

REPORT OF THE 2007 INTER-SESSIONAL SCIENCE BOARD MEETING

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The fifth inter-sessional Science Board meeting, with the participation of Governing Council, met from 9:00–17:30 hours on April 19, 2007 at Work Pia, Yokohama, Japan, following a successful 3-day workshop to develop a science plan for the new PICES integrative scientific program (FUTURE) prior to the inter-sessional meeting. Science Board Chairman, Prof. Kuh Kim, welcomed participants (*SB-IM Endnote 1*) to the meeting and thanked Chairman-elect, Dr. John E. Stein, for his efforts in organizing and convening the workshop and those present at the inter-sessional meeting who had participated at the workshop. The meeting agenda is provided in *SB-IM Endnote 2*.

Mid-term updates (Agenda Items 2 and 14)

Biological Oceanography Committee (BIO)

BIO Committee Chairman, Dr. Michael Dagg, reported that BIO is sponsoring/co-sponsoring 2 topic sessions, 1 paper session and 2 workshops at PICES XVI and that convenors and invited speakers are in place. Dr. Dagg, who is one of the convenors of the 4th International Zooplankton Production Symposium, to be held in Hiroshima, Japan, May 28–June 1, 2007, reported that the symposium plans were progressing well due to the efforts of the major convenor, Dr. Shin-ichi Uye, of Japan, and the PICES Secretariat. A total of 469 abstracts were submitted for 10 plenary sessions and 3 workshops.

The North Pacific Research Board (NPRB) is developing a program entitled “*Bering Sea Integrated Ecosystem Research Program*” (BSIERP) in which it is providing \$14M to be combined with about \$10M (plus logistical support) from the National Science Foundation (NSF) BEST program to study the entire Bering Sea ecosystem over a 4- to 6-year timeframe. An attempt is being made to coordinate funding and science objectives from NPRB and NSF into a single “ecosystem level” program with NSF focusing on lower trophic levels and NPRB

focusing on the upper levels. Proposals are being reviewed. NPRB is also developing a smaller (\$6M) IERP for the Gulf of Alaska.

The Bering Ecosystem Study (BEST) program went on its first cruise April 11, 2007 to study the impact of seasonal ice cover on the shelf of the eastern Bering Sea. ESSAS (Ecosystem Studies of the Sub-Arctic Seas) is planning a series of PICES co-sponsored workshops and annual SSC meeting for June 4–8, 2007 in Hakodate, Japan. About 40 scientists from 7 or more countries are expected to attend a 2-day workshop on “*The role of seasonal sea ice cover in marine ecosystems*”, co-convened by MONITOR Vice-Chairman, Dr. Sei-Ichi Saitoh, a 1-day workshop on “*Evaluation of future ESSAS climate scenarios*” convened by POC/CFAME member, Dr. James E. Overland, and a ½-day discussion of modeling approaches to comparisons of how climate change will affect the sub-arctic seas and their ability to support sustainable fisheries. ESSAS is involved in helping to organize an activity in the IPY program through a sub-program, Ecosystem Studies of Subarctic and Arctic Regions (ESSAR), which IPY has chosen to be the lead group for about 20 groups. The Oceanic Ecodynamics Comparison in the Subarctic Pacific (OECOS) program, in which the western and eastern gyres of the subarctic North Pacific were to be compared, was funded by Japan to study the western gyre. The Japanese team, led by Dr. Tom Ikeda, completed its first, exploratory, cruise (March 6–16, 2007) and a second, longer cruise is scheduled soon. The U.S. proposal to study the eastern gyre, led by Dr. Charles B. Miller, was submitted to NSF and declined. Dr. Miller will look elsewhere for funding.

Dr. Dagg has now received draft terms of reference from IFEP-AP to form a Working Group with proposed title “*Iron Supply and its Impact on Biogeochemistry and Ecosystems in the North Pacific Ocean*”. New members from additional PICES countries are being considered,

and a new hypothesis on the mechanisms controlling phytoplankton production in the subarctic North Pacific is being formulated. IFEP Co-Chairman, Dr. C.S. Wong, is preparing a synthesis manuscript as a contribution to Dr. Atushi Tsuda's special volume on SEEDS I and II and SERIES.

Fishery Science Committee (FIS)

FIS Committee Chairman, Dr. Gordon H. Kruse, informed the meeting that FIS will be sponsoring/co-sponsoring 5 topic sessions and 2 workshops at PICES XVI. PICES Scientific Report No. 33 of the "*PICES/NPRB workshop on integration of ecological indicators of the North Pacific with emphasis on the Bering Sea*" was finalized and published in December 2006 and Dr. Kruse has arranged to publish a special issue in the journal *Fisheries Research* for PICES XVI topic session S4, "*Ecosystem approach to fisheries: Improvements on traditional management for declining and depleted stocks.*" The FIS Committee recommended that PICES co-sponsor the Linking Herring Symposium, to be held in Galway, Ireland from August 26–29, 2008, by funding travel for PICES members, Drs. Brenda Norcross and Prof. Yoshiro Watanabe, to attend. The Committee also recommended that PICES co-sponsor the CLIOTOP Symposium (see Agenda Item 11).

The FIS Committee recommended publication of the WG 16 report on "*Impacts of climate and climate change on the key species in the subarctic Pacific*" after a FIS sub-committee had reviewed a revised draft. Prior to publication, a number of scientific and technical issues must be addressed by WG 16 report authors. WG member, Dr. Steven Bograd, will work with report author, Dr. Richard Beamish, to prepare a synopsis. Science Board raised concerns about the relevancy of a body of work to be published in 2008 when the report had been approved by Council in 2003. Another concern was that the contents needed to reflect what was stated in the title of the report.

Action

Dr. Kruse:

2.FIS.1 Confirm that Dr. Bograd is working

with Dr. Beamish on a WG 16 report synopsis and that WG 16 report contents and title match. Dr. Kruse to send subcommittee comments to Dr. Beamish to be addressed prior to submission to the PICES Secretariat. Dr. Kruse to review the next revision to verify that the final satisfactory edits have been made.

Marine Environmental Quality Committee (MEQ)

Dr. Glen Jamieson, Chairman of the MEQ Committee informed everyone that he, as Co-Chairman of the Working Group on *Ecosystem-based Management Science and its Application to the North Pacific* (WG 19), had been nominated by PICES to co-convene Theme Session R, "*The ecosystem approach: What is the impact on marine science, science based advice and management of marine ecosystems?*" at the ICES Annual Science Conference (ASC) in Helsinki, Finland to be held September 17–21, 2007. The *Harmful Algal Bloom* Section (HAB-S) Co-Chairman, Dr. Vera Trainer, submitted a proposal to Japan to fund an early warning system for toxins in seafood and seawater in developing countries.

Working Group on *Non-indigenous Aquatic Species* (WG 21) has been working on developing its links with ICES/IOC/IMO Working Group on *Ballast and Other Ship Vectors* (WGBOSV) and ICES Working Group on *Introductions and Transfers of Marine Organisms* (WGITMO) and all 3 groups will meet May 24–25, 2007 to forge links between PICES and ICES for joint projects. Work has been slow on completing WG 21's terms of reference 1–4. WG Co-Chairman, Darlene Smith, did not receive much feedback from China or Korea and suggested that members should participate throughout the year – not just at the Annual Meeting. WG21 is involved in 2 topic sessions and 1 workshop at PICES XVI. The WG had requested a topic session on invasive species, but agreed to postpone their request until the Annual Meeting in Dalian, China, owing to the fifth International Conference on "*Marine bioinvasions*" taking place in May 2007.

The Working Group recommended to Science Board the appointment to Co-Chairman of WG21 member, Dr. Vasily Radashevsky.

Technical Committee on Monitoring (MONITOR)

MONITOR Vice-Chairman, Dr. Sei-Ichi Saitoh, reported on the status of the *Continuous Plankton Recorder Survey in the North Pacific* Advisory Panel (CPR-AP). The E–W (Vancouver, Canada–Japan) transect has a new CTD fluorometer mounted on the CPR and sampling was completed between March 19–April 3, 2007, with plans to sample twice more in 2007. The N–S transect (Cook Inlet–Puget Sound, U.S.A.) was sampled from April 7–11, and will continue to be sampled approximately monthly until September 2007. Funding for the N–S transect is in place for the entire 2007 field season but the E–W transect was funded only for the sampling that just took place. The Sir Alister Hardy Foundation for Ocean Science (SAHFOS) is prepared to cover the costs of the summer and fall transects in order to ensure that there will be no gaps in sampling, but it is crucial that funding be sought beyond 2007. There will be no funding for either transect beyond 2007, but proposals will be submitted to the Exxon Valdes Oil Spill Trustee Council (EVOSTC) and a proposal to the NSF is being considered. Executive Secretary, Dr. Alexander Bychkov, informed members that the Secretariat and CPR-AP member, Dr. Sonia Batten, are working together to place the E–W database on the PICES website.

The GOOS Scientific Steering Committee (SSG-GOOS) has endorsed the North Pacific CPR program as an ocean monitoring tool. The eleventh session of the IOC/WESTPAC Coordinating Committee for the NEAR-GOOS took place in Bangkok, Thailand, January 18–19, 2007, in which SG-GOOS member, Dr. Vacheslay Lobanov, presented a report on MONITOR and its GOOS-related activities. The NEAR-GOOS Coordinating Committee expressed intentions to keep in close contact with PICES on developing ocean monitoring in the North Pacific and its marginal seas. At PICES XV, SSG-GOOS recommended that the

existing GOOS program should be coordinated by PICES and a North Pacific GOOS pilot project should not be initiated. Therefore, terms of reference will need to be revised and proposed at PICES XVI. Dr. Phillip Mundy attended the 10th session of the GOOS SSC (GSSC-X) in Seoul, Korea on March 13–16, 2007, and submitted a report of GSSC-X to the Secretariat that will not only initiate the exchange of information between GSSC and PICES entities engaged in ocean observing activities, but will also serve GSSC as a reference to the ocean observing activities of PICES.

MONITOR will be sponsoring 1 topic session and co-sponsoring 1 topic session and 1 WS at PICES XVI.

Action

Dr. Alexander

2.MONITOR.1 Contact new Exxon Valdes program managers regarding CPR funding.

2.MONITOR.2 Check if NSF will fund CPR until EVOS can get its funding in place if there is a funding gap.

Drs. Napp/Saitoh

2.MONITOR.3 propose new terms of reference for GOOS at PICES XVI.

Physical Oceanography and Climate Committee (POC)

POC Committee Chairman, Dr. Michael Foreman, presented his Committee report to Science Board. POC will be sponsoring a paper session and co-sponsoring 3 topic sessions and 1 workshop at PICES XVI. Dr. Foreman will be a co-convenor at the ICES/PICES/IOC Symposium on “*Effects of climate change on the world oceans*” scheduled for May 19–23, 2008 in Gijón, Spain. The Committee’s Action Plan has been updated and in the next 5 years POC wants to address the coordination of carbon-related issues in the North Pacific and the evaluation of climate change projections from the 4th assessment report of IPCC. POC/WG 20 plans to determine the major circulation and physical/geochemical changes for the North

Pacific and its marginal seas as projected by the latest global climate models, and plans to provide a summary of these changes in a manner that will be useful to other PICES Committees and Groups.

The Section on *Carbon and Climate* (CC-S) is progressing very well and wants to add more members (from Canada and Japan). The Best Practices Guide website has been set up and numerous reviews have been received. Plans are to have the manual ready in June prior to the IOC meeting. CC-S is addressing its first term of reference by initiating the data synthesis process, and is proceeding as planned. Partial travel support was provided to WG 20 members, Drs. Muyin Wang and Enrique Curchitser to attend the ESSAS workshop (see BIO Committee report, above) in Hakodate, Japan, from June 4-8, 2007. WG 20 members, Drs. Ig-Chan Pang and Jai-Ho Oh, will work together to adapt Dr. Oh's high-resolution atmospheric model to an ocean circulation model for the Yellow and East China Seas. The Advisory Panel for a *CREAMS/PICES Program in East Asian Marginal Seas* (CREAMS/PICES-AP) will be holding their inter-session meeting in Qingdao, China, on May 18–19, 2007. Plans are being made to have a second summer school, in Hakodate in 2008. A special issue of the *Journal of Marine Systems*, arising from selected papers presented in the CREAMS/PICES international workshop on “*Model/data intercomparison for the Japan/East Sea*”, held August 21–25, 2006 in Busan, Korea, is tentatively scheduled for publication by the end of 2007. A joint Korean–Russian cruise and Korean–Japanese cruise will take place in the Japan/East Sea in 2007.

Technical Committee on Data Exchange (TCODE)

TCODE Technical Committee Chairman, Dr. Igor Shevchenko, announced that the Committee will continue to support HAB-S work with the HAE-DAT and required metadata. The Committee is sponsoring 1 topic session and is organizing 1 scientific/e-poster session at PICES XVI. TCODE is collaborating with the ICES Working Group on *Data and Information Management* (WGDIM) and has 1 TCODE

member (Georgy Moiseenko) who is also a member of WGDIM. TCODE is continuing its Federated Metadata project. In 2005 Korea became a member of the PICES Marine Metadata Federation, and Far East Russia became a partner shortly after. In 2006 Japan joined, completing the Phase II Metadata Federation proposal to include Japan. Phase III is being carried out to bring China into the Federation. The PICES Metadata Federation now includes 5 nodes from 4 countries (Japan, Republic of Korea, Russia, and U.S.A.). A Chinese node will be added in 2007. TCODE is investigating the utility of an Asian-side metadata server. TCODE is continuing to work closely with the Secretariat on providing advice on information archiving and e-publishing, and interacting with MONITOR to coordinate and manage monitoring data.

Climate Change and Carrying Capacity Program Implementation Panel (CCCC-IP)

Program Implementation Panel Co-Chairman, Dr. Harold Batchelder, reported that the MODEL Task Team had reached a milestone by having 19 contributions on NEMURO and NEMURO.FISH published in a special issue of *Ecological Modelling* in February 2007. MODEL has been working with the Secretariat to update its website so that there is public access to all MODEL reports, workshop archives, and NEMURO model code. MODEL was contacted by Dr. Ivo Grigorov of the Euro-Oceans project for the purpose of including the NEMURO models in the Euro-Oceans online database of ocean models and CCCC Co-Chairman, Prof. Michio Kishi, worked with Dr. Grigorov to provide the data. Additional material relating to other NEMURO-related models and links to the Eur-Oceans project are planned for the MODEL webpage on the PICES website. MODEL TT Chairman, Dr. Thomas Wainwright, and member, Dr. Shin-ichi Ito, attended an FRA international workshop on “*Collaborative studies for ecosystem variation and climate change in the North Pacific*” held on October 21–23, 2006, in Yokohama, which compared plankton research in the Odate and CalCOFI regions, and considered the use of NEMURO and related models as tools for future

studies in the two regions. The project on *Software framework for integrating marine ecosystem model*, which was funded by NOAA in 2005, is still in progress, and it is expected that the Fortran model code will be available in the summer of 2007, with documentation and web interface later in the year. The project will integrate NEMURO and NEMURO.FISH in the Earth System Modeling Framework (ESMF), provide a web-based interface for the NEMURO and NEMURO.FISH models, and provide users' guides and documentation on the web. MODEL TT member, Dr. Francisco Werner, led a proposal to the U.S. NSF Partnership for International Research and Education (PIRE) program for the purpose of linking Norwegian, Japanese, and U.S. research on marine ecosystems and forecasting. This project will have a strong emphasis on education as well as research, with inclusion of summer schools/workshops to be held in Japan, Norway and NCAR in the U.S. Research objectives include the study of climate effects on subarctic marine ecosystems, and thus would be related to work under the ESSAS program. A final decision should be made by June 2007.

An inter-sessional *Climate Forecasting and Marine Ecosystems* (CFAME) Task Team workshop on "*Linking climate-forcing mechanisms to indicators of species ecosystem-level changes: A comparative approach*" is planned for May 21–23, 2007, in Seattle, U.S.A. Planning for this workshop, which was to focus on formalizing conceptual mechanisms of climate forcing and then apply comparative approaches to the California Current system, the Sea of Okhotsk, the East China/Yellow Seas, and the Kuroshio/Oyashio Current system, has been slow. Originally intended to complete work begun at the 2006 ASC, an agenda has not yet been developed, the venue was selected only recently, and CFAME national representation is made up only by Canada, U.S. and Japan.

As the CCCC Program is nearing its completion, Dr. Batchelder presented a proposed PICES scientific report outline on the summary of the 4Cs Program and stated that any feedback from Science Board would be welcome. The report will take approximately 1½ years to finish.

CCCC and/or its Task Teams will be co-sponsoring 3 topic sessions and 1 workshop, and the Program will sponsor a paper session at PICES XVI.

Report of the Study Group on *Ecosystem Status Reporting* (Agenda Item 3)

Dr. Skip McKinnell, PICES Deputy Executive Secretary, presented the findings of the report on the behalf of the Study Group on *Ecosystem Status Reporting* Chairman, Mr. Robin Brown. From the terms of reference created under Science Board (Decision 06/S/6), the SG developed 4 options for consideration at the inter-sessional Science Board/Governing Council meeting. Science Board was able to narrow the options down to 2: Incremental improvement ESR and integrated ecosystem assessment. Members were divided as to whether the ESR should tie in with FUTURE or could be started earlier. Dr. Bychkov stated that funds were available but that people willing to devote time to the report was an issue. There was consensus that the report was a flagship product of PICES and should not be abandoned.

Action

SG-ESR

3.0 Finalize the report within 1 month and, on behalf of Science Board, submit to Council in order to determine what member countries consider the preferred option.

Report of the Study Group on *Marine Aquaculture and Ranching in the PICES Region* (Agenda Item 4)

Tasks were circulated to members of the Study Group on *Marine Aquaculture and Ranching in the PICES Region* by Study Group Chairman, Dr. Michael Rust, but responses could not be collected and summarized in time to present a progress report to the inter-sessional Science Board/Governing Council meeting in Yokohama.

Status of proposed publications (Agenda Item 5)

The Executive Secretary reviewed the items that were slated for publication or had been published. FIS Chairman, Dr. Kruse, stated that

arrangements had been made with the journal *Fisheries Research* to have a special issue on selected papers from PICES XVI Topic Session, “*Ecosystem approach to fisheries: Improvements on traditional management for declining and depleted stocks*”, and requested that this item be added to the PICES list of proposed publications for 2007 and beyond.

Status of proposed inter-sessional workshops/symposia (Agenda Item 6)

The proposal by Prof. Kishi for a 4th International Workshop on *Okhotsk Sea and adjacent areas* was deferred from summer 2007 to 2008 so that a financial request could be made at PICES XVI. NOAA has contributed \$30K towards costs for the Early Career Scientists Conference scheduled for June 26–29, 2007 in Baltimore, U.S.A.

Status of preparations for PICES XVI (Agenda Item 7)

Good progress is being made on preparations for PICES XVI in Victoria, Canada, with the venue set and invited speakers in place for the Science Board Symposium. The meeting in Victoria will be 1 day longer because of the addition of the FISP Workshop on FUTURE. At PICES XV in Yokohama, Science Board had proposed 4 parallel sessions for the meeting in Victoria but Council recommended that the sessions be reduced to 3. Science Board was able to implement the request by adjusting the duration of some sessions. GLOBEC and ICES have contributed funds to co-sponsor 1 and 2 topic sessions, respectively. Visas to Canada will need to be issued for only Chinese and Russian participants.

Selection of PICES XVII theme (Agenda Item 8)

The Science Board Chairman stated that because the proposed theme for PICES XVII in Dalian, China, was received just prior to PICES XV, Science Board did not have time to review it for discussion at that time, but the members did note that the original proposal was too narrow to draw wide participation for the next Annual Meeting. Since FUTURE will be implemented at

PICES XVII, Prof. Kim felt it would be appropriate to make the Science Board Symposium the occasion to address the final themes of FUTURE and highly desirable to invite speakers to the Science Board Symposium who will play a key role in FUTURE. He noted that a number of key words in China’s original proposal are the same as those addressed in the FISP planning documents, and considered it reasonable to prepare an abstract in anticipation of those invited speakers although the key players for FUTURE were not yet known. A draft of the science plan for FUTURE will be presented at an Open Forum at PICES XVI and it is anticipated that Science Board will have a better idea of the scope and themes for FUTURE by this time. Prof. Kim therefore proposed finalizing the theme abstract for PICES XVII at the Science Board meeting immediately after the closing of PICES XVI so that the science plan draft could be considered.

Action

Science Board:

8.0 Finalize the theme abstract by PICES XVI.

2007 Wooster Award (Agenda Item 9)

Three nominations for the 2007 Wooster Award were reviewed and discussed by Science Board *in camera*. The recipient will be announced at PICES XVI. The remaining 2 nominations will remain for consideration at next year’s inter-sessional meeting.

Capacity building actions (Agenda Item 10)

Professor Kishi will undertake the responsibility to co-ordinate scheduling and venue for a fourth international workshop on the “*Okhotsk Sea and adjacent areas*”, a second OECOS workshop (to be proposed at PICES XVI), and a second CREAMS/PICES summer school in 2008. Dr. Bychkov requested that the Secretariat be informed on details for the second summer school as soon as they were known. BrainKorea21, the Korea-PICES, Korea-GLOBEC and China’s SOA support matching funds with PICES to allow the participation of Korean and Chinese early career scientists, respectively, in PICES Annual Meetings and workshops/symposia.

Action

Prof. Kishi

10.1 Co-ordinate scheduling and venue for 3 events proposed to take place in 2008 with the other convenors.

Interactions with other organizations (Agenda Item 11)

The FIS Committee recommended that PICES co-sponsor the CLIOTOP (CLimate Impacts on Oceanic TOp Predators) Symposium to be held La Paz, Mexico, from December 3–7, 2007, by supporting the attendance of 2 plenary speakers, Drs. William Sydeman (or alternate George Hunt) and Nathan Mantua.

The Mexican Fisheries Society and the Mexican Chapter of the American Fisheries Society will be holding their first biannual meeting on “*Challenges to fisheries and aquatic sciences in Mexico*” from May 2–4, 2007 in La Paz, Mexico. PICES will use this meeting as a vehicle to bring awareness of PICES activities to the Mexican scientific community and to encourage interest and participation in potential affiliation with PICES. Dr. Stein will attend a plenary meeting to present information on the vision and activities of PICES. A stand will be set up to display PICES books, special publications, selected Scientific Reports, and recent primary journals of interest to Centro de Investigaciones Biológicas del Noroeste (CIBNOR). The publications will remain with CIBNOR’s library which PICES has added to its mailing list.

Science Board declined the North Atlantic Salmon Conservation Organization’s (NASCO) invitation to co-sponsor a symposium on “*Salmon at sea – Causes of marine mortality of Pacific and Atlantic salmon and implications for their management*” scheduled for 2010 mainly because the topic was not of interest to all PICES member countries.

Science Board endorsed the proposal to co-sponsor a GLOBEC/Eur-Oceans/FAO symposium on “*Coping with global change in marine social-ecological systems*” scheduled for July 2008 in Rome, Italy. Members thought it would be useful topic for FUTURE to move into

as well as being relevant to the Ecosystem Status Report.

Science Board endorsed the Secretariat’s proposal to mail the WOCE Pacific Ocean Atlas of physical and chemical parameters, compiled by Dr. Lynne Talley of Scripps Institution of Oceanography, to Chinese and Russian libraries. To minimize distribution costs, the atlas will be presented to Chinese and Russian participants at PICES XVI to take back to their respective libraries.

Action

Dr. Kruse/Secretariat:

11.1 Send a letter to NASCO declining their invitation.

Secretariat:

11.2 Provide WOCE atlases to Chinese/Russian libraries in care of selected scientists when they come to PICES XVI.

Status of proposed changes in membership (Agenda Item 12)

As there was still concern about lack of membership or participation in some PICES categories, the Secretariat will send formal letters of request for members to be appointed from Canada, China, and Korea. Dr. Sinjae Yoo, national delegate of Korea, indicated that there was an expert who expressed interest in joining MBM-AP.

Action

Secretariat:

12.1 Send letters of request for members for CC-S and MBM-AP to national delegates.

Dr. Yoo:

12.2 Ensure that letter from MBM expert is channeled to the Secretariat.

Committee Chairmen and Vice-Chairmen (Agenda Item 13)

The Science Board Chairman instructed Committee Chairmen whose terms were coming to an end to consult with the Secretariat about replacements or extensions so that these could be in place to ensure stability for the implementation of FUTURE. He also asked that an open mind be

kept about having Vice-Chairmen on Committees that currently do not have them.

Other items (Agenda Item 14)

The Study Group on *Scientific Cooperation* (SG-SC) between PICES and non-member countries was approved by Council at PICES XV in 2006 (Decision 06/A/6). SG Chairman, Dr. Laura Richards, thanked Science Board members for their comments on the draft report being presented at the inter-sessional meeting. Dr. Richards stated that the purpose of the report was to try to identify options and propose mechanisms for scientific cooperation between PICES and non-member countries. The SG strongly urged the same membership to be kept rather than expanding the terms of the Convention. The SG looked at affiliate status and asked Science Board to consider what kind of roles they would like affiliate countries to have. Suggested questions included: 1) What would be the processes for selecting an affiliate institution? 2) How would PICES interact with scientists from non-affiliate institutions in a country with a recognized affiliate? 3) What would be the costs to the Secretariat that would be associated with expanded scientific cooperation?

Dr. Bychkov announced that national delegate for Korea, Dr. Ig-Chan Pang, will make a statement on Korea's acceptance to host PICES XVIII at Council's inter-sessional meeting, April 20, 2007. The Annual Meeting will take place October 2009 in Seoul, Busan, or Yosu.

Science Board endorsed the idea of presenting a PICES award certificate to an organization(s), group(s), or individual(s) that have contributed to marine science in the North Pacific through long-term monitoring and/or data management of various ocean conditions and marine resources. Nominations and letters of recommendation can be sent to the Secretariat. Recommendation for a recipient(s) will be made by the MONITOR and TCODE Technical Committees with final approval to be made by Science Board. (Update: On May 6, 2007, Science Board voted to have the award named the "PICES Ocean Monitoring Service Award (POMA)". A description of the new award will be finalized at PICES XVI and the first POMA will be awarded at PICES XVII.)

Dr. Batchelder announced that Professor Kishi was awarded the Japan Oceanographic Prize of the Oceanographic Society of Japan in early 2007 and that in the previous year he was the recipient of the Uda Prize, awarded by the Japan Society of Fisheries Oceanography.

Action

Dr. Batchelder

14.1 Circulate the SG-SC draft report to Science Board for review and comments.

Dr. Kim

14.2 Circulate proposed titles of a PICES award certificate to Science Board for review and finalization.

SB-IM Endnote 1

Participation list

Science Board members

Harold P. Batchelder (Co-Chairman, CCCC-IP)
Michael J. Dagg (Chairman, BIO)
Michael G. Foreman (Chairman, POC)
Glen Jamieson (Chairman, MEQ)
Kuh Kim (Chairman, Science Board)
Michio J. Kishi (Co-Chairman, CCCC-IP)

Gordon H. Kruse (Chairman, FIS)
Sei-Ichi Saitoh (Co-Chairman, MONITOR)
Igor I. Shevchenko (Chairman, TCODE)
John E. Stein (Chairman-elect, Science Board)
Gongke Tan (Representative of People's Republic of China)
Sinjue Yoo (Representative of Republic of Korea)

Governing Council members and advisors

Vera Alexander (Past Chairman, PICES)
 Lev N. Bocharov (Vice-Chairman, PICES)
 Anna Karulina (advisor, Russia)
 Oleg Katugin (advisor, Russia)
 Kyoung-Jin Kim (alternate delegate, Republic of Korea)
 Tokimasa Kobayashi (advisor, Japan)
 Hideki Nakano (national delegate, Japan)
 Ig-Chan Pang (national delegate, Republic of Korea)
 Samuel Pooley (national delegate, U.S.A.)

Laura Richards (national delegate, Canada)
 Igor Shevchenko (advisor, Russia)
 Gongke Tan (alternate national delegate, People's Republic of China)
 Yuji Uozumi (advisor, Japan)
 Tokio Wada (Chairman, PICES)

PICES Secretariat

Alexander Bychkov (Executive Secretary)
 Christina Chiu (Deputy Executive Secretary on Administration)
 Skip McKinnell (Deputy Executive Secretary)

SB-IM Endnote 2**Science Board/Governing Council Inter-sessional meeting agenda*****Thursday, April 19, 2007***

1. Welcome and introduction
2. Mid-term update on activities of Committees and CCCC Program and their subsidiary bodies
 - 2.1 BIO Committee (Michael J. Dagg)
 - 2.2 FIS Committee (Gordon H. Kruse)
 - 2.3 MEQ Committee (Glen Jamieson)
 - 2.4 POC Committee (Michael G. Foreman)
 - 2.5 MONITOR Technical Committee (Sei-Ichi Saitoh)
 - 2.6 TCODE Technical Committee (Igor Shevchenko)
 - 2.7 CCCC-IP (Harold Batchelder; Michio Kishi)
3. Report of the Study Group on *Ecosystem Status Reporting*
4. Report of the Study Group on *Marine Aquaculture and Ranching in the PICES Region*
5. Status of proposed publications
6. Status of proposed inter-sessional workshops/symposia
7. Status of preparations for PICES XVI
8. Selection of PICES XVII theme (China, 2008)
9. 2007 Wooster Award
10. Capacity building actions
11. Interactions with other organizations
12. Status of proposed changes in membership for committees/program and their subsidiary bodies
13. Committee Chairmen and Vice-Chairmen
14. Other items

