FINAL REPORT OF THE STUDY GROUP ON RESTRUCTURING OF THE PICES ANNUAL MEETING

1. Rationale

Article VI(3) of the PICES Convention states that "The Chairman of the Council shall convene a regular annual meeting of the Organization". The PICES Annual Meeting is the largest and most important event for both the science and administration of the Organization. The Annual Meeting consists of two parts: a regular meeting and some preliminary activities that occur in the days before the regular meeting. The regular meeting includes a formal Opening Session, various scientific sessions organized by the Science Board and the Scientific and Technical Committees, and the administrative meetings of the Governing Council and permanent committees. The preliminary meeting includes workshops convened by the PICES expert groups, business meetings of expert groups, and other events.

With the expansion of PICES activities, its Annual Meeting has also expanded in scale and duration. Since 2000, the Annual Meeting usually runs for 10 days (7 days for the regular meeting and 3 days for preliminary activities). Inter-sessional activities (between Annual Meetings) such as symposia and workshops cosponsored with other organizations, such as ICES and FAO, have increased. This growth has imposed additional demands on the Contracting Parties to support travel for their scientists and on the Secretariat to arrange the events, even though the scale of the Annual Meeting has been stable. Since there are some limitations in the number of scientists who can participate in PICES activities and in financial support from the Contracting Parties, there is a need to review the Organization's current practices and consider cost-saving ways for sustaining PICES activities.

Council recognized the importance of this issue at the 2007 Annual Meeting. At the 2008 Annual Meeting, Council addressed this issue formally and established, under the direction of Council, a Study Group to review the present practice and structure of the Annual Meeting, and to consider options to allocate time and order among various events in the Annual Meeting, while shortening the meeting duration. Clarifying the responsibilities of the permanent committees in the PICES decision-making process should also be considered as part of the restructuring of the Annual Meeting, as a secondary task of the Study Group.

2. Terms of Reference and Membership

Council approved the following terms of reference for the Study Group on *Restructuring of the PICES Annual Meeting* (SG-RAM):

- 1. To review the current practice and structure of the PICES Annual Meeting to
 - (a) Consider ways of improving the time balance and order among various events of the Annual Meeting.
 - (b) Shorten the duration of the Annual Meeting, and
 - (c) Assess other issues related to the Annual Meeting.
- 2. To develop recommendations on the Annual Meeting and report to the Governing Council by March 31, 2009.

It was agreed that SG-RAM will be led by the Chairman of PICES, and its membership should include the Vice-Chairman of PICES, the Chairmen of Science Board and Finance and Administration Committee, one representative from each Contracting Party, and the Executive Secretary and Deputy Executive Secretary. At a later date, the United States respectfully offered to forgo its nomination to SG-RAM to keep its size as manageable as possible, since two members of the U.S. delegation will be on the group *ex-officio* (Science Board and F&A Chairmen). The full SG-RAM membership is listed in *Endnote 1*.

3. The Course of Discussion

The nomination process of SG-RAM members was completed in late November of 2008. Because the time for preparing recommendations to Council was limited, the group worked by correspondence. The SG-RAM Chairman prepared a draft report based on the comments from the SG members and opinions on this issue from Council members at the 2008 Annual Meeting. On March 22, 2009, the draft report (*Appendix 1*) was circulated among the SG-RAM members for review. In the meantime, the Secretariat kindly provided a statistical analysis of past Annual Meetings as background information for the SG discussion, and suggested that the current practices had evolved to their current state as a consequence of trial and error (*Appendix 3*). The Chairman of Science Board expressed concern about the negative effects of drastic changes to the style of the Annual Meeting on PICES science, and he also pointed out a need for further discussion in Science Board.

At the 2009 inter-sessional meeting (April 2009, Qingdao, PR China), Council discussed the draft report with all SG-RAM members in attendance. Council decided to extend the term of SG-RAM until the 2009 Annual Meeting (October 2009, Jeju, Korea), and asked the SG to prepare its final report taking account of the comments from Science Board. Among the recommendations in the draft report, Council decided to implement immediately the proposed changes in the format of the Opening Session. Beginning with PICES 2009, the Opening Session will include remarks from a representative of the host country, remarks by the Chairman of PICES, and such activities as Science Board and/or Council may wish to include. Remarks by Contracting Parties will now occur at the beginning of the Governing Council meeting.

Science Board presented its comments on the draft report on May 22, 2009 (*Appendix 2*). The comments were constructive with some alternative recommendations for improving the current practices of the Annual Meeting, but cautious of shortening the meeting duration. Taking into account the comments, the SG Chairman prepared a draft of the final SG-RAM report for review by the SG members. After some revision, the final report was submitted to Council.

4. Review of the Current Structure and Practices of the Annual Meeting

Council last dealt with the issue of the structure of the Annual Meeting at PICES-1999. Aspects of the current structure and related practices have followed the discussion and decision there (Decision 99/S/7, *Endnote 2*).

A typical schedule of recent Annual Meetings is as follows:

- 1. Days 1–3 (Fri. to Sun.) are the preliminary part of the Annual Meeting (Preliminary Meeting). Four to six workshops plus meetings of the subsidiary bodies of the permanent committees are convened concurrently. A Science Board Lunch Meeting is held on Sunday.
- 2. Days 4–10 (Mon. to Sun.) are the main part of the Annual Meeting (Regular Meeting). The first five days (Mon. to Fri.) is the PICES Science Conference (ASC).
 - a. The Regular Meeting starts with the Opening Session on Monday morning, followed by the Science Board Symposium on the overall theme of the Annual Meeting as a plenary session. In the evening of Monday, a Welcome Reception is held by the host country for all participants.
 - b. From Tuesday to Friday, Scientific Sessions convened by Scientific/Technical Committees and Steering Committee of the PICES Integrative Scientific Program are convened concurrently (three concurrent sessions per day).
 - c. On Wednesday (Day 6), the Finance and Administration Committee meets (0.75 day), and all Scientific/Technical Committees have their formal meetings in the afternoon (3.5 hours). The Finance and Administration Committee meets again for a short time on Thursday (Day 7) to review their report and to develop recommendations to Council.
 - d. Poster Session is held on Thursday evening (Day 7), with some wine and snacks served by the host country.
 - e. On Friday (Day 8), immediately after Scientific Sessions, the Closing Session is convened in plenary. After the Closing Session, the Chairman of PICES holds a reception, by invitation, for officials of the

- host country and PICES, invited speakers, group Chairman and representatives of international organizations/programs.
- f. On Saturday (Day 9), meetings of Science Board and Governing Council are held concurrently. Science Board discusses the scientific business of the Organization including the planning of the next Annual Meeting, and prepares its recommendations to Council. Council discusses and makes decisions on financial and administrative issues based on the report from the Finance and Administration Committee.
- g. On Sunday (Day 10), Council meets again to hear the results of the Science Board meeting and to discuss and make decisions on scientific matters based on the report and recommendations from Science Board.

The current style of the Annual Meeting is a consequence of a kind of "natural evolution" due to limitations on time and budget for the activities of the Organization. Many scientists have multiple roles in the Organization, and they can fulfill most of their obligations by attending one meeting where many things are achieved. Therefore, the current scheduling of the workshops and meetings of the permanent committees, immediately prior to the Regular Meeting, is the most cost-effective approach.

During the early period of PICES, the number of participants at the Annual Meetings increased year by year. Since 2000, however, it has been stable at around 400–450, and this indicates that the PICES Annual Science Conference (ASC) has matured into a scientific forum that has demonstrative value to scientists in the North Pacific. The Science Board Symposium on the first day (Monday) of the Regular Meeting is the only plenary session and therefore the only opportunity for a diverse and broad set of speakers from multiple disciplines and from regions beyond the North Pacific to reach the broadest PICES audience.

An inter-sessional Science Board Meeting has been held every spring (April or May) since 2003, and it has become a custom of the Organization. The meeting provides a good opportunity to discuss long-term strategies of the Organization, such as cooperation with other organizations/programs and planning of the integrative scientific programs, as well as an interim review of PICES activities, which are difficult to discuss in depth at the Annual Meeting.

5. Problems and Recommendations on Possible Measures

Even though Council agreed with the changes in the format of the Opening Session and the current structure and practices have certain rationality, still there are some problems in the operational and scientific aspects of the Annual Meeting. The following are problem areas and recommendations for their possible solution.

5.1 Increase of time and economical expenses of Scientists, Contracting Parties, and Secretariat

The increase of inter-sessional events co-sponsored with other organizations, such as ICES and FAO, have imposed additional demands on scientists for attending the events, on the Contracting Parties to support travel for scientists, and on the Secretariat for arranging the events, even though scale of the Annual Meeting has been stable. To maintain a broader range of activities of PICES, the Organization should seek ways of reducing the scope of the Annual Meeting, as far as possible (at least not to enlarge it), while keeping the present high quality and quantity of PICES science.

SG-RAM recommends shortening and fattening the Annual Meeting by increasing the number of concurrent scientific sessions during the ASC and reducing its duration as follows:

- a. To increase the number of concurrent scientific sessions from the current practice (three per day) to four per day;
- b. To maintain the current practice of holding the Opening Session and Science Board Symposium on Monday;
- c. To hold the Closing Session immediately after the Friday morning scientific sessions, a reduction of 0.5 day.

5.2 Insufficient time for Science Board discussion

Currently, Science Board meets at the lunch time on Sunday just prior to the Regular Meeting and has its main meeting on Saturday (Day 9) just after the ASC. Planning of the next Annual Meeting is the most time-consuming issue of the meeting. With the implementation of the FUTURE Program and with Science Board serving as the Scientific Steering Committee (SSC) of the Program, the Organization should consider extenting the meeting duration from 1 day, current practice, to 1.5 days or more.

SG-RAM recommends expanding the duration of the main meeting of Science Board from 1 day (Saturday) to 1.5 days (Friday afternoon and Saturday) to provide more time to accommodate its new role as the FUTURE SSC, and to complete its agenda in time for the Science Board Chairman to present his report to Council on Sunday morning (the current practice).

5.3 Insufficient time for Scientific/Technical Committee Discussion

Scientific/Technical Committees have their official meetings on the Wednesday afternoon during the Regular Meeting. Even though they have many issues to discuss and resolve, currently it seems that much time is spent bringing committee members up to speed on the activities that need to be discussed. As a consequence, indepth discussions of proposed topic sessions and reviews of the activities of subsidiary bodies are difficult. Collaboration among the Committees on their mutual interests will be a key issue, especially for the success of the FUTURE Program.

SG-RAM recommends holding overture meetings of Scientific/Technical Committees to examine and confirm the points of discussion in preparation for their official meetings on Wednesday.

- a. Overture meetings (1 to 1.5 hours) could occur just prior to the Opening Session (e.g., 08:30 09:30) or immediately after the Science Board Symposium (e.g. 17:00 18:00) on Monday;
- b. Scientific/Technical Committee Chairmen should circulate to members of the committee a description of the key issues and topics to be covered at the overture and formal meetings, prior to the Annual Meeting;
- c. Scientific/Technical Committees should assign priorities for the proposed scientific sessions of the next Annual Meeting.

5.4 Overloading Preliminary Events prior to the Regular Meeting

Workshops and meetings scheduled immediately prior to the Regular Meeting are a good opportunity for PICES expert groups to accomplish their tasks in a cost-effective way. These activities should have the highest priority for the expert groups, and the individual event should have a high probability of success. However, some preliminary events are not well focused and do not provide substantial results because essential members do not attend, and some workshops are simply topic sessions that could not be accommodated in the current format of the ASC. The growth of unproductive events enlarges the scale of the Annual Meeting without providing equivalent returns. It seems that a lack of discussion on topic session priorities and insufficient review of the activities of subsidiary bodies at Scientific/Technical Committees and Science Board meetings are the cause of this problem.

SG-RAM recommends improving the results of events that occur just prior to the Regular Meeting by having:

- a. Science Board and Scientific/Technical Committees carefully examine proposals from expert groups that occur prior to the Regular Meeting to ensure a higher probability of a successful result,
- b. Science Board should refrain from converting topic sessions to workshops in the days before the Regular Meeting [this recommendation does not preclude high priority workshops be held in the days before the Regular Meeting].

6. Other Recommendations for Restructuring the Annual Meeting

6.1 Strategic Planning at inter-sessional Science Board Meetings

Science Board should use the inter-sessional meeting as an opportunity to do some strategic planning on the types of scientific sessions for future Annual Meetings. The objective is to ensure that PICES uses its Annual Meetings to meet the objectives that are set out in Committee Action Plans and the PICES Strategic Plan. A key focus for Science Board at its inter-sessional meeting is to fulfill its role as the Science Steering Committee for the FUTURE program. Also, collaboration among Scientific/Technical Committees will be an important topic for accomplishing the goal of the FUTURE Program.

6.2. Explore the possibility of video and web conference

Science Board and Scientific/Technical Committees should explore the possibility of holding an inter-sessional conference using video and web systems among the member countries, especially for PICES expert groups. This approach must be beneficial for cost savings, but also for focusing discussion at the Annual Meeting.

6.3. Strict management of PICES expert groups

Governing Council and Science Board should carefully check the performance of each expert group and reorganize or disband it, if necessary. Careful examination by Governing Council and Science Board is also important for the requests of new expert groups.

6.4. Other Issues Related to the Annual Meeting

With the expansion of PICES activities, the annual budget of the Organization has also increased, and now reaches nearly CDN\$1,400,000. However, the annual contribution from the Contracting Parties covers less than ~50% of the budget. The remainder depends on the voluntary contributions from the Contracting Parties and funds from various scientific foundations and partnerships. In addition, the permanent staff of the Secretariat has been restricted to four since 1995, and it seems not enough to provide sufficient logistical service to every activity of PICES. Therefore, it is clear that there is a "carrying capacity" problem of the Contracting Party's finances and the logistical capabilities of the Secretariat. The restructure of the Annual Meeting under consideration will somewhat ease this problem.

SG-RAM recommends that PICES develop a long-term strategy to accommodate the growing financial and logistical demands on the Organization.

- a. It will require sincere effort by both Council and Science Board through their collaborative discussion at the Annual and inter-sessional meetings.
- b. It is also important to maintain the tireless communication among the Council, Science Board and Finance and Administration Committee members on interests and financial situation in each Contracting Party.

Endnote 1

Membership of the Study Group on Restructuring of the PICES Annual Meeting

Tokio Wada (PICES Chairman) Lev Bocharov (PICES Vice-Chairman) Patricia Livingston (F&A Chairman) John Stein (Science Board Chairman) Laura Richards (Canada) Yukimasa Ishida (Japan) Gongke Tan (People's Republic of China) Jeonghwa Kim (Republic of Korea) Igor Shevchenko (Russian Federation) Alexander Bychkov (Executive Secretary) Skip McKinnell (Deputy Executive Secretary)

Endnote 2

Main components of Decision 99/S/7 (Structure of PICES Annual Meetings)

- 1. To promote inter-committee sessions Science Board should select a "main theme" for each Annual Meeting and 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 presentation 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; poster presenters for that session would be required to stand by their poster at that time;
- 4. To increase the participation of young scientists a Young Scientists' Travel Grant (as a part of the Trust Fund) should be advertised.

Appendix 1

Draft Report of the Study Group on Restructuring the PICES Annual Meeting (Draft of March 22, 2009)

1. Background

With the expansion of activities of PICES, its Annual Meeting* has also expanded in scale and duration. This is evidence that PICES has become an internationally renowned scientific organization. The expansion of the Annual Meeting, however, compresses the time for deliberations by the Governing Council, Science Board, Finance and Administration Committee, and Scientific/Technical Committees, even though their responsibilities have also increase. Such discussions are very important for planning and coordinating relevant activities among Contracting Parties to achieve the Organization's objectives and facilitate international cooperation in the North Pacific Ocean. The increasing scale and duration of the Annual Meeting is also a burden for the host countries, participants and the PICES Secretariat. [Annual Meeting means not only the plenary and subsequent scientific sessions (Annual Science Conference), but also the meetings of the Governing Council, Science Board, Finance and Administration Committee, Scientific/Technical Committees and their subsidiary bodies, as well as workshops and other pre-annual meeting obligations.]

The importance of this issue has been recognized by Council since the 2006 PICES Annual Meeting. At the 2008 Annual Meeting, Council addressed this issue formally and established, under the direction of Council, a Study Group to review the present structure of the Annual Meeting and to consider options to allocate time and order among various events in the Annual Meeting, while also shortening the meeting duration.

The following terms of reference for the Study Group on *Restructuring of the PICES Annual Meeting* (SG-RAM) were approved:

- To review the current practice and structure of the PICES Annual Meeting to (a) consider ways of improving the time balance and order among various events of the Annual Meeting, (b) shorten the duration of the Annual Meeting, and (c) assess other issues related to the Annual Meeting.
- To develop recommendations on the Annual Meeting and report to the Governing Council by March 31, 2009.

Council also agreed that the SG-RAM membership will include one representative from each Contracting Party, as well as the Chairman and Vice-Chairman of PICES, the Chairmen of Science Board and Finance and Administration Committee, and the Executive Secretary and Deputy Executive Secretary. The Study Group will be led by the Chairman of PICES. The nomination process was completed in late November of 2008. Because the time for preparing recommendations to Council was limited, the Study Group worked by correspondence.

2. Review of the Structure and Current Practices of the Annual Meeting

2.1. Current Practices and Structure

A typical schedule of recent Annual Meetings is as follows:

- The overall meeting duration is 10 days.
- During the first three days (Fri. to Sun.), four to six meetings and workshops of the Scientific/Technical Committees and their subsidiary bodies are convened concurrently. Science Board Lunch Meeting is held on Day 3 (Sun.).
- The next five days (Mon. to Fri.) are the formal part of the Annual Meeting (Regular Meeting).
 - The Regular Meeting starts with the Opening Session on Monday morning, followed by the Science Board Symposium on the overall theme of the Annual Meeting as a plenary session. In the evening of Monday, a Welcome Reception is held by host country for all participants.

- o From Tuesday to Friday, Scientific Sessions planned by the Scientific/Technical Committees and the Steering Committee of the Integrated Scientific Program of PICES are held concurrently (three concurrent sessions per day).
- o On Wednesday (Day 6), the Finance and Administration (F&A) Committee has its official meeting in the morning, and all Scientific/Technical Committees have their formal meetings in the afternoon.
- O Poster Session is held in the evening of Thursday (Day 7), with some wine and snacks served by the host country.
- On Friday, in the early evening immediately after scientific sessions, the Closing Session is held as a
 plenary session. After the Closing Session, a reception is held by the Chairman of PICES for officials
 of the host country and PICES, invited speakers, group Chairman and representatives of international
 organizations/programs.
- On Saturday (Day 9), meetings of Science Board and Council are held concurrently. Science Board discusses the scientific matters of the Organization and prepares recommendations to Council. Council discusses and makes decisions on financial and administrative issues based on the report from the Finance and Administration Committee. On Sunday (Day 10), Council meets again to discuss the Science Board report.

2.2. Problems and Implications

- (1) Increase of time and economical expenses of participants
 - Because the total meeting period stretches over 10 days, and even the scientific part is as long as 8 days, time and economical expenses of participants have been quite substantial. The members of Council and Science Board must stay at least 7 days (Mon. to Sun.). It is a burden for the members of Council who are not scientists, because they must wait for the Council meeting on Saturday and Sunday, after attending the Opening Session on Monday.
- (2) Increase of economical expenses of the host countries
 - The total number of participants at the most recent Annual Meetings is from 400 to 500. This is not so large a figure for an international scientific conference. However, because the meeting period is long and many meeting rooms are needed for concurrent scientific sessions, workshops and business meetings, it is not only difficult to secure a venue to fulfill the requirements, but it is also a financial burden for the host country.
- (3) Insufficient time for discussion on scientific matters at business meetings
 In spite of the expansion and diversification of activities of PICES, the lack of frequency and length of
 the Scientific/Technical Committee and Science Board meetings results in insufficient time for
 discussion to focus and prioritize the activities, and to select topics for scientific sessions/workshops to
 be held at the next Annual Meeting. As a consequence, there are overlaps of themes and contents of the
 Topic Sessions, and a remarkable and disordered increase in the number of events prior to the formal
 part of the Annual Meeting. In addition, under the current structure of the Annual Meeting, time to
 prepare a well-focused Science Board report to Council is also insufficient. This is not only
 inconvenient for Science Board, but is also an obstacle for discussion and decision making on scientific
 issues in Council.
- (4) Increase in the number of meetings and workshops prior to the Annual Meeting
 Increase in the number of workshops and working group meetings immediately prior to the Regular
 Meeting is the main reason for the extension of the overall duration of the Annual Meeting. An aim to
 have workshops and meetings in conjunction with the Annual Meeting is to reduce the meeting cost in
 time and finance. Among the workshops and meetings, there are some that produce good fruits for
 collaboration among the Contracting Parties (e.g., events planned by the HAB Section). However, there
 are some workshops/meetings that could not provide substantial results because of a lack of attendance
 of essential members. Besides, there are many cases when workshops are held on themes that were not
 adopted for the Topic Session.

3. Recommendation on Possible Measures

3.1. Improvement of Time Allocation among Various Events

The idea that the meetings of the Governing Council and Finance and Administration Committee should be held a few weeks/months after the Annual Meeting (the current practice of ICES) was proposed at the early phase of the discussion on this issue. This approach has the merit of ensuring sufficient time for preparing a well-focused Science Board report to Council. However, for many members of Council and F&A Committee who have closed relationship with scientific activities and are interested in attending scientific sessions or meetings, this option results in great expenses in time and finance to attend two meetings. This approach also increases the workload of the Secretariat. Therefore, the Study Group considers that reduction of the total meeting period and improvement of time allocation among various events is a practical way to restructure the Annual Meeting, and recommends the following:

- (1) Implementation of workshops and WG meetings at the Regular Meetings
 The Study Group recommends that the Scientific/Technical Committees and Science Board carefully
 examine the proposals for workshops and working group meetings, and select only those that should be
 held during the Annual Meeting. The Study Group also recommends that these workshops and meetings
 be held concurrently with scientific sessions during the Regular Meeting.
- (2) Meetings of the Scientific/Technical Committees

 The Study Group recommends that the Scientific/Technical Committees should have a short (1.5-hour) overture meeting immediately prior or just after the Opening Session of the Regular Meeting to confirm the points and directions for discussion at the Annual Meeting. At that time, proposals for scientific sessions/workshops for the next Annual Meeting and proposals for new subsidiary bodies should be tabled and confirmed by the Committee members. These overture meetings would be quite helpful for the smooth discussion at the Committee meeting to be held during the Regular Meeting.
- (3) Moving up the Science Board meeting
 The Study Group recommends moving the Science Board meeting from Saturday (current practice) to
 Friday to ensure that sufficient time is available for preparing a well-focused report to Council. The
 Study Group also recommends that, if necessary, Science Board should meet again in the morning of
 Saturday.

3.2. Reduction of the Overall Meeting Duration

In principle, the overall duration of the Annual Meeting should be set a few days shorter (e.g., 8 days), and various events should be accommodated within this shorter duration according to the recommendations mentioned above. The Study Group recommends the following possible ways to reduce the meeting duration:

- (1) Simplification and delaying the start time of the Opening Session

 The Study Group recommends abolishing the opening remarks by the Contracting Parties, except the host country, to exempt the national delegates from attending the Opening Session. This would reduce the burden of the time commitment for the national delegates, especially for those who are not scientists. At the same time, it is important for each Contracting Party to express its own view and expectations of the activities and administration of PICES. Therefore, the Study Group recommends allocating time at the beginning of the Council meeting for the statements by the Contracting Parties. The Study Group also considers delaying the start time of the Opening Session from the morning (08:30 or 09:00) to the afternoon (13:00), and having overture meetings of the Scientific/Technical Committees in the morning.
- (2) Increasing the number of concurrent scientific sessions

 The Study Group recommends increasing the number of concurrent scientific sessions from three per
 day (current practice) to four or five per day. This will accommodate some workshops that are now held

prior to the formal part of the Annual Meeting. Currently, 6 meeting rooms have to be prepared for the concurrent Scientific/Technical Committee meetings, and it would not be so difficult for the host country to increase the number of concurrent sessions during the formal part (Mon. – Fri.) of the Annual Meeting.

(3) Review of the Science Board Symposium

The Study Group suggests that the Science Board Symposium should be an exhibition of the scientific achievement of PICES on the overall theme of the Annual Meeting to not only scientists but also administrators and stakeholders, and recommends a review of the current practice of the Symposium to make talks more understandable and shorter.

(4) Application of evening events

The Study Group recommends the use of evenings (from 18:00 to 20:00 or 20:30 hours) for workshops and working group meetings.

3.3. Possible Images of Restructuring and Timing of Its Implementation

Table 1 shows two possible examples of the restructured Annual Meeting based on the recommendations mentioned above. The Study Group recommends that Council restructures the Annual Meeting starting from PICES-2010.

4. Other Issues Related to the Annual Meeting – Improvement of Communication

(1) Communication among Council, F&A Committee, and the Secretariat

The Finance and Administration Committee has a half-day meeting a few days prior to the first session of the Council meeting on Saturday. Even though the schedule for the F&A meeting is tight, the discussion proceeds smoothly because of the excellent leadership of the F&A Chairmen and well prepared background materials by the Secretariat. Many of the F&A members attend the Council meeting as national delegates or advisors, and this is also beneficial for good communication among the Council, F&A Committee, and the Secretariat.

(2) Communication among Council, Science Board, and the Secretariat

Incubation of scientific seeds is one of the major tasks for the Scientific/Technical Committees. When planning activities, such as scientific sessions/workshops to be convened at the Annual Meeting and Working Groups to be established, however, the Committees should select the seeds appropriately and direct their activities according to the expectations of the Contracting Parties and trends of the world. To meet the requirements anticipated from the Committees, not only discussion within the Committees, but also the directions and suggestions from Council via Science Board are important. From this point of view, communication between Council and Science Board has not been sufficient. The Study Group recommends that Council informs Science Board, *via* the Secretariat, of its concerns and the financial situation of the Organization prior to the Annual Meeting based on the meeting agenda and the Science Board briefing book.

Table 1 Possible examples of the restructured Annual Meeting.

Example 1

Day	Time	Events			
Day 1(Sun.)	M	Workshops/WG Meetings			
		(Max. 6 concurrent)			
	L	SB Lunch Meeting			
	A	Scientific/Technical Committees Overture Meetings			
Day 2(Mon.)	M	Opening Session (plenary)			
	A	SB Symposium (plenary)			
	Е	Welcome Reception			
Day 3(Tues.)	M	Scientific Sessions/Workshops/WG Meetings (4-5 concurrent)			
	A	Scientific Sessions/Workshops/WG Meetings (4-5 concurrent)			
Day 4(Wed.)	М	Scientific Sessions/Workshops/WG Meetin (4-5 concurrent)	gs	F&A Meeting	
	A	Scientific/Technical Committee Meetings (6 concurrent)			
	Е	Poster Session			
Day 5(Thu.)	M	Scientific Sessions/Workshops/WG Meetings (4-5 concurrent)			
	A	Scientific Sessions/Workshops/WG Meetings (4-5 concurrent)		Meetings	
Day 6(Fri.)	M	Scientific Sessions (4-5 concurrent)		SB Meeting	
	A	Scientific Sessions (4-5 concurrent)		SD Meeting	
	Е	Closing Session (plenary)/Chairman's Reception			
Day 7(Sat.)		GC Meeting			
Day 8(Sun.)		GC Meeting			

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Example 2

Day	Time	Events		
Day 1(Mon.)	M	SB Overture Meeting		
		Scientific/Technical Committee Overture Meetings (6 concurrent)		
	A	Opening Session/SB Symposium (plenary)		
	Е	Welcome Reception		
Day 2(Tues.)	М	Scientific Sessions/Workshops/WG Meetings (4-5 concurrent)		
	A	Scientific Sessions/Workshops/WG Meetings (4-5 concurrent)		
Day 3(Wed.)	М	Scientific Sessions/Workshops/WG Meetings (4-5 concurrent)	F&A Meeting	
	A	Scientific/Technical Committee Meetings (6 concurrent)		
	Е	Poster Session		
Day 4(Thu.)	M	Scientific Sessions/Workshops/WG Meetings (4-5 concurrent)		
	A	Scientific Sessions/Workshops/WG Meetings (4-5 concurrent)		
Day 5(Fri.)	M	Scientific Sessions (4-5 concurrent)	SB Meeting	
	A	Scientific Sessions (4-5 concurrent)	SD Meeting	
	Е	Closing Session (plenary)/Chairman's Reception		
Day 6(Sat.)		GC Meeting		
Day 7(Sun.)		GC Meeting		

Appendix 2

PICES Science Board comments on draft report of the Study Group on *Restructuring of the PICES Annual Meeting* (May 27, 2009)

As Science Board Chairman I have collated and synthesized comments from the Board, which follow below.

Preface

We want to offer the following written comments on the draft report of the SG-RAM as a follow-up to remarks made during the recently completed inter-sessional Science Board (2009-ISB) meeting. These comments come from newly appointed SB members and from members that have up to seven years of experience as a Science Board member and as co-chairs of the CCCC scientific program. This breadth of experience we believe provides appropriate institutional history with regard to the Annual Meeting as well as a fresh perspective.

First, we preface the comments by noting that the trends shown in Figure 1 (duration of ASC), Figure 2, Figure 4 (pages in annual report), and Figure 5 (annual participants) in *Appendix 3* are all indications of a vibrant, healthy organization that is clearly beyond its infancy, and judging from annual attendance (Fig. 5) nearly at a steady state. These data indicate that the PICES Annual Science Conference (ASC) has matured into a scientific forum that has demonstrative value to scientists in the North Pacific. From the background information provided by SG-RAM, and some of the comments in materials provided by the, it is also clear that we have what could be called a 'carrying capacity' problem. The demand for presentation of oral paper sessions and workshops is now exceeding the Contracting Party's finances and the logistical capabilities of PICES Secretariat

As I mentioned at the ISB-2009, we believe that the solution to this issue is multifaceted, and requires effort by both the Science Board and Council to resolve the concerns. Fundamentally, Science Board should implement changes that are possible and that do not compromise the integrity and collegiality of the science aspects of the ASC, while producing efficiency improvements. We conclude, however, that the current problem is a symptom of PICES success, and we have outgrown our current financial and logistical support base.

It is our general understanding that the base financial support for PICES from the Contracting Parties has not kept up with the rate of inflation over the past decade, much less accounted for the ever-increasing number of tasks that are being tackled by PICES. If demand exceeds resources, then either demand must decrease (fewer PICES activities engaged in, which is not a good outcome from Science Board's perspective), efficiency must increase (Science Board may be able to help with this as described below) or resources available must increase (a task for Governing Council and National Delegates). We feel that Science Board could assist Council in marketing the usefulness and demonstrated value of PICES to the funding agencies in the member states.

Where Science Board agrees with the current draft of the report

Certainly, there are efficiency improvements and changes that can be discussed and implemented by Science Board that will lead to shorter, and perhaps less expensive, PICES ASC. Each of these changes [(1)–(6)] are discussed in the next few paragraphs.

We favor (1) SG-RAM's suggestions for eliminating contracting party statements during the opening session, except for the host country statement. This change alone will lead to time savings in the opening session. It does seem that for some countries this change will also enable some Council members to arrive as late as the Friday or Saturday of the second weekend (after most if not all of the sessions). For some countries, delegates are not scientists, and they do not wish to spend an entire week (or more) at the ASC.

We also (2) think that SG-RAM's suggestion that Scientific and Technical Committees have short overture meetings on the Sunday preceding the meeting merits consideration by the Science Board. It is worth noting, however, that we used to have business meetings for the Committees before the ASC, and we did find that

attendance was low. We agree that currently too much time in committee meetings is spent bringing committee members up to speed on the activities that need to be discussed. These overture meetings could be used to remind the committees of the key topics that require their attention at the current ASC meeting. We propose that these overture meetings occur for 1.5 hours, from perhaps 4:30 - 6:00 PM, on Sunday night, rather than as an activity on the first Monday.

Thirdly (3), we agree that having more than 3 concurrent parallel sessions during the Tuesday-Friday time frame of the main meeting merits serious consideration by Science Board. By increasing the number of parallel sessions from 3 to 4 during these days, we gain four additional full-day sessions within the main part of the meeting. SB does not agree with increasing beyond 4 concurrent sessions.

Finally, we concur (4) that there is merit in Science Board giving due consideration to the SG-RAM idea of having some of the workshops within the main 5-days of the meeting. We feel strongly, however, that because workshops and topic sessions have fundamentally different purposes, they should not be scheduled in parallel. For workshops to lead to effective discussion and products, the attendees of workshops should be in the workshop all day, and not skipping out at various times to attend a 15- to 20-minute talk that particularly interests them in a parallel topic session. If the decision is made to schedule 4 concurrent workshops on one day, for example on the Tuesday of the ASC week, then that day should be only workshops, and have no topic sessions. That would lead to workshops that are more likely to retain their participants throughout all of the presentations and discussions.

The above four recommendations were in the SG-RAM report. The next two recommendations were not in the report and are offered for consideration by Science Board.

We suggest (5) that the individual committees and FUTURE Advisory Panels (AICE, COVE, SOFE) and Science Board need to be more realistic about expectations and more conservative or strict in making their decisions about which topic session proposals and workshop proposals can be accommodated within a framework that extends from the Saturday prior to the meeting to the Friday of the main meeting [7 days, not including the Saturday (Science Board and Council) and Sunday (Council) meetings following the closing session]. In recent years, there has been a tendency for Scientific Committees to bring 3-5 topic session proposals to Science Board. It is not possible to accommodate all of these within the four days available. Consequently, after the Tuesday through Friday slots have been filled with topic sessions, some remaining sessions are changed from topic sessions to a workshop format and scheduled for Friday to Sunday preceding the main meeting. We propose to instruct the Committees that because we have a limited number of slots for sessions and workshops, they must show restraint in the number of proposals they bring to Science Board for consideration. Likewise, we propose that Science Board will refrain from converting topic sessions to workshops scheduled prior to the main meeting. All Scientific and Technical Committees should prioritize topic session proposals as they currently do, and after balancing slots among the committees, the convenors of the remaining (unsuccessful, lower priority) topic sessions can be informed that their session could not be accommodated.

An alternative strategy that could be useful in some circumstances is available. If the desire is to include many topic sessions, then (6) some topic sessions that request a full-day could be converted to half-day sessions, with overflow abstracts being relegated to poster format. Both of these options (5 and 6) should result in fewer "topic sessions" from the main meeting period being moved to the weekend prior to the main meeting.

Where Science Board has concerns

There are some ideas/recommendations currently in the SG-RAM draft that Science Board does not support.

First, Science Board members are scientists first, and they need to be able to attend scientific sessions or workshops that are held anytime during the main part of the meeting. Consequently, they are (1) strongly opposed to the idea that Science Board should meet on the Friday of the main meeting while workshops or topic sessions are still being held. Having Science Board members attend a business meeting cuts the Chairmen off from one of the most important committee activities, which are the topic sessions/workshops,

and the collegial scientific discussions that arise during these events. We believe that the earliest when Science Board should meet for the main portion of their discussions is on the Saturday following the main meeting week, which has traditionally been the case. With the FUTURE program coming online and Science Board serving in a new capacity as the responsible steering and decision-making body for the FUTURE program, it is possible that a 1-day Saturday Science Board meeting may need to be extended to 1.5 days and include Sunday (AM) as well; this is not currently a proposal but rather we are just highlighting the need to consider this option. If Council wishes to have a 2-day meeting following the ASC, then it might be best to have the Science Board meeting on Saturday (all day) and Sunday (AM), while Council meets all day Sunday and for as much of Monday as is needed to complete their business. In this option the Science Board Chairman would need a 3-hour period on Sunday afternoon to compile all of the recommendations for presentation to Council on Sunday no earlier than 3:30 PM. This would make for a long day on Sunday and would most likely extend the Council meeting to Monday.

As noted at the 2009-ISB, the Science Board session on Day 1 (Monday) of the main meeting is not to exclusively highlight the accomplishments of PICES, but rather to provide the only plenary oral forum within the PICES ASC that enables a diverse and broad set of speakers from multiple disciplines (and from regions beyond the North Pacific (e.g., Europe and elsewhere) to reach the broadest PICES audience. Science Board supports the view that the Science Board plenary session be used to bring speakers to PICES to present ideas generated from other disciplines or regions. For this reason we (2) do not support the SG-RAM recommendation to use the Science Board session for the primary, or sole, purpose of highlighting PICES recent accomplishments. This would be looking too much inward to PICES and not using this important session to look outward and to bring new ideas and science to our organization.

Exploring new technologies

The experience of current and past Committee Chairmen suggests that attempts to conduct business via email before the main meeting usually elicits a very limited response. Some of the Science Board members have recently been part of video and web conference calls with up to six participants that have been very successful. In addition, Anne Hollowed has found that teleconferences have been an effective means of communicating and reaching decisions with the new PICES/ICES Working Group on *Forecasting Climate Change Impacts on Fish and Shellfish*. We therefore suggest that PICES should investigate these technologies for transferring some business that is conducted at the Annual Meetings to other times. Member countries could explore whether institutions in their countries could provide video conference capabilities and share them with the Secretariat. For discussions of only a few hours, this expense would be much less than funding, for example, travel to inter-sessional committee meetings.

Future concerns

It is likely that the activities of PICES, which include Science Board and Council meetings; meetings of Standing Committees and expert groups, the annual science topic sessions; and workshops, that occur at the ASC will become more hectic with increasing demands, such as with the start of FUTURE. It is also possible that with level or decreasing financial resources, more PICES expert groups may increase their requests for more workshops or lengthier workshops immediately prior to the ASC. The alternative to having workshops in the days preceding the ASC is to have them inter-sessionally. The concern with inter-sessional workshops is that they impose substantially greater demands on PICES member nations to support additional travel for Expert Group members and place increasing demands on the Secretariat for arranging venues. The efficiency improvements that may result from the positive recommendations provided in the SG-RAM report and others discussed above may alleviate some of these stresses in the near-term, but eventually, increasing demand will likely eat into the efficiency-based savings. This capacity erosion will be in time commitment, financial resources and Secretariat logistical support. It seems that the long-term strategic objective has to be securing additional resources to sustain PICES leadership in marine science in the North Pacific in the future.

Dr. John Stein PICES Science Board Chairman

Appendix 3

Secretariat Comments

on the Draft Report of the Study Group on Restructuring of the PICES Annual Meeting (SG-RAM)

1. Annual Meeting

The PICES Convention (Article VI(3)) states simply that an Annual Meeting will be convened by the Chairman of PICES, and that it will normally be held at the seat of the Secretariat unless otherwise decided by Council (Council routinely decides otherwise). The Convention does not prescribe what an Annual Meeting should include, other than a meeting of Council.

The Secretariat's view is that an Annual Meeting of the Organization includes: a meeting of its Governing Council, meetings of its permanent committees, and its annual science conference. Through most of its history, Annual Meetings¹ begin on a Monday with the Opening Session, and end the following Sunday, a period of 7 days, with the final meeting of Council. Other activities such as workshops and meetings of some (but not all) subordinate groups of the permanent committees have been scheduled immediately prior to the Annual Meeting (typically Friday-Sunday) as the Organization has found this to be the most cost-effective scheduling of activities throughout the year.

Council last dealt with the issue of structure of Annual Meetings in 1999. Aspects of the current structure and related practices have followed from Decision 99/S/7. Its main components were:

- To promote inter-committee sessions Science Board should select a "main theme" for each Annual Meeting, and proposed Topic Sessions must then fit the overall "theme" of the meeting;
- 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;
- 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; poster presenters for that session would be required to stand by their poster at that time;
- To increase the participation of young scientists a Young Scientists' Travel Grant (as a part of the Trust Fund) should be advertised.

2. Comments on SG-RAM Background

The background section of the report introduces a number of issues that are associated with the terms of reference of the Study Group, particularly as they relate to Annual Meetings. The Secretariat offers the following observations on the draft to help to clarify the situation. The first step was to identify the issues raised in the background:

- 1. The increasing activity of PICES scientists has expanded the scale and duration of its Annual Meeting;
- 2. This expansion has compressed time for deliberations by Council, Science Board, and Permanent Committees;
- 3. The increased scale and duration is a burden to the host country, participants, and Secretariat.

2.1. The increasing activity of PICES scientists has expanded the scale and duration of its Annual Meeting

Analysis:

■ The first two Annual Meetings of PICES were 6 days long and the last two Annual Meetings (2008/09) were 7 days long. Even if preliminary activities are included there has been no statistically significant increase in the duration of the Annual Meeting since its inception in 1992 (P > 0.06). Without including the

¹ Throughout this report, we have attempted to use "Annual Meeting" with capital letters when referring to the Secretariat's definition, and "annual meeting" with small letters when referring to the Annual Meeting plus preliminary activities.

- first two years, the rate of growth in the duration of the annual meeting approaches 0.0 (P > 0.69). Figure 1 shows the temporal history of the Annual Meeting duration (with and without preliminary activities).
- The total number of days of activities scheduled before an Annual Meeting describes only part of the story of activities. It is also necessary to reflect how much activity occurs during those days. The scale (interpreted to mean: the number and diversity of activities) of annual meetings increased dramatically between 1995 and 1996, but has remained relatively constant since 1996. This happened as a consequence of groups meeting/workshops prior to the Annual Meeting at the venue (Fig. 2). This occurred for two reasons: (1) in recent years, the scale of the Annual Meeting did not increase significantly under the direction from Council to limit the number of concurrent activities/sessions at an Annual Meeting to 3, and (2) as previously mentioned, the Organization has found it to be more cost-effective to have their scientists travel to one PICES meeting, and perhaps stay a little longer, than to travel internationally several times.
- It should be noted that rate of growth of extramural activities is not uniform among all of the Standing Committees (and Scientific Program). If one uses the number of pages in an Annual Report to gauge the degree of activity of a Permanent Committee (Fig. 3), FIS and TCODE have very low increases in their activities since PICES-I, while the Climate Change and Carrying Capacity (CCCC) Program had the highest rate of increase of activity of any committee or program because of its later start (1996) and an active program. Please note that at present, there is no active Science Program.

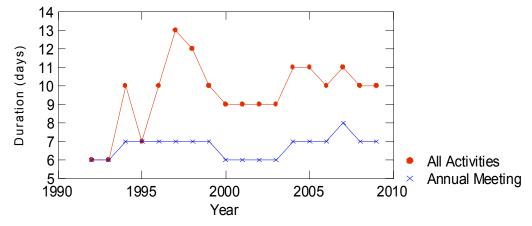


Fig. 1 Duration of PICES Annual Meetings (1992-present).

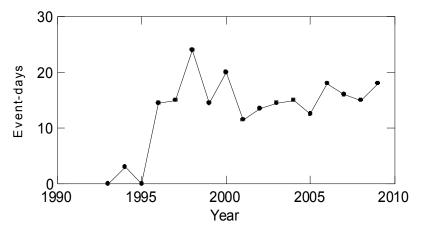


Fig. 2 Number of "event-days" of activities scheduled during an Annual Meeting.

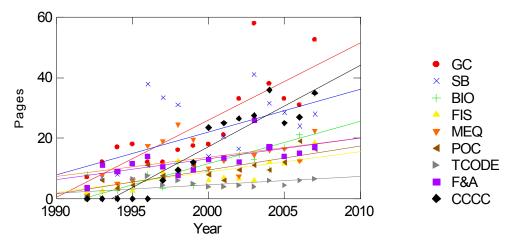


Fig. 3 Pages in the Annual Report describing activities of the Standing Committees, Science (CCCC) Program, and Council.

2.2. Expansion has compressed time for deliberations by Council, Science Board, and Committees

Analysis:

- The main cause of compression of time for deliberations is because the Permanent Committees have not adjusted their schedules to accommodate the growth of PICES science (Fig. 4). As a consequence more issues receive less attention.
- Council is the only group that increased their total meeting time.
- Finance and Administration Committee meetings are short and have decreased of late because:
 - o financial decisions precede the activities proposed by Science Board
 - o zero nominal growth target for the Organization
- This situation will get worse rather than better as FUTURE comes on-line, and overall responsibility for product delivery lies with the Permanent Committees rather than an SSC.

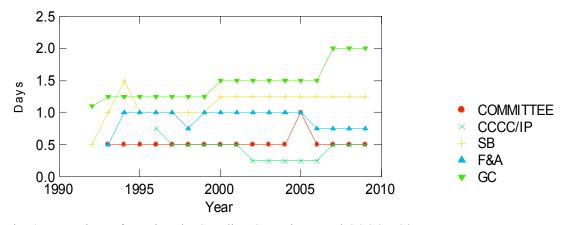


Fig. 4 Durations of meetings by Standing Committees and CCCC EC/IP.

2.3. The increased scale and duration is a burden to the host country, participants, and Secretariat

Analysis:

Most scientists are free to arrive and depart from an annual meeting based on their own schedule. The average participation at an Opening Session is typically less than half of the total number of participants at an annual meeting, and the general lack of award winners present at the Closing Session indicates that most scientists take advantage of this freedom.

- Host countries had an increasing burden from growth in participants during the first half of PICES existence. The annual rate of increase of annual meeting participants was 39 people per year (P < 0.002) until the Tenth Anniversary annual meeting. Since 2000, there has been no significant increase in number of participants (P>0.55) at annual meetings. The average number of participants over the entire duration including preliminary activities is currently ~400 but not all are present simultaneously (Fig. 5).
- The Secretariat is paid to organize and attend the Annual Meeting so it is their legitimate burden.

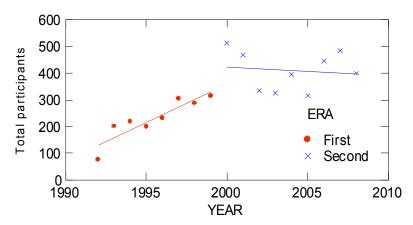


Fig. 5 Total numbers of participants at all events at annual meetings.

2.4 Summary

The major reason for the historical analysis was to distinguish whether the existing structure of the Annual Meeting was caused by incorrect or unthoughtful top-down planning, or was a consequence of evolution, when natural selection pressures on the Organization resulted in certain practices considered as the most cost effective. We concluded that the current state of PICES annual meetings is generally a consequence of evolution, not planning. Natural selection pressures on the Organization have extirpated certain practices. The selection pressures occurred quickly because, after 1993, there has been no significant increasing or decreasing trend in the duration of an annual meeting.

3. Comments on SG-RAM Problems and Implications

In addition to the Background, this section on Problems and Implications raises some additional concerns and some that are repeated from the Background.

3.1. Burden on Governing Council

Analysis:

- Council members have 2-hour work on the Monday of an Annual Meeting, followed by a 4-day interval, followed by 1.5-2 days of meetings. As most Council members are senior executives, the burden of their time commitment and expense far exceeds requirements for discussion and decision making.
- From the outset (PICES I), Council members requested that the schedule of activities be prepared in such a way as to allow Delegates and Committee members to attend the scientific sessions.
- For various reasons, some Council members are not scientific executives, making the 7-day obligation, plus travel time, unbearable for them.
- The cost and distance involved for Council members to travel to an Annual Meeting makes two trips (one for the Opening Session/Science Board Symposium and one for the Council meeting) nearly impossible and delegates have been reluctant to pass on either responsibility to a scientist.

3.2. Increasing expenses

Analysis:

- As previously mentioned, the average total number of participants at all events, since 2000, is 400.
- Host countries are offered up to CDN\$40,000 from the PICES budget to offset the cost of Annual Meetings, but this is frequently refused or (partially) returned to PICES.
- Some countries share a greater burden of the costs than others (Fig. 6).
- Because there are two times more Asian than North American member countries in PICES, the latter must travel to Asia twice for every one in the other direction.

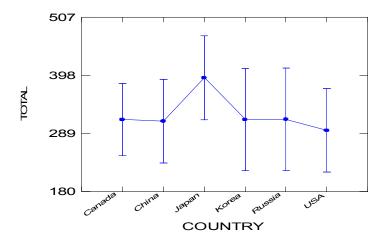


Fig. 3 The results of an analysis of the variance of total numbers of participants at annual meetings by meeting location from 1992-2008. The vertical lines indicate the 95% confidence intervals on the average number of participants (dots), by host country.

3.3. Insufficient discussion on scientific matters

(In general, this item should be left for Science Board to comment, but some limited comments are possible.)

Analysis:

- The amount of time allocated by the Secretariat for scientific discussion at annual meetings of Permanent Committees is whatever amount of time the committees have requested. Requests by Committee Chairmen for additional time have been rare, and requests for additional days have been non-existent.
- At final Science Board meetings, each Committee is responsible for presenting, in order of priority, its scientific activities for the upcoming Annual Meeting. Science Board typically asks Committee Chairmen to merge scientific sessions on similar topics into a single Topic Sessions, as was done in Dalian. But recall that Council endorsed the concept of having a general theme for each Annual Meeting, of significant interest to the host country. Committees were encouraged, but not obliged, to find topics that aligned with the theme. Topics of strong scientific interest for a Committee that did not fit well with the theme ended up as workshops. So some of the similarities among topic sessions (real or apparent) have arisen from Council's policy regarding annual meeting themes.
- The development and presentation of the Science Board report to Council on the last day is acknowledged to be a problem, on many levels:
 - 1. Science Board cannot meet until all of its scientific activities at an Annual Meeting have ended because Committee Chairmen often have obligations at sessions, either as co-convenors, as selection committee member for awards, or to appreciate the full scope of scientific activities related to their committee's interests. In spite of spilling some of Science Board business to the inter-sessional meeting and a lunch meeting, the final Science Board meeting is always rushed to get through all of the business on the agenda. The main items of business taking the most time are the annual review of committee's activities, and the planning for the next Annual Meeting.

- 2. The Science Board report consists of a Powerpoint presentation. No written document is produced and Science Board members never see the final presentation before it is presented to Council.
- 3. No time is allotted at the Annual Meeting to prepare the Science Board presentation/report.
- 4. Council has no time to review the report in detail before being asked to make decisions on its content.
- 5. The Finance and Administration Committee reviews the budget of the Organization without having seen what Science Board is proposing to do for the upcoming year.
- The current version of the Implementation Plan of FUTURE are leaning toward Science Board taking the main leadership role in the delivery of the program. Chairmen and Vice-Chairmen of Permanent Committees are being asked to assume leadership roles on Steering Groups. For the last year or two, the activities of the CCCC Program have diminished significantly. The current SG-RAM report does not acknowledge the additional demands on Science Board should they also be asked to run FUTURE.

4. Comments on SG-RAM Options 1 and 2

- We strongly support the proposed changes in the format of the Opening Session keeping only the opening remarks by the host country and the Chairman of PICES, and moving remarks by other Contracting Parties to the beginning of the Governing Council meeting.
- To start the Opening Session in the afternoon on Monday looks acceptable, if combined with (1) the overture meetings of Science Board and Standing Committees in the morning, and (2) including in this session, in addition to a keynote lecture, a couple of invited talks to demonstrate scientific achievement of PICES on the overall theme of the Annual Meeting to scientists, administrators and stakeholders.
- We feel that this "extended" Opening Session cannot replace the Science Board Symposium (it would certainly be more appropriate for Science Board to comment on that). Currently this symposium is the most exciting session at the Annual Meeting with high-profile world-class invited speakers, and it would be a pity to loose this session. As an alternative, we could consider having a 0.75-day or 1-day Science Board Symposium on Friday to wrap up the Annual Meeting on a high note (as was the case until 1999).
- Assuming that 6 parallel events (meetings/workshops/field trips) will occur in each of the 3 days before the Annual Meeting, the total number of "event-days" is 29.5 (11.5 during the Annual Meeting). Option 1 reduces this to 19.5 and Option 2 to 18. Using the maximum of 5 parallel events proposed in these options, the amount of "science" conducted at the site of the Annual Meeting will be reduced to 66% and 61% of present levels, respectively.
- Increasing the number of concurrent scientific sessions and having workshops and business meetings concurrently with these sessions during the Annual Meeting is also problematic, as it goes against the integrative scientific approach promoted by PICES, and could limit the development of collaborative projects that cut across disciplines. The situation will become worse after FUTURE is in place and will starts planning its activities.
- The decision by Council to limit Annual Meetings to 3 parallel sessions has had an additional benefit of limiting simultaneous demands on the Secretariat for preparing agendae, schedules, collecting and testing presentation files, *etc*. Options 1 and 2 attempt to increase "the diameter of the pipe" by increasing the number of simultaneous sessions during the Annual Meeting. Additional resources will be required by the Secretariat to accommodate the larger "pipe".
- It is the Secretariat's view that an Annual Meeting serves an equally important role in the sociology of marine science in the Pacific. While the original model for PICES was ICES, it is essential to recognize that the mixture of cultures in PICES is dramatically different from ICES. English language competencies are also very different. As a consequence, collaborative international marine science in the Pacific does not arise as spontaneously as it should. In some cases, the PICES Annual Meeting provides one of the few opportunities for scientists from the same country to meet. This brings special meaning and importance to the role of social events in PICES where, if only briefly once every year, we try to communicate with each other and learn from each other. When combined with jet lag, full days of concentration on science, it seems inadvisable to rely on evening meetings for productive results.
- We think that moving the Science Board meeting to Friday will create more harm than good (again it would be more appropriate for Science Board to comment on that). The intent is good to ensure that Science Board has sufficient time to prepare a well-focused report to Council, but the proposed solution

does not seem acceptable, as Science Board members often have obligations at sessions (see 3.3). One possible option to provide Science Board more time is to delay the Council meeting by one day, and have it on Sunday and Monday. But a more preferable option from our perspective is to move the selection and approval of scientific sessions and workshops to the inter-sessional meeting. The planning for the next annual meeting is the most time-consuming item of business at the Science Board meeting. If sessions and workshops for Year (N+1) are decided at the inter-sessional meeting in Year N, it will ease the burden substantially. If the proposed Option 3 (see below) is found reasonable, then recommendations on host-obligation and host optional events could be made at the same time.

5. Option 3 (The hybrid model)

The current format of annual meeting activities has evolved (and "evolved" is the key word) because it has proven to be the most economically cost-effect scheduling of activities for the Organization. Multiple trans-Pacific flights are expensive for scientists and managers, so there has been tremendous pressure on groups to align their meetings and discussions with the Annual Meetings. Furthermore, if an individual scientist has multiple roles in the Organization (and this is not uncommon), they can achieve most of their obligations to the Organization by attending one meeting. Unfortunately, this has placed increasing demands on the agencies hosting the Annual Meeting.

An alternative to what has been proposed is to shift the decision-making responsibility for these preliminary events to the host country. Not all host countries have the same interest or capacity, but those who are willing to accommodate preliminary events at the Annual Meeting venue should be given the opportunity to do so. The process might work as follows:

- Secretariat divides its request to a host country into two categories:
 - o requirements for the Annual Meeting (host-obligation)
 - o requests for preliminary activities such as workshops, meetings (host -optional)
- The host will advise the Secretariat which, if any, of the preliminary activities can be accommodated. To accommodate schedules for booking venues, these activities will likely need to be known before the previous Annual Meeting. The proposed approach will require advanced planning selecting topic sessions and workshops for Year (N+1) at the inter-sessional meeting in Year N. But this might be a good thing as Science Board will have more time at the Annual Meeting for strategic discussions and for preparing the report.
- Organizers of preliminary activities will be advised of the decision.
- Scientific groups that cannot organize their event at the venue of the Annual Meeting will have various options:
 - For business meetings members of scientific groups in the host country of the Annual Meeting can invite the meeting to their institute during the week immediately prior to the annual meeting; scientists can then move to the Annual Meeting on the weekend. PICES is doing this presently (*e.g.*, WG-21-Rapid Assessment Surveys).
 - o For workshops convenors may invite their colleagues in the host country to make arrangements for a venue for the workshop during the week before the Annual Meeting. PICES has done this in the past (e.g., PICES-2000, Tsukuba/Hakodate).
 - Meetings or workshops might be scheduled inter-sessionally in association with other major events that are occurring at a date and location other than the Annual Meeting (e.g., WG-25 will have the first meeting at GLOBEC Open Science Meeting). This will not work for groups whose members do not meet routinely at some other event.