacific Action Plan
NPAFC*	North Pacific Anadromous Fish Commission
PSC	Pacific Salmon Commission
SCOPE	Scientific Committee on Problems of the Environment
SCOR*	Scientific Committee on Oceanic Research
SPC	South Pacific Commission
SPREP	South Pacific Regional Environmental Program
START	South Asian Regional Committee for the System for Analysis, Research and Training
UNEP	United Nations Environment Program
WCRP	World Climate Research Program
WESTPAC	Cooperative Study of the Western Pacific, IOC Sub Committee for the Western Pacific
WMO	World Meteorological Organization
WOCE	World Ocean Circulation Experiment

1999 additions to list:

AMAP	Arctic Monitoring and Assessment Program (AMAP)
ACIA*	Arctic Climate Impact Assessment Program (ACIAP of AMAP)
ARGO*	International Program for deployment of profiling floats (linked with GOOS)
CREAMS*	Circulation Research in the East Asian Marginal Seas

Appendix D. Structure of PICES Annual Meetings

1. To promote inter-committee sessions, the Science Board should select a “main theme” for each Annual Meeting; proposed topic sessions must then fit the overall “theme” of the meeting;
2. To advance the role of the Science Board Symposium, it should be arranged as the first scientific session of the Annual Meeting, immediately following the Opening Session;
3. To upgrade image and position of poster presentations, the poster sessions should be arranged to have a formal poster viewing time near the end of each day in conjunction with a social hour. Posters to be focused on for each day should be summarized just prior to the poster session by a person appointed by each Committee. Poster presenters for that session would be required to stand by their poster for that social hour;
4. To increase the participation of young scientists, a Young Scientists’ Travel Grant (as a part of the Trust Fund) should be advertised.

GC Endnote 1

Participation List

Canada

William G. Doubleday (delegate)
Richard J. Beamish (alternate delegate)

China

Hai-Qing Li (alternate delegate)
Qian-Fei Liu (alternate delegate)
Jian Kang (advisor)
Yanan Hu (advisor)

Japan

Makoto Kashiwai (delegate)
Koji Harunari (alternate delegate)

Republic of Korea

Jin Yeong Kim (alternate delegate)
Young Shil Kang (advisor)

Russian Federation

Lev N. Bocharov (delegate)
Alexander Kurmazov (advisor)

U.S.A.

Vera Alexander (delegate)
John E. Stein (alternate delegate)
Dorothy Bergamaschi (advisor)

Others

Hyung-Tack Huh (Chairman, PICES)
Alexander S. Bychkov (Executive Secretary)
(Rapporteur)
Stewart M. McKinnell (Assistant Executive
Secretary) (Rapporteur)
Patricia Livingston (Chairman, Science
Board)
Richard J. Marasco (Chairman, Finance and
Administration Committee)

GC Endnote 2

Report on Administration for 1999

1. National contributions

According to Regulation 5(ii) of Financial Regulations, all national contributions to PICES are payable by the first day of the financial year (January 1) to which they relate. Dues were paid as follows:

Canada	November 30, 1998
U.S.A.	January 27, 1999
Japan	March 29, 1999
Korea	August 16, 1999
China	not received as of Sept. 15, 1999
Russia	not received as of Sept. 15, 1999

2. National Delegations

The following reflects changes in

membership for Council, Finance and Administration Committee, various Scientific and Technical Committees, Working Groups and Task Teams

Governing Council

Dr. William G. Doubleday replaced Ms. Kathryn Bruce (Canada)
Dr. Laura Richards replaced Dr. John C. Davis (Canada)
Dr. Makoto Kashiwai replaced Dr. Satsuki Matsumura (Japan)
Mr. Yukiya Amano replaced Mr. Akio Suda (Japan)
Mr. Sung-Ho Joo replaced Mr. Jang-Hyun Choi (Korea)
Mr. Su-Han Woo replaced Dr. Jhin-Kyoo Chae (Korea)

Finance and Administration Committee

Dr. William G. Doubleday replaced Ms. Joyce Quintal-McGrath (Canada)
Dr. Laura Richards replaced Dr. John C. Davis (Canada)
Dr. Makoto Kashiwai replaced Dr. Satsuki Matsumura (Japan)
Mr. Hiroshi Oka replaced Kimihiro Ishikane (Japan)
Mr. Sung-Ho Joo replaced Dr. Jhin-Kyoo Chae (Korea)

Committees, Working Groups and Task Teams

Biological Oceanography Committee

Mr. Song Sun replaced Prof. Rong Wang (China)
Dr. Woong-Seo Kim replaced Dr. Sung-Yun Hong (Korea)

Fishery Science Committee

Dr. Laura Richards replaced Dr. Michael A. Henderson (Canada)
Mr. Jia-Hua Cheng replaced Prof. Zheng Yan (China)
Dr. Xian-Shi Jin replaced Prof. Ming-Jiang Zhou (China)
Dr. Takashi Minami replaced Dr. Tokyo Wada (Japan)
Dr. George W. Boehlert replaced Dr. John R. Hunter (U.S.A.)

Marine Environmental Quality Committee

Mr. Steve Samis replaced Dr. John Pringle (Canada)
Dr. John E. Stein replaced Dr. Usha Varanasi (U.S.A.)

Physical Oceanography and Climate Committee

Dr. Kenneth L. Denman replaced Prof. Paul H. LeBlond (Canada)
Dr. Susan E. Allen replaced Dr. Kenneth L. Denman (Canada)

TCODE

Ms. Susan Bates replaced Mr. Bill Shaw (Canada)
Dr. Bernard A. Megrey replaced Dr.

William A. Karp (U.S.A.)

WG 12

Mr. Zhi-Meng Zhuang replaced Mr. Sheng-Min Ren

WG 14

Dr. David L. Mackas was added (Canada)
Mr. Naoki Iguchi was added (Japan)
Dr. Vadim F. Savinykh replaced Dr. Eugene N. Il'insky (Russia)

PICES-GLOBEC CCCC Implementation Panel

Dr. David L. Mackas replaced Dr. Michael A. Henderson as a national member (Canada)
Dr. Masahide Kaeriyama replaced Dr. Makoto Terazaki as a national member (Japan)
Dr. Andrey S. Krovnin was added as a national member (Russia)
Dr. Warren S. Wooster replaced Ms. Pat Livingston as a national member (U.S.A.)
Dr. William T. Peterson replaced Dr. Anne B. Hollowed as U.S. GLOBEC representative
Dr. Yukimasa Ishida replaced Dr. Michael Dahlberg as NPAFC representative

BASS Task Team

Mr. G.A. McFarlane replaced Dr. Richard J. Beamish (Canada)
Dr. Masahide Kaeriyama replaced Dr. Makoto Terazaki (Japan)

MODEL Task Team

Dr. Da-Ji Huang replaced Prof. Ji-Lan Su (China)

MONITOR Task Team

Dr. Thomas C. Royer replaced Dr. William A. Karp (U.S.A.)
Dr. Warren S. Wooster (U.S.A.) was added as a new member

REX Task Team

- Dr. Michael Henderson was removed (Canada)
Dr. William T. Peterson replaced Dr. Anne B. Hollowed (U.S.A.)

3. Observers

Invitation letters to attend PICES VIII were sent to inter-governmental and non-governmental organizations using the PICES standing list. Organizations and Programs that accepted our invitation are:

- Global Ocean Observing System (GOOS)
Dr. Ned Cyr
International Pacific Halibut Commission (IPHC) Dr. Steven R. Hare
Intergovernmental Oceanographic Commission Dr. Ned Cyr
North-East Asian Regional GOOS (NEAR-GOOS) Prof. Jihui Yan
North Pacific Anadromous Fish Commission (NPAFC) Dr. Yukimasa Ishida
Scientific Committee on Oceanic Research (SCOR) Dr. Suam Kim

4. Travel and representation at other organization meetings

- a. Ms. Patricia Livingston attended the ISC's (Interim Scientific Committee for Tuna and Tuna-like species in the North Pacific) Annual Meeting in Honolulu in January.
- b. Dr. Alexander Bychkov and Ms. Patricia Livingston attended the NPAFC CSRS (North Pacific Anadromous Fish Commission – Committee on Scientific Research and Statistics) meeting in Vancouver in March. Ms. Christina Chiu also traveled to Vancouver at the same time to discuss PICES VIII preparations with Dr. Vladimir I. Radchenko.
- c. Dr. Chang-Ik Zhang attended the SCOR/ICES Symposium on Ecosystem Effects of Fishing/SCOR Working Group

105 meeting in Montpellier, France, in March.

- d. Dr. Alexander Bychkov and Ms. Christina Chiu traveled to La Jolla to discuss the Beyond El Niño Conference preparations with the Local Organizing Committee in April.
- e. Dr. Alexander Bychkov and Ms. Christina Chiu attended the Pension Society Meeting in Ottawa in April.
- f. Ms. Patricia Livingston visited the PICES Secretariat and met with Mr. Martin Esseen of the United Nations Development Programme (UNDP) in April.
- g. Dr. Alexander Bychkov and Ms. Christina Chiu traveled to Vladivostok to discuss Annual Meeting preparations with the Local Organizing Committee in April.
- h. Dr. Alexander Bychkov attended the MEQ Workshop briefly in Vancouver in June.
- i. Dr. Hyung-Tack Huh attended IOC's (Inter-Governmental Oceanographic Commission) Assembly in Paris in June.
- j. Support from the Trust Fund was provided for Dr. Boris Ivanov to attend the WG 12 meeting in Qingdao, People's Republic of China, in August.
- k. Dr. Alexander Bychkov went to Vancouver to visit the Secretariats of the North Pacific Anadromous Fish Commission and the Pacific Salmon Commission in August.
- l. Travel support was provided for 4 candidates to attend the interview for the Assistant Executive Secretary position in August.

- m. Support was provided for Secretariat staff, Chairman Dr. Hyung-Tack Huh, and Science Board Chairman Ms. Patricia Livingston, to attend the Annual Meeting in October.
- n. Travel support was provided for 9 invited speakers to attend the PICES Eighth Annual Meeting in October.
- o. Trust Fund travel support to the Annual Meeting was provided as follows:
 - Full support for 9 Chinese scientists;
 - Full support for 1 Korean and 1 Canadian scientist;
 - Partial support for 2 Korean scientists, 1 Canadian scientist, 2 Russian scientists, and 2 scientists from Mexico; and
 - Full support for 1 young scientist.
- p. Support was provided to Prof. Jihui Yan to represent NEAR-GOOS and China NEAR-GOOS at the Annual Meeting in October.
- q. Ms. Patricia Livingston and Dr. Stewart McKinnell attended the NPAFC Seventh Annual Meeting and International symposium on Recent Changes in Ocean Production of Pacific Salmon in Juneau, Alaska, in October/November (under planning).
- e. Vol. 7 nos. 1 and 2 of PICES Press were circulated in January and July.
- f. Scientific Report No. 10: Proceedings of the 1998 Science Board Symposium on the Impacts of the 1997/87 El Niño Event on the North Pacific Ocean and its Marginal Seas, was printed and distributed in March.
- g. The 1999 Directory was updated and circulated in June.
- h. The Final Announcement for the Eighth Annual Meeting was distributed in June.
- i. The Final Announcement for the Beyond El Niño Conference was distributed in June.
- j. The special issue of Progress in Oceanography on Ecosystem Dynamics in the Eastern and Western Gyres of the Subarctic Pacific was published in July and will be distributed in October.
- k. The book "Dynamics of the Bering Sea" was published in September and will be distributed in October.
- l. Scientific Report No. 11: PICES Climate Change and Carrying Capacity Program/Summary of the 1998 MODEL, MONITOR and REX Workshops and Task Team Reports, was published in September and will be circulated in October.
- m. Scientific Report No. 12: Proceedings of the Second PICES Workshop on the Okhotsk Sea and Adjacent Areas, was published in September and will be circulated in October.
- n. A program and abstracts for scientific sessions were prepared for circulation at the Annual Meeting in October.

5. Publications

List of publications produced this year:

- a. Handbook 1999 and the 1999 Handbook for Chairman and Convenors were distributed in January.
- b. The 1998 Annual Report was published and circulated in January.
- c. A poster and the First Announcement for the Eighth Annual Meeting were printed and circulated in January.
- d. A poster and the First Announcement for the Beyond El Niño Conference were printed and circulated in January.

6. Inter-sessional meetings

The following inter-sessional meetings were convened, for which financial and travel arrangements were made:

- a. A 4-day CO₂ Technical Workshop was held April 20-22, 1999, in Tsukuba (Japan);
- b. A 2-week MEQ Practical Workshop was held in May 1999, in Vancouver

- (Canada);
- c. A 5-day WG 12 meeting was held August 10-14, 1999, in Qingdao (China).

The Symposium "Pandalid Shrimp Fisheries:- Science and Management at the Millenium" (September 8-10, 1999) has been co-sponsored with NAFO and ICES.

7. Electronic communication

- a. Methods for handling registration and abstract submission for the Annual Meeting have been improved. On line registration and abstract submission to PICES VIII compared to last year: registration through the web increased

by more than 20% (to 75%) and submitted abstracts increased by more than 15% (to 50%).

- b. The Secretariat continues to disseminate PICES Scientific Report series publications (with graphics) electronically through the PICES Home page.
- c. The Long-Term Time Series Data Set Inventory was updated.
- d. Updates to the list of internet resources and web sites of interest to PICES scientists were made.

GC Endnote 3

PICES Intern Program

Introduction

A PICES Intern Program will allow individuals from PICES member countries to gain experience in operations of intergovernmental scientific organizations and coordination of multidisciplinary international ecosystem research programs by working in the PICES secretariat for periods of up to one year. The PICES Secretariat would supervise up to one intern at any point in time. PICES would benefit from the intern program **directly** through the presence of an additional professional in the secretariat and **indirectly**, over a period of years, by strengthening the capacity of member states to coordinate their involvement in PICES programs.

Objectives

The PICES Intern Program has two goals:

1. professional development of marine

scientists and managers from PICES member countries;

2. increasing the capacity of the PICES Secretariat to support the work of PICES.

Nature of the internship

Under the supervision of the Assistant Executive Secretary, interns will work on projects of the Secretariat relevant to their professional interests and development needs, including ESL (English as a Second Language) training if required. Interns may be given a wide variety of tasks as to assist in:

- preparing information for and providing secretarial support to PICES Working Groups and Scientific and Technical Committees;
- organizing scientific meetings;
- preparing and editing various PICES

- publications;
- coordinating international cooperative program in marine science; and
- coordinating PICES activities with efforts of other relevant organizations.

Internships will normally begin on or about April 1 and extend for a period up to a maximum of 12 months.

Qualifications of candidates

Applicants must be staff of the academic or government sector of PICES member-countries, have a M.Sc. or Ph.D. degree, the ability to read, write and speak English (taking into consideration whether English is the candidate's native language), the ability to use computers and the internet, and be self-motivated.

Guidelines for application and selection procedure

In the selection process, it is important to ensure balanced distribution of internships among member countries. There will be an annual competition for PICES interns. A member country that has had an intern in any year is not eligible to have an intern in the following two years.

- Governing Council delegates will be responsible for advertising the PICES Intern Program within their countries.
- Applicants will apply to their main national delegate for PICES, describing their interests and qualifications, providing a resume delineating their

academic and work experience and three professional references.

- The national PICES delegate will review applications from his/her country and transmit his/her nominee(s) to the PICES Secretariat for final selection. Applications must be received by the Executive Secretary by the date of the first Governing Council meeting at the PICES Annual Meeting.
- The Chairman of PICES will select the successful candidate in consultation with the Executive Secretary and the Chairman of Science Board.
- The Executive Secretary will inform all Governing Council members of the result of the competition.

Financial support

PICES interns will be provided a stipend of CDN \$2,000 per month by the secretariat. Travel costs for the intern to and from the place of residence and the location of the Secretariat will be normally borne by the individual's home country. Travel expenses associated with the intern's work in the Secretariat will be covered by PICES. Since the intern will continue to be an employee with his home institution while at the Secretariat, his/her medical insurance and all other benefits will remain the responsibility of the intern's home country.