IODP Science Planning Committee

4th Meeting, 25-27 October 2004

The LaSells Stewart Center Oregon State University Corvallis, Oregon, U.S.A.

Science Planning Committee - SPC

Keir Becker (vice-chair) Rosenstiel School of Marine & Atmospheric Science, University of Miami, USA

Barbara Bekins U.S. Geological Survey, USA

Hans Brumsack Institut für Chemie und Biologie des Meeres (ICBM), Universität Oldenburg, Germany

David Christie^a College of Oceanic & Atmospheric Sciences, Oregon State University, USA

Mike Coffin (chair) Ocean Research Institute, University of Tokyo, Japan

Bob Duncan College of Oceanic & Atmospheric Sciences, Oregon State University, USA
Gabriel Filippelli Department of Geology, Indiana University-Purdue University Indianapolis, USA

Patricia Fryer Hawaii Institute of Geophysics, University of Hawaii, USA

Benoît Ildefonse Laboratoire de Tectonophysique, ISTEEM, Université Montpellier II, France

Kenji Kato Institute of Geosciences, Shizuoka University, Japan

Hodaka Kawahata Geological Survey of Japan, Japan

Jeroen Kenter

Faculty of Earth and Life Sciences, Vrije Universiteit, The Netherlands
Hiroshi Kitazato

Institute for Research on Earth Evolution (IFREE), JAMSTEC, Japan

Department of Marine Geology and Geophysics, Tongji University, China
Chris MacLeod*

Department of Earth Sciences, Cardiff University, United Kingdom
Department of Geological Sciences, Rutgers University, USA

James Mori

Disaster Prevention Research Institute, Kyoto University, Japan

Ritsuo Nomura Faculty of Education, Shimane University, Japan

Terry Quinn College of Marine Science, University of South Florida, USA Wonn Soh* Institute for Research on Earth Evolution (IFREE), JAMSTEC, Japan

Damon Teagle^c Southampton Oceanography Centre, United Kingdom Hidekazu Tokuyama^d Ocean Research Institute, University of Tokyo, Japan

Zuyi Zhou* Department of Marine Geology and Geophysics, Tongji University, China

Liaisons and Guests

Jamie Allan National Science Foundation (NSF), USA
Jack Baldauf JOI Alliance, Texas A&M University, USA
Rodey Batiza National Science Foundation (NSF), USA

Tim Byrne (ISSEP) Department of Geology and Geophysics, University of Connecticut, USA Harry Doust (ILP) Faculty of Earth and Life Sciences, Vrije Universiteit, The Netherlands

André Droxler Department of Earth Science, Rice University, USA

Nobuhisa Eguchi IODP Management International, Inc., Sapporo Office, Japan

Dan Evans ECORD Science Operator (ESO), British Geological Survey, United Kingdom
Holly Given U.S. Science Support Program, Joint Oceanographic Institutions, Inc. (JOI), USA
Colin Graham ECORD Science Operator (ESO), British Geological Survey, United Kingdom

Tom Janecek IODP Management International, Inc., Washington, D.C. Office, USA

Yoshihisa Kawamura Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan

Peter Kelemen (Leg 209) Lamont-Doherty Earth Observatory, U.S.A.

Kenji Kimura Ministry of Education, Culture, Sports, Science, and Technology (MEXT), Japan

Ann Klaus JOI Alliance, Texas A&M University, USA

Shin'ichi Kuramoto Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Hans Christian Larsen IODP Management International, Inc., Sapporo Office, Japan
Mike Lovell (SciMP) Department of Geology, University of Leicester, United Kingdom
Kate Moran (TAP) Graduate School of Oceanography, University of Rhode Island, USA

^aAlternate for Keir Becker and Ken Miller during non-riser and MSP scheduling exercise, respectively.

^bAlternate for Zuyi Zhou (non-voting member).

^cAlternate for Chris MacLeod (non voting member except during MSP scheduling exercise).

^dAlternate for Wonn Soh.

^{*}Unable to attend.

Makoto Okada (SciMP) Department of Environmental Sciences, Ibaraki University, Japan

Nick Pisias (SPPOC) College of Oceanic & Atmospheric Sciences, Oregon State University, USA

Frank Rack JOI Alliance, Joint Oceanographic Institutions, Inc. (JOI), USA Jeff Schuffert IODP Management International, Inc., Sapporo Office, Japan

Alister Skinner ECORD Science Operator (ESO), British Geological Survey, United Kingdom

Emanuel Söding IODP Management International, Inc., Sapporo Office, Japan

Manik Talwani IODP Management International, Inc., Washington, D.C. Office, USA Kensaku Tamaki (SPPOC) Department of Geosystem Engineering, University of Tokyo, Japan

Valentina Zampetti ESSAC Office, Faculty of Earth and Life Sciences, Vrije Universiteit, The Netherlands

IODP Science Planning Committee

4th Meeting, 25-27 October 2004

The LaSells Stewart Center Oregon State University Corvallis, Oregon, U.S.A.

EXECUTIVE SUMMARY

1. Introduction

SPC Consensus 0410-1: Recently the SPC heard the tragic news that committee member Chris MacLeod has fallen seriously ill and has withdrawn from sailing as co-chief scientist on the first Atlantis Oceanic Core Complex expedition. Chris was not only instrumental during the preparations that led to the scheduling of those expeditions, he is also highly appreciated and valued as an SPC member, ESSAC Vice-Chair, and as a colleague in science and science management. The SPC hereby supports his continuing involvement in IODP science, including the Atlantis Oceanic Core Complex expeditions, and we express collectively and individually our strongest support and best wishes for a quick and full recovery.

1.2. Approve last SPC meeting minutes

SPC Consensus 0410-2: The SPC approves the minutes of its third meeting on 14-17 June 2004 in Yokohama, Japan.

1.3. Approve SPC meeting agenda

SPC Consensus 0410-3: The SPC approves the revised agenda of its fourth meeting on 25-27 October 2004 in Corvallis, Oregon, U.S.A.

1.4. Items approved since June 2004 meeting

SPC Motion 0410-4: The SPC appoints Mike Lovell as a new co-chair of the Scientific Measurements Panel (SciMP), effective immediately. [3 August 2004]

Coffin moved, Kawahata seconded; 12 in favor, 2 abstained (Ito, Kenter), 3 absent (Fisher, Mori, Tatsumi), one non-voting (MacLeod).

SPC Consensus 0410-5: The SPC prioritizes the nominees for co-chief scientists of the Tahiti South Pacific Sea Level expedition as follows: 1) Camoin, 2) Quinn, 3) Dullo and Iryu, 5) Droxler and Taylor, 7) Betzler, Machiyama, and Matsuda. [3 August 2004]

SPC Motion 0410-6: The SPC appoints Roger Searle as a new co-chair of the Site Survey Panel (SSP), effective immediately. [13 September 2004]

Coffin moved, Austin seconded; 14 in favor, 3 absent (Kato, Kitazato, Mori), one non-voting (Brumsack).

1.5.2.1. Ranking and scheduling voting procedures

SPC Consensus 0410-7: The SPC does not favor implementing fully transparent reporting of proposal rankings. The SPPOC raised this issue in connection with the SAS conflict-of-interest policy that may need further attention from the SPC and the SPPOC.

1.5.2.2. Meeting minutes

SPC Consensus 0410-8: The SPC reaffirms the importance of producing detailed and prompt minutes from SAS meetings. The committee endorses the current level of detail of the SPC and SPPOC minutes and recognizes the burden that producing those minutes places on the IODP-MI Sapporo office. The SPC applauds that office for its diligence and hard work in producing minutes in a timely fashion, particularly during the transition to the IODP, and encourages them and the SAS to continue their efforts to maintain a one-month post-meeting goal for distributing draft minutes.

1.5.3. Conflict-of-interest policy and statements

SPC Consensus 0410-9: Complex science programs are particularly subject to concerns about conflict of interest because of the large body of specialized knowledge required to contribute at the highest levels. The SPC therefore recognizes the need for a strong conflict-of-interest policy in the IODP and accepts the principles outlined in the conflict-of-interest policy approved by the SPPOC in July 2004. The recommendations below apply specifically to SPC procedures and focus on conflicts related to SPC members who serve as proponents on proposals considered for ranking or scheduling.

The SPC typically ranks proposals at its meetings early in the calendar year. Alternate members capable of providing similar scientific expertise should be chosen to attend those meetings. This requires identifying conflicts of interest and alternate members as early as possible, and a database of qualified alternate members sorted by expertise would facilitate the process. Due to the expense and shifting expertise needs of the committee, the SPC does not favor naming standing alternates who would attend all meetings.

The SPC typically schedules proposals at its meetings later in the calendar year. The committee recommends allowing conflicted members to attend those meetings but excluding them from scheduling discussions. When formulating the meeting agenda, the committee will try to address topics related to the expertise of a conflicted member at a separate time from the scheduling. Conflicted members should leave the room when the discussion turns specifically to determining which proposals will be scheduled and their relative merits.

SPC Consensus 0410-10: The SPC does not regard any of the declared institutional conflicts as constituting a true conflict of interest at this meeting.

3. IODP-MI report

SPC Consensus 0410-11: The SPC forms a working group to develop draft terms of reference and notional timelines for scientific assessment of expeditions originating from a single proposal or CDP, in consultation with the IODP-MI Vice President for Science Planning and Deliverables. The working group members include Becker (chair), Brumsack, Duncan, and Soh, and the group should deliver a draft final report at the March 2005 SPC meeting.

6.1.4. SciMP

SPC Consensus 0410-12: The SPC receives SciMP Recommendation 0406-1 and accepts the principle that all IODP sites should be logged. The committee recommends that the absence of planned logging at any IODP proposed sites must be explained and justified in the related proposal or expedition prospectus.

SPC Consensus 0410-13: The SPC accepts SciMP Recommendation 0406-2 and forwards the SciMP drill cuttings team report to the IODP-MI.

SPC Consensus 0410-14: The SPC receives SciMP Recommendation 0406-3 on acquiring x-ray CT scanners but defers discussing it in the absence of any information on the relative priority of other specific instruments recommended for shipboard and shore-based laboratories.

SPC Consensus **0410-15:** The SPC receives SciMP Recommendation 0406-4 and recommends to the IODP-MI that a science coordinator should attend all SciMP meetings but should not have responsibility for recording the minutes of those meetings.

SPC Consensus 0410-16: The SPC receives SciMP Recommendation 0406-05 on the SciMP paleontology working group report and the six recommendations therein.

SPC Consensus 0410-17: The SPC receives SciMP Recommendation 0406-6 on integrating petrophysical disciplines for IODP working groups and discussions.

SPC Consensus 0410-18: The SPC accepts SciMP Recommendation 0406-7 and forwards the revised SciMP physical properties working group report to the IODP-MI.

SPC Consensus 0410-19: The SPC accepts SciMP Recommendation 0406-8 and forwards the SciMP petrophysics QA/QC report to the IODP-MI.

SPC Consensus 0410-20: The SPC receives SciMP Recommendation 0406-9 and recommends wherever feasible measuring the temperature profile at each sedimentary IODP site.

SPC Consensus 0410-21: The SPC accepts SciMP Recommendation 0406-10, except for recommending frequent use of LWD and MWD, and forwards the SciMP downhole measurements working group report to the IODP-MI.

SPC Consensus 0410-22: The SPC receives SciMP Recommendation 0406-11 on the SciMP core-description working group report and requests the SciMP to provide more information on adding new core imaging techniques, allowing sufficient shipboard laboratory space for visual core description, and whether the core description working group considered the Conceptual Design Committee (CDC) report for the IODP non-riser drilling vessel.

SPC Consensus 0410-23: The SPC accepts SciMP Recommendation 0406-12 and forwards the revised SciMP paleomagnetics working group report to the IODP-MI, with the caveat of merely recommending and not requiring the use of non-magnetic core barrels for all APC coring.

SPC Consensus 0410-24: The SPC receives SciMP Recommendation 0406-13 on the SciMP chemistry working group report. Based on the eleven specific recommendations given within the report, the committee recommends that:

- a) the IOs and co-chief scientists should specify during the planning stage for each expedition the sample handling procedures required to preserve the integrity of the acquired samples,
- b) every expedition should have a sufficient number of microscopes configured and prioritized for each specific use to achieve the scientific objectives, with the ability wherever possible to take and store digital images, and
- all analytical facilities across the different IODP platforms and shore-based laboratories should consistently use international standards and routinely analyze reference materials as unknowns.

SPC Consensus 0410-25: The SPC receives SciMP Recommendation 0406-14 on IODP publications.

SPC Consensus 0410-26: The SPC receives SciMP Recommendation 0406-15 and requests the SciMP and the TAP to work with the SSEPs and the IOs to develop a draft checklist of scientific measurements and technological and engineering needs for use by the SSEPs in evaluating proposals. The SciMP the TAP should present a merged draft checklist at the March 2005 SPC meeting.

SPC Consensus 0410-27: The SPC receives SciMP Recommendation 0406-16 and recommends that the IODP-MI examine potential procedures for incorporating regular engineering testing and downhole tool and observatory development into the annual program plan.

SPC Consensus 0410-28: The proponents of Proposal 621-Full Monterey Bay Observatory assert that the Monterey Accelerated Research System (MARS) management program of the Monterey Bay Aquarium Research Institute (MBARI) can be modified to accommodate the MARS-IODP test site. The SPC reiterates its earlier request (see SPC Consensus 0406-14) for the SciMP and the TAP to work with MBARI scientists (C. Paull, lead proponent) to develop a draft plan for managing the MARS-IODP borehole test sites. Issues to be considered in developing the plan include:

- a) integrating and coordinating management of the site with the MARS management program (available at www.mbari.org),
- b) managing the site in the transition from IODP to MARS-IODP management when the MARS fiber optic cable is attached to the site, and
- c) establishing a data management policy that will accommodate potential IODP users.

The SciMP and the TAP should submit a joint report for the March 2005 SPC meeting, and the SPC and OPCOM intend to submit a final report for the SPPOC to consider at its mid-2005 meeting.

SPC Consensus 0410-29: The SPC requests the SciMP to develop guidelines for disseminating expedition results during an expedition and during the post-expedition moratorium. The SciMP should present its recommended guidelines at the March 2005 SPC meeting, and the IODP should follow ODP procedures in the meantime.

6.2.1. Membership disciplinary, experience, and gender balance

SPC Consensus 0410-30: The SPC notes that the gender balance of the SAS membership closely approximates the gender balance of lead proponents on current drilling proposals, whereas a larger proportion of women participated as shipboard scientists in the later years of the ODP. The SPC encourages the IODP national and consortia offices to work to increase the number of female scientists participating in the SAS and submitting IODP proposals.

6.2.2. SPC working group

SPC Consensus 0410-31: The SPC accepts the draft final report of its own SAS Review working group (Duncan, Ildefonse, Tatsumi) and, pending minor modifications, forwards it to the SPPOC *ad hoc* committee reviewing the SAS (McKenzie, chair; Delaney; Tsujii; Coffin). The SPC appreciates and commends the efforts of Duncan, Ildefonse, and Tatsumi.

8. FY05/06 expedition schedule I

8.1. Discussion of MSP scheduling scenarios

SPC Consensus 0410-32: The SPC reaffirms SPC Consensus 0403-13, including scheduling of the Tahiti component of Proposal 519-Full2 South Pacific Sea Level in FY2005, as approved by SPPOC Motion 0407-4.

SPC Consensus 0410-33: The SPC reaffirms SPC Consensus 0406-9. The committee applauds the initiative represented by Proposal 650-APL and in particular the potential for a productive interaction among the proponents, the scientific party of the Tahiti component of Proposal 519-Full2 (the FY2005 MSP project), and industry. However, the committee cannot yet fully assess the operational, environmental, and fiscal impacts of operations associated with the proposed imaging experiments, and in particular the need to install and remove PVC liners from a subset of the holes proposed for the TAH-02A transect. The SPC therefore requests that OPCOM consider Proposal 650-APL at its earliest convenience, with input from the proponents and the ECORD Science Operator as appropriate.

8.3. Discussion of non-riser scheduling scenarios

SPC Motion 0410-34: After considering the scientific priorities previously determined by the SPC and the potential drilling schedules for FY2005 as presented by OPCOM, the SPC recommends Model 1 (Proposal 573-Full2 Porcupine Basin Carbonate Mounds, as modified in 573-PRL5; Proposal 589-Full3 Gulf of Mexico Overpressures as modified in 589-Add; and Proposal 522-Full3 Superfast Spreading Crust) as the preferred option and Model 3 (Proposal 477-Full4 Okhotsk and Bering Seas Paleoceanography, Parts 1 and 2) as a backup plan.

Mori moved, Fryer seconded; 13 in favor, 2 abstained (Kato, Kitazato), 3 absent (Bekins, Teagle, Tokuyama), 1 non-voting (Liu).

SPC Motion 0410-35: The SPC recommends following Model 1 in the beginning of FY2006 with a transit to the Southern Ocean to complete Proposals 600-Full Canterbury Basin and 482-Full3 Wilkes Land Margin. If Model 3 is executed in FY2005, however, the committee recommends following it with Proposals 522-Full3 Superfast Spreading Crust and 621-Full Monterey Bay Observatory.

Mori moved, Filippelli seconded; 14 in favor, 1 abstained (Kato), 3 absent (Bekins, Teagle, Tokuyama), 1 non-voting (Liu).

SPC Consensus 0410-36: The SPC recommends for the remainder of FY2006 following Proposal 482-Full3 Wilkes Land Margin with appropriate non-riser drilling components of Proposals 603A-Full2 NanTroSEIZE Reference Sites and 603B-Full2 NanTroSEIZE Mega-Splay Faults, then Proposal 477-Full4 Okhotsk and Bering Seas Paleoceanography, Part 1. The committee also recommends the remainder of Proposal 545-Full3 Juan de Fuca Flank Hydrogeology or Proposal 553-Full2 Cascadia Margin Hydrates as a backup for Proposal 477-Full4 Okhotsk and Bering Seas Paleoceanography, Part 1.

10. IODP policy development

10.1. Third-party tools

SPC Consensus 0410-37: The SPC requests that the SciMP and the TAP work with the IOs to develop a draft third-party tools policy for the IODP. The SciMP and the TAP should submit a joint report for the March 2005 SPC meeting, and the SPC and OPCOM intend to submit a final report for consideration by the SPPOC at its mid-2005 meeting.

10.2. PPGs and DPGs

SPC Consensus 0410-38: The SPC forms a working group to develop draft terms of reference for program planning groups (PPGs) and detailed planning groups (DPGs). The working group members include Bekins (chair), Ildefonse, Kawahata, Nomura, and Quinn, and the group should deliver a draft final report at the March 2005 SPC meeting.

16. Other business

SPC Consensus 0410-39: In the IODP Initial Science Plan, the deep biosphere is a fundamental focus of the IODP, in addition to more traditional geoscientific themes. Kenji Kato is a pure microbiologist, not a geoscientist. However, he has made invaluable contributions to the iPC, the SPC, and the IODP in general through his thoughtful comments and wise counsel. Today Kato-san graduates from the SPC, but we hope that he will promote microbiological work in the IODP and develop collaborations with geoscientists, and that he will return to another IODP committee in the future to establish the SPC (Success for Paradise Communities in the IODP).

SPC Consensus 0410-40: With full appreciation of the difficulties inherent in arranging any meeting of this scope, the SPC expresses its sincerest gratitude to Bob Duncan, Dave Christie, and the ORST students (Chris Russo, Mark Nielsen, Heather Benway, and Jennifer Joseph, who gave so generously of their time) for their superb logistical arrangements and assistance, a great hotel and meeting facility, full internet connectivity, and for their remarkable hospitality, with what one SPC member noted was the "best-catered SPC meeting" he had ever attended. The field trip was particularly enjoyed, as was the Tuesday evening reception at the Hanson Country Inn (even, apparently, by the cats).

IODP Science Planning Committee

4th Meeting, 25-27 October 2004

The LaSells Stewart Center Oregon State University Corvallis, Oregon, U.S.A.

FINAL MINUTES (approved 14 March 2005)

Monday 25 October 2004 08:30-17:30

1. Introduction

Mike Coffin opened the meeting promptly at 08:30 and asked the participants to introduce themselves. Jeroen Kenter read a prepared statement of recognition and support for absent committee member Chris MacLeod. The committee adopted the statement by consensus.

SPC Consensus 0410-1: Recently the SPC heard the tragic news that committee member Chris MacLeod has fallen seriously ill and has withdrawn from sailing as co-chief scientist on the first Atlantis Oceanic Core Complex expedition. Chris was not only instrumental during the preparations that led to the scheduling of those expeditions, he is also highly appreciated and valued as an SPC member, ESSAC Vice-Chair, and as a colleague in science and science management. The SPC hereby supports his continuing involvement in IODP science, including the Atlantis Oceanic Core Complex expeditions, and we express collectively and individually our strongest support and best wishes for a quick and full recovery.

1.1. Welcome and meeting logistics

Bob Duncan welcomed everyone to the Oregon State University campus in Corvallis, Oregon and briefly described the meeting logistics. Coffin announced two separate side meetings in the evening for OPCOM representatives and other program managers.

1.2. Approve last SPC meeting minutes

Coffin asked for comments on the draft minutes from the previous SPC meeting. The committee offered no comments.

SPC Consensus 0410-2: The SPC approves the minutes of its third meeting on 14-17 June 2004 in Yokohama, Japan.

1.3. Approve SPC meeting agenda

Coffin proposed several changes to the draft agenda. These included deferring Agendum 7 on Proposal 651-APL until March 2005 because OPCOM could not fit that ancillary project in any of the scheduling scenarios for FY2005 or 2006; considering mission-specific platform (MSP) expeditions first under Agendum 8 to simplify the management of conflicts of interest; and taking the written report under Agendum 15 as read, in the absence of a representative from the International Continental Scientific Drilling Program (ICDP).

Becker asked if Proposal 651-APL would go back to the SSEPs. Coffin noted that the SSEPs co-chairs had reviewed the proposal and agreed to forward it to the SPC. Byrne did not see any need for the entire SSEPs to review it.

SPC Consensus 0410-3: The SPC approves the revised agenda of its fourth meeting on 25-27 October 2004 in Corvallis, Oregon, U.S.A.

1.4. Items approved since June 2004 meeting

Coffin reminded the committee of several items of business addressed through e-mail voting since the previous SPC meeting.

SPC Motion 0410-4: The SPC appoints Mike Lovell as a new co-chair of the Scientific Measurements Panel (SciMP), effective immediately. [3 August 2004]

Coffin moved, Kawahata seconded; 12 in favor, 2 abstained (Ito, Kenter), 3 absent (Fisher, Mori, Tatsumi), one non-voting (MacLeod).

SPC Consensus 0410-5: The SPC prioritizes the nominees for co-chief scientists of the Tahiti South Pacific Sea Level expedition as follows: 1) Camoin, 2) Quinn, 3) Dullo and Iryu, 5) Droxler and Taylor, 7) Betzler, Machiyama, and Matsuda. [3 August 2004]

SPC Motion 0410-6: The SPC appoints Roger Searle as a new co-chair of the Site Survey Panel (SSP), effective immediately. [13 September 2004]

Coffin moved, Austin seconded; 14 in favor, 3 absent (Kato, Kitazato, Mori), one non-voting (Brumsack).

1.5. SPC procedures and protocol

1.5.1. Agenda book

Coffin asked for suggested improvements to the content and style of the SPC agenda book. Miller suggested making it an amendable document to include last minute items submitted before the meeting so that members could download the latest version immediately before the meeting. The committee offered no further comments or formal recommendation.

1.5.2. Terms of reference

1.5.2.1. Ranking and scheduling voting procedures

Coffin reviewed the SPC voting procedures, with particular reference to voting by closed, signed ballots. He noted that the IODP-MI Sapporo office keeps the ballots on file in case of any challenge to the results, though none had ever arisen during the ODP or the IODP to the best of his knowledge. Coffin listed the various types of feedback that proponents now receive from the SAS. He explained that the SPPOC had begun debating whether to require open voting by the SPC, but a split of opinions resulted in deferring the issue until the next SPPOC meeting. Coffin opened the floor for discussion.

Bekins asked if any particular incident prompted the SPPOC debate. Coffin saw it as an effort to improve the transparency of the program. Ildefonse added that the SPPOC debated the idea of transparent voting as a means to reduce the level of detail in the IODP conflict-of-interest policy. Kato raised the question of what the SPPOC would do with transparent voting results. Kenter wondered if transparency would change the outcome of voting. Quinn asked if the public voting record included the standard deviations or just the rankings. Coffin noted that it includes both. Kawahata asked if the past voting results indicated any bias. Coffin replied that no one had examined the results that way, and he wondered who would arbitrate potential complaints. Kato suggested that the committee itself could review complaints.

Quinn stated that he had never participated in a more transparent program than this one, where proponents already receive perhaps too much feedback. Ildefonse asserted that the community still perceives the system as opaque. Fryer said that as a proponent she found the program remarkably responsive, and it surprised her to hear that some proponents might perceive otherwise. Duncan noted that watchdogs could give proponents additional feedback on how to improve a proposal, without disclosing the voting record. Miller asserted that the current voting procedure had worked well for many years. He characterized open voting as a

very bad idea that would result in lobbying of committee members by proponents. Ildefonse did not see how anonymous voting prevented lobbying. Miller explained that it prevented proponents from targeting those members who ranked a proposal low. Brumsack expressed reluctance to expose individual members to questions about voting records. Mori said that he could accept a public voting record, but he worried that it would make it very difficult for watchdogs to serve as an advocate of a proposal. Bekins preferred concentrating on the role of watchdogs rather than open voting. She suggested that if the SSEPs had to vote openly it could put untenured panel members at risk. Coffin did not want to have separate voting procedures on different levels. Becker suggested that the committee could provide more details on the voting results without disclosing identities.

Coffin asked for volunteers to draft a consensus statement. Becker, Kenter, and Mori volunteered. Mori then requested a straw vote. Coffin agreed and polled the committee. One member favored open voting, twelve favored keeping the current system, and four indicated no preference. Becker presented the following consensus statement on Friday afternoon, and the committee accepted it without further comment or debate.

SPC Consensus 0410-7: The SPC does not favor implementing fully transparent reporting of proposal rankings. The SPPOC raised this issue in connection with the SAS conflict-of-interest policy that may need further attention from the SPC and the SPPOC.

1.5.2.2. Meeting minutes

Coffin asked for any suggestions on changing the style of the SPC minutes. Bekins wondered if people refer more to the minutes or the executive summary. Quinn favored the level of detail now given in the minutes. Allan believed that the current form of the minutes satisfied the contractual obligations for recording SAS activities. Becker asked if anyone had objected to the current style. Coffin said that he had heard some concerns expressed about the timing of producing the minutes. Miller regarded the current level of detail as very valuable for reviewing what happened after the memory fades. Schuffert remarked that the timing of producing minutes would improve if the SAS could follow a consistent and reasonably spaced schedule of SPPOC and SPC meetings. Coffin sensed a general approval of the current style and level of detail in the minutes and asked Miller to draft a consensus statement.

SPC Consensus 0410-8: The SPC reaffirms the importance of producing detailed and prompt minutes from SAS meetings. The committee endorses the current level of detail of the SPC and SPPOC minutes and recognizes the burden that producing those minutes places on the IODP-MI Sapporo office. The SPC applauds that office for its diligence and hard work in producing minutes in a timely fashion, particularly during the transition to the IODP, and encourages them and the SAS to continue their efforts to maintain a one-month post-meeting goal for distributing draft minutes.

1.5.3. Conflict-of-interest policy and statements

Coffin reviewed the currently approved version of the conflict-of-interest policy in detail and described it as broader than in the previous program. He reported the suggestion for adopting a SAS ethics statement and suggested that the SPPOC still needed to clarify the policy, for example, to define the boundaries of the implementing organizations for SAS eligibility and to decide whether SAS panel chairs should serve as alternate SPC members, given the potential conflict in deciding on their own advice. Coffin identified the members of the SPPOC *ad hoc* committee on conflict of interest and inquired about its status. Tamaki replied that the SPPOC still planned to consider the SPC voting procedure, but not necessarily through the *ad hoc* committee. Coffin opened the floor for discussion.

Kenter asked for more background on the history of the policy. Becker recalled that the SPC had proposed a more liberal policy but the SPPOC rejected it. Coffin explained that the SPPOC preferred a stricter policy of not allowing proponents to stay in the room for proposal discussions and had imposed the same policy on itself. He asked if the committee wanted to send any message to the SPPOC on clarifying or modifying the policy. Filippelli noted the difficulty from a national program perspective in identifying suitable alternates for conflicted SAS members. Bekins believed that committee members would not want to attend a meeting if excluded from discussing proposals, thus posing a problem for maintaining expertise on the committee. Kato echoed the concerns about maintaining appropriate expertise, especially for microbiology. Miller favored the current policy and viewed it as just carrying on the tradition of the previous program. He identified the potential problem of maintaining historical memory and cited the benefit of having alternates attend meetings, though recognizing the extra cost. He also proposed that each program member should name three permanently funded alternates by disciplinary theme, and it would amount to the same level of involvement as in the past for the U.S. Byrne favored the idea of having permanent alternates attend every meeting. Ildefonse cautioned that not all program members would have the budget to send an alternate and regular member at the same time. Coffin suggested that the IODP members should simply not appoint to the SPC any proponents whose proposal would likely come before the committee for ranking or scheduling during their term of service on the committee. Teagle suggested moving to a college style system of committee membership, with an expanded pool for choosing members depending on the expertise required for each meeting.

Tokuyama described the policy as casting a broad net and cited a lack of custom in Japan for concern about conflicts of interest. He identified a need for examples of what constitutes a conflict of interest and what does not. Allan recognized the danger of creating a bureaucratically complex program. Kelemen also worried about the size of the management apparatus. He viewed the conflict-of-interest policy as unworkable because no one would want to serve on the committees. Tamaki understood the difficulty of managing the conflict-of-interest policy, but he viewed it as the minimum effort necessary and stressed that it makes an important commitment to the community. He recommended choosing SAS members and watchdogs carefully to avoid conflicts of interest. Coffin sensed a difference of opinion among the committee and asked for a group of volunteers to draft a consensus statement. Bekins, Filippelli, Tokuyama, Kato, and Brumsack volunteered.

On Wednesday afternoon Bekins presented a consensus statement on conflicts of interest that distinguished between SPC ranking and scheduling meetings. Coffin noted that the scheduling scenarios considered by the SPC would not include all of the proposals sent to OPCOM, so scheduling meetings could involve fewer conflicts and perhaps not require alternates unless necessary for a quorum. Bekins still regarded it as a problem if a committee member could not provide their expertise regardless of whether they come to the meeting or not. Ildefonse asked about the typical lead-time for identifying alternates. Eguchi said approximately four months. Miller still found value in having conflicted members attending meetings to maintain memory and understanding for other matters on the agenda. Bekins called it cleaner and cheaper not to have conflicted members attend at all. Kelemen doubted that the program could completely eliminate the problem of influence. Allan suggested letting conflicted members vote on all except their own proposal. Larsen said that that would still allow the possibility of voting strategically against competing proposals. Miller reiterated that the current procedure had worked pretty well since 1996.

SPC Consensus 0410-9: Complex science programs are particularly subject to concerns about conflict of interest because of the large body of specialized knowledge required to contribute at the highest levels. The SPC therefore recognizes the need for a strong conflict-of-interest policy in the IODP and accepts the principles outlined in the conflict-of-interest policy approved by the SPPOC in July 2004. The recommendations below apply specifically to SPC procedures and focus on conflicts related to SPC members who serve as proponents on proposals considered for ranking or scheduling.

The SPC typically ranks proposals at its meetings early in the calendar year. Alternate members capable of providing similar scientific expertise should be chosen to attend those meetings. This requires identifying conflicts of interest and alternate members as early as possible, and a database of qualified alternate members sorted by expertise would facilitate the process. Due to the expense and shifting expertise needs of the committee, the SPC does not favor naming standing alternates who would attend all meetings.

The SPC typically schedules proposals at its meetings later in the calendar year. The committee recommends allowing conflicted members to attend those meetings but excluding them from scheduling discussions. When formulating the meeting agenda, the committee will try to address topics related to the expertise of a conflicted member at a separate time from the scheduling. Conflicted members should leave the room when the discussion turns specifically to determining which proposals will be scheduled and their relative merits.

After a brief recess on Monday morning, Coffin asked the committee members and other participants to declare all potential conflicts of interest.

Current proponent: Becker (545-Full3), Bekins (621-Full), Kenter (650-APL), Miller (564-Full), Teagle (522-Full3, 545-Full3, 584-Full2) Tokuyama (477-Full4), Okada (477-Full4).

Colleague at same institution as proponents: Christie (547-Full4), Coffin (477-Full4, 595-Full3, 603CDP, 603A-Full2, 603B-Full2), Duncan (547-Full4), Kenter (595-Full3), Miller (584-Full2), Tokuyama (603CDP, 603A-Full2, 603B-Full2), Pisias (547-Full4).

Adviser of participant on related expedition: Fryer (545-Full3, Expedition 301).

Coffin deemed Fryer as not conflicted because the expedition participant did not serve as a proponent on the proposal. He also proposed disregarding institutional conflicts for this meeting, and the committee agreed.

SPC Consensus 0410-10: The SPC does not regard any of the declared institutional conflicts as constituting a true conflict of interest at this meeting.

Coffin noted that conflicted participants could remain in the room for the OPCOM presentation under Agendum 8 but would have to leave during the SPC discussion. He also repeated that the committee would consider MSP expeditions separately at the beginning of the discussion. This meant that Becker and Teagle could participate in the discussion of MSP expeditions but not non-riser expeditions, whereas Kenter and Miller could participate in the discussion of non-riser expeditions but not MSP expeditions, and Christie would serve as an alternate member in turn for Becker and Miller.

1.5.4. Robert's Rules of Order

Coffin briefly reviewed several salient points from Robert's Rules of Order concerning the conduct of the meeting.

2. Agency reports

2.1. MEXT

Kenji Kimura reported briefly on the new minister at MEXT. He referred to ongoing internal budget negotiations at MEXT and said that he hoped to report good news on the budget by early next year.

2.2. NSF

Jamie Allan acclaimed the SAS and the program for a good beginning. He summarized the recent guidance from the lead agencies to the IODP-MI, announcing the availability of \$10 million in POCs and \$2 million in SOCs for additional non-riser expeditions in FY2005. Allan stated that the NSF had informally determined the availability of sufficient funds to operate the *JOIDES Resolution* until February 2006, with the last port call in the U.S., and they also requested that the program develop a provisional schedule for non-riser expeditions for the rest of FY2006. Allan added that the NSF looked forward to the reports from the operational and technical reviews of Expeditions 301 and 302. He also announced that the NSF hoped to identify a new OCE Division Director in the next few months.

2.3. EMA

Jeroen Kenter reported that Sören Dürr had stepped in as the new chair of the ECORD Council. He announced that the council had recently confirmed that ECORD would contribute \$7 Million in SOCs and fund the POCS for the Tahiti expedition in FY2005. Kenter stated that Canada joined ECORD in FY2004 as a provisional member for one year, pending review of a proposal submitted for three-year membership, and Austria joined starting in FY2005, giving ECORD fifteen members. He mentioned discussions underway with Greece, Ireland, and Russia and said that ECORD also looked toward expanding to the Baltic countries and Poland within the framework of EU funding. Kenter noted the first completed MSP expedition and described the second as in the implementation phase, with the budget submitted and approved by the ECORD Council. He said that ESSAC had responsibility for nominating ECORD candidates for staffing IODP expeditions and would meet in November to discuss applications for the Tahiti expedition. Kenter noted a proposal written for the EuroCORE program related to initiating site surveys supported by the European Science Foundation (ESF). He explained that the EuroCODE program allows the pooling of funds from multiple countries for supporting workshops and proposal development. Kenter noted that the EMA had coordinated an IODP booth at the August 2004 IGC meeting in Florence, Italy. He anticipated more integration between the ECORD and ESSAC Web sites and mentioned the ECORD newsletter available soon online and printed this week.

Given asked if the ESSAC would review only European or all applications for the Tahiti expedition. Kenter replied only European applications. Kawahata asked about the membership fee for joining ECORD. Kenter described the fee as negotiable.

2.4. MOST

Zhifei Liu reported on activities of the IODP-China organization, including the establishment of three scientific working groups corresponding to the three themes of the IODP Initial Science Plan. He said that China hoped to submit several IODP drilling proposals in the near future. Liu noted that the next fifteen-year plan of science and technology development in China includes focuses on ocean science and deep-sea research, as well as the marginal sea economy and coastal zone management. He summarized the IODP-China budget of 1.5 million yuan (US\$180,000) for activities in 2004-2005 related to preparing drilling proposals, attending SAS meetings, publications, and supporting the IODP-China office. Liu cited a November 2004 forum on deep-sea science and technology, the spring 2005 Asian IODP

workshop, and the September 2007 International Conference on Paleoceanography, all in Shanghai. He noted that one Chinese scientist would participate on Expedition 303. Liu announced a round-the-world research cruise on the *Dayang Yihao* in 2005 to commemorate the navigation of the Indian and Pacific Oceans in 1405-1433 by Chinese mariner Zheng He. Liu reported on close cooperation in China with other oceanographic research program such as IMAGES, InterMARGINS, and InterRidge.

Talwani added that Zheng He might have been the first navigator to use a magnetic compass. Byrne asked about the dates of the Shanghai workshop, possibly to coordinate with a SSEPs meeting.

3. IODP-MI report

Talwani reported that the IODP-MI now had funding available for the FY2005 program plan. He acknowledged the efforts of the NSF and MEXT to settle the negotiations and noted that the IODP-MI had completed the subcontract with the Bremen core repository but still had to negotiate with the ESO and the JOI Alliance. Talwani outlined his report and said he would speak in detail about the relations between the IODP-MI and the SPC. He cited the success of ACEX and its operational and technical assessment and asked the SPC to take on the task of scientific assessment of expeditions in cooperation with the IODP-MI vice-president for science planning and deliverables. Talwani called on the SAS to provide advice and requirements for engineering development. He expected the request for proposals for the site-survey data bank to go out by mid November 2004 and close for bids in mid December 2004, aimed at starting a new contract in May 2005, and he noted that the IODP-MI would negotiate with JOI to continue the current site-survey data bank at Lamont Doherty Earth Observatory through April 2005. Talwani outlined the premises for relations between the IODP-MI and the SPC. He recognized scientists as the principle stakeholders and said that the SPC provides the IODP-MI with advice on scientific activity and priority drilling locations and assesses the success of drilling expeditions, whereas the IODP-MI establishes task forces to determine how to implement advice received from the SAS. Talwani believed that the final agreement with the lead agencies would allow for providing \$5000 honoraria to SAS panel chairs, though perhaps divided among co-chairs.

Tom Janecek provided more details on the new review committees, known as REVCOMs, for operational and technical assessment of expeditions. He anticipated constituting two or three such committees per year, based on individual expeditions or operational or technical themes, to focus on how to improve future operations. He also reiterated that the SPC should evaluate scientific accomplishments in cooperation with the IODP-MI vice-president for science planning and deliverables and must work out the timing of how to do it. Janecek reported on the October 2004 ACEX REVCOM meeting in Washington, D.C., with representatives from the IODP-MI, the EMA, the ESO, the SPPOC, and the SPC, plus the ACEX co chiefs and outside experts. He said that they developed eighteen recommendations on improving communications, defining roles and responsibilities, and developing timelines and procedures with appropriate checks and balances for future MSP operations, and he expected to have a report published within two weeks of the meeting. Janecek also reported on the education and outreach task force. He cited program objectives for developing a fully functional Web portal, creating an electronic newsletter, and reaching out to scientists, the media, and the public through various channels. Janecek showed a potential example of the new Web pages and mentioned the upcoming promotional exhibit at the December 2004 AGU meeting.

Janecek mentioned the September-October 2004 OPCOM meeting in Washington, D.C., concerning operational scheduling of the *JOIDES Resolution* for FY2005-2006. He noted that

the NanTroSEIZE project scoping group held its second meeting in October 2004 at JAMSTEC headquarters in Yokosuka, Japan, and the selection process had begun for the Murray Ridge scoping group. Janecek reported that the IODP-MI would hire an operations manager to help with leading the project scoping groups. He cited the typical scoping group participants including the IODP-MI, proponents, the IOs, technical implementation experts, SAS representatives, and other *ad hoc* guests and observers. He also identified the attendees of the recent NanTroSEIZE meeting and noted several action items on developing a mandate for the group, defining critical data sets, developing a contingency tree for expedition operations, and defining the site-survey procedures, the pore pressure and drilling conditions, and the nature of the scientific parties. Janecek identified the critical needs for engineering development in terms of SAS advice on long-term priorities, coordination with the IOs and task forces on long-term development plans, and determining how to implement those developments through annual program plans.

Miller characterized the ACEX REVCOM effort as very successful from his perspective as a member of the review committee. He encouraged having SPC representatives on future REVCOMs to facilitate SPC assessment of scientific results. Allan referred to the expedition prospectus as the basis for REVCOM reviews and suggested that the SPC could take a broader historical review of the scientific outcome. Pisias added that the SPC should assess whether the prospectus included what the SAS recommended. Talwani acknowledged a link between the operational and scientific reviews.

Mori wanted to examine the relation between scoping groups and the SPC. Janecek expressed reluctance to begin the scoping process for unranked proposals. Coffin recalled that the SPC, as recommended by the SSEPs, had designated two proposal packages as CDPs in March 2004 to enable long-term planning to begin before the SPC had received the proposals for ranking. He wondered if that gave inappropriate encouragement to the proponents for planning subsequent stages. Pisias suggested that CDPs might require a different approach from the normal ranking and scheduling processes. Janecek noted the possible inefficiency of considering some pieces of a CDP in the scoping process and not others.

Coffin mentioned the new IODP logo currently under development. Duncan asked if the idea of having a central Web portal involved linking to all of the IOs. Janecek replied yes. Teagle asked about the policy of who had responsibility for outreach. Talwani recognized the difficulties with funding coming from different sources and said that the education and outreachtask force would have to develop a policy statement.

On Wednesday morning Hans Christian Larsen reported the highlights of activities handled by the IODP-MI Sapporo office since its inception in April 2004. He diagrammed the staff organization and cited the new five-year contract with AESTO for support. Larsen announced that three new staff members would join the office in FY2005, and he expected one or two new full-time positions in FY2006 to complete the staffing. Larsen presented a timeline for establishing the new site-survey data bank next year and indicated that a new science coordinator would serve as the link between the data bank and the SAS. He also anticipated releasing a request for proposals for a new information services center in FY2006. Larsen listed the members of separate task forces for establishing the site-survey data bank and for publications. He noted that the publications task force would meet in early November 2004 and focus on determining the nature of the program publication for scientific results. Larsen outlined the principles of publications during Phase 1, with a reassessment expected for Phase 2, and he noted a plan for launching a successor to the *JOIDES Journal* beginning in April 2005. Larsen provided an update on active proposals and recent submissions in terms of

origins, scientific themes, and drilling platforms and suggested a possible need for stimulating more proposals for riser drilling.

Coffin asked if support for the SPC chair would switch from AESTO to JOI when the chair position rotates to the U.S. Larsen could not answer at the moment. Duncan asked who in the IODP-MI handled education and outreach. Larsen said primarily Director of Communications Nancy Light in Washington, D.C., with secondary contact through Executive Program Associate Saneatsu Saito in the Sapporo office. Coffin asked how the newsletter planned by the education and outreach task force would interrelate with the IODP journal. Larsen replied that the publications task force would discuss that topic at its upcoming meeting. Kato wondered about the impact factor of starting a new journal. Larsen believed it required several years of publication to begin compiling impact factors. Klaus stated that the TAMU staff had prepared for the task force meeting by investigating citation data and impact factors of DSDP- and ODP-related publications and major journals, respectively. Coffin indicated that the SPC would like to see those data. Ildefonse wondered if electronic publications could meet the goal of long-term archiving as recommended by the SPC, and he asked about linking the new site-survey data bank to the meta-database being prepared by the ILP. Doust described the ILP meta-database as only in the design stage now, but he expected to see it implemented by the IODP-MI. Larsen answered that the task forces would investigate those issues. Becker asked if proponents typically specified a drilling platform in their proposals. Larsen said not usually, but one could assess the likely platform needs based on water depth and penetration depth at the proposed drilling sites. Byrne noted that many proposals have a microbiology component, though it might not comprise the main objective.

In response to the earlier request from Talwani, Coffin proposed forming a working group to develop a plan for conducting scientific assessments of expeditions. Becker, Brumsack, and Duncan volunteered. Tokuyama volunteered Soh in his absence. Kitazato volunteered as an alternate for Soh if necessary. Becker volunteered to chair the group. Bekins asked if this group would just define the procedure or do the assessments, and she wondered how this effort would mesh with those of the SPPOC. Coffin clarified that this working group would just define the procedures, and he explained that the SPC would assess matters for each proposal or expedition as opposed to the overall program assessments undertaken or organized by the SPPOC. Pisias suggested that the SPC should assess whether the operational achievements sufficed to address the proposed scientific hypotheses. Larsen noted that he had already instructed co-chiefs to include a one-to-two page assessment in the expedition report.

SPC Consensus 0410-11: The SPC forms a working group to develop draft terms of reference and notional timelines for scientific assessment of expeditions originating from a single proposal or CDP, in consultation with the IODP-MI Vice President for Science Planning and Deliverables. The working group members include Becker (chair), Brumsack, Duncan, and Soh, and the group should deliver a draft final report at the March 2005 SPC meeting.

4. Implementing Organization (IO) reports

4.1. Center for Deep Earth Exploration (CDEX)

Shin'ichi Kuramoto reported that the organizational structure of JAMSTEC changed significantly in July 2004, including the merger of the OD21 Department with CDEX and the move of CDEX from JAMSTEC headquarters in Yokosuka to the Yokohama Institute for Earth Sciences. Kuramoto noted that JAMSTEC also acquired two research vessels (*Hakuho Maru* and *Tansei Maru*) from the Ocean Research Institute of the University of Tokyo. He showed the characteristics of the eight-ship JAMSTEC fleet and said that the new riser

drilling vessel *Chikyu* should have all of its equipment installed and tested by November 2004. He also outlined the schedule for completing the *Chikyu* operational training by the middle of 2007, pending favorable budget conditions. Kuramoto noted that JAMSTEC hosted the recent NanTroSEIZE scoping group meeting. He referred to the development of an onshore database for managing site-survey and other scientific data and said that CDEX would soon open it to the community. Kuramoto cited several education and outreach activities conducted in Japan and abroad in cooperation with J-DESC and described a campaign involving science talks at various universities coupled with popular lectures and displays at local museums. He also mentioned the exhibit booths at the December 2003 AGU meeting in San Francisco, the July 2004 AOGS meeting in Singapore, and the August 2004 Western Pacific Geophysical meeting in Honolulu.

Liu asked about the schedule of the *Chikyu* training cruises. Kuramoto answered that the schedule depended on forthcoming budget guidance from MEXT. Given expressed enthusiasm about the promotional campaign to universities and museums and said that she hoped to discuss similar ideas with USSAC.

4.2. JOI Alliance

Frank Rack reported on the operational accomplishments of Expedition 301Juan de Fuca Hydrogeology. He identified several logistical challenges and said that OPCOM had discussed the lessons learned, the JOI Alliance had undertaken an internal review, and a REVCOM would assess the expedition operationally and technically in December 2004. Rack stated that Expedition 301 included the teacher-at-sea initiative, the compiling of a series of laboratory briefs, and the videotaping of expedition activities and interviews with scientists. He noted that unexpected difficulties with the U.S. Homeland Security Department at the port call in Astoria, Oregon resulted in no offloading of items other than personnel and their belongings. Rack reported that Expedition 301T Costa Rica CORKs II involved a total operational time of 3.8 days and succeeded in recovering one of two osmosamplers and installing replacements for both. He explained that future port call dates had changed because of delays transiting the Panama Canal and course changes to avoid hurricanes. Rack identified the co-chiefs selected for upcoming expeditions. He outlined the tasks for extending the FY2005 program plan with four extra months of scheduled expeditions, based on additional funding of \$10 million in POCs, \$2 million in SOCs, and \$4.5 million in reallocated demobilization costs. Rack reviewed the recommendations presented to OPCOM concerning minimizing science creep by only scheduling expeditions with well-defined deliverables, maximizing deliverables through resource management, and providing adequate lead-time for planning and conducting expeditions. He referred to negotiations with the IODP-MI for a nine-year subcontract for distributing SOCs and the need to extend the agreement with the subcontractor in December 2004 for continued use of the JOIDES Resolution. Rack outlined the project planning for the U.S. scientific ocean drilling vessel and said it depended on the U.S. Congress settling the continuing national budget resolution. He noted that JOI had issued a request for proposals for the project in October 2004, had hired a project director at JOI, and would soon hire a project manager at TAMU.

4.3. ECORD Science Operator (ESO)

Dan Evans reported on the results of the Arctic Coring Expedition (ACEX), saying that it provided a good test of many developing procedures and protocols in ECORD and the IODP. He identified the expedition fleet, showed the final configuration of the drill ship, illustrated the ice management process with aerial photos, and cited the various operational risks involved. Evans noted that the drill ship operated manually and not on dynamic positioning, and despite heavier ice conditions than expected, with almost complete and constant ice cover,

they succeeded in drilling through a prominent angular unconformity beneath Paleocene to recent sediment, though with only 68% recovery of core. He summarized that the expedition began on time, spent twenty-four days operating on site, and finished within the optimum weather window and within the budget. Evans stated that the expedition received excellent media attention and obtained excellent scientific results that will greatly expand our knowledge of Arctic Ocean history.

Evans reported that the ESO would issue tenders before the end of 2004 for the Tahiti expedition in 2005. He said that they selected the co-chiefs and would have a logistics meeting with Tahitian authorities in December 2004. Evans explained that the ESO submitted a program plan and budget in May 2004 but could not receive a SOCs contract from the IODP-MI until the lead agencies finalized the budget. He asserted that Tahiti planning would benefit from the ACEX experience and would incorporate recommendations of the ACEX REVCOM. Evans added that the ESO had already submitted a measurements plan to the SciMP, begun preparing the expedition prospectus, and started considering the implications of incorporating an ancillary project (Proposal 650-APL).

Tokuyama requested that the ESO inform the program member organizations of the planned dates of the pre-cruise meeting for the Tahiti expedition. Droxler asked about the coring system for the Tahiti expedition. Skinner replied that they would certainly use a diamond coring system on either a dynamically positioned vessel or a jack-up rig. He added that the core would have a smaller diameter than usual. Miller asked about the possibility of using an anchored vessel. Skinner explained that it would require using a separate vessel to lay the cables and keep them off the reefs, and it would involve more difficulty at the deeper water site. Quinn asked about the expected core recovery. Skinner expected at least 75% core recovery, depending on the amount of cavities.

5. SPPOC report

Kensaku Tamaki expressed his appreciation of the efforts by the SPC. He reported that the SPPOC approved the FY2004 and FY2005 program plans at the first two SPPOC meetings and expected to receive the FY2006 program plan at the June 2005 SPPOC meeting. Tamaki noted that the SPPOC approved the conflict-of-interest policy drafted by one of its *ad hoc* committees, but they still had to evaluate how to discriminate the boundaries of the IOs and discuss further the idea of requiring open balloting by the SPC. He explained that the SPPOC hoped to reduce the length and complexity of the COI policy by having open voting, though SPPOC members expressed sharply divided opinions. Tamaki announced that the IODP-MI board of governors amended the SPPOC mandate in August 2004 and recently appointed Nick Pisias as SPPOC vice-chair. He mentioned the SPPOC *ad hoc* committee currently evaluating the IODP science advisory structure, with input from the SPC. Tamaki reported that the SPPOC would finalize the new advisory structure at its December 2004 meeting and also try to redefine its own role and responsibilities, including long-range planning and overall program assessments of science achievements and operations.

Pisias noted that the SPPOC did not exist as an interim committee and thus had not yet had a chance to define itself. Miller questioned why the SPPOC would undertake the role of science assessment when that task should belong to the SPC. Pisias replied that the SPPOC would not do the assessing but must decide how to augment the SAS to do it. Talwani advised defining the goals and the mechanism for achieving those goal and not duplicating efforts among the SPC, the SPPOC, and the IODP-MI. Coffin noted that the mandates of the SPPOC and the SPC as well as the job description of the IODP-MI vice president for science planning and

deliverables all refer to long-term planning. Miller recommended dividing the responsibilities so as not to overwhelm anyone.

6. IODP SAS6.1. Panel reports

6.1.1. SSEPs

SSEPs Co-chair Tim Byrne briefly reviewed the SSEPs membership and their role in nurturing and evaluating drilling proposals through an iterative review process. He explained that the two panels meet jointly and split into cross-panel breakout sessions organized around specific scientific themes, depending on the nature of proposals under review at each meeting. Byrne briefly reviewed the results of the May 2004 SSEPs meeting. He identified areas of science not well represented among the pool of active proposals, and he noted the difficulties of tool development and getting funding for site surveys. He also advocated the sponsorship of thematic meetings and workshops as ways to create more proposals and broaden the community base. Byrne previewed the November 2004 SSEPs meeting in Okinawa, saying that the panels would have thirteen new or alternate members and twenty-seven proposals to review. He also briefly updated the status of proposals related to the two designated CDPs for NanTroSEIZE and the Costa Rica Seismogenesis Project.

Kawahata asked who picks the external reviewers. Byrne replied that the proponents and the SSEPs recommend reviewers and the IODP-MI Sapporo office picks the reviewers, who remain anonymous to the proponents and the SSEPs. Mori asked how the SSEPs decide when to forward a proposal to the SPC. Byrne explained that they assess the external reviews and how well the proponents responded to all of the concerns.

6.1.2. SSP

Outgoing SSP Co-chair André Droxler thanked the SPC for approving Roger Searle to replace him as SSP co-chair. He recommended appointing a U.S. member as the other co-chair when the current co-chair from Japan, Kyoko Okino, rotates off the panel. Droxler reviewed the new completeness classification for site-survey data packages and the specific completeness classifications for each of the proposals already ranked by the SPC.

Duncan wondered if the SSP could look at proposals earlier to give feedback to proponents and improve the synergy with the SSEPs. Droxler replied that the SSP already reviews preliminary proposals and gives proponents feedback on recommended data, plus they send liaisons from the SSP to the SSEPs. He supposed that the new fully electronic data bank might allow the SSEPs to get access to survey data. Byrne mentioned the possibility of having joint meetings, but he doubted that the SSEPs would want or need access to the site-survey data bank, particularly since external reviewers would not have access to it. Pisias cited the difficulty of assessing survey data from the limited information submitted directly with a proposal. Talwani suggested allowing reviewers to have access to the full quality data. Bekins recalled the SSEPs thinking that proponents needed panel endorsement to seek funding for conducting heat-flow surveys, and she asked why the SSP recommended a high-resolution heat-flow survey for the Nankai mega splays. Droxler said to optimize the location of sites. Coffin saw significant room for improving the communication and coordination between the SSP and the SSEPs. Miller suggested having the panels meet jointly at least once per year. Doust recommended defining a formal procedure to get proper expertise involved in the review. He also suggested that the SSP could propose enhancements to the scientific objectives.

6.1.3. EPSP

Coffin referred to the written EPSP report in the agenda book and noted that EPSP Chair Barry Katz could not attend the meeting.

6.1.4. SciMP

The committee deferred the SciMP report until Tuesday afternoon. SciMP Co-chair Makoto Okada reviewed the SciMP membership, noting that four members rotated off after the June 2004 meeting. He said that the panel now lacked expertise in databases, micropaleontology, and sedimentology. Okada reported that the June 2004 SciMP meeting resulted in eight recommendations concerning the SciMP laboratory working group reports, plus eight other recommendations on various topics. SciMP Co-chair Mike Lovell presented SciMP Recommendation 0406-1 on logging all IODP sites.

SciMP Recommendation 0406-1: SciMP recommends that all IODP sites should be logged. The absence of planned logging of IODP sites in a proposal has to be explained and justified explicitly in the proposal.

Fryer noted that sometimes the lithology at a site physically precludes logging. Goldberg referred to the old 400-meter rule as not working and agreed on the need for something better, though he wondered who would review the logging plan in proposals. Lovell supposed that the SciMP might need to do it. Kelemen thought the recommendation implied that co-chiefs lack the capability of deciding on the necessity or desire for logging. Baldauf stated that the prospectus defines the agreement with regard to logging for each expedition. Allan asserted that co-chiefs need the flexibility to make decisions onboard. Baldauf said that adjustments have always occurred during operations. Miller noted that Expeditions 303 and 306 currently have no logging plans.

Christie worried about burdening proponents with describing logging plans in their proposals when such plans belong in the prospectus. Rack said that it would aid the scoping process to include logging plans in proposals. Becker suggested putting the logging plan in the proposal and the prospectus. Pisias recommended that the SPC review the expedition prospectuses. Allan doubted that the SPC could have authority of approving the prospectus given the timing for producing it and the contractual responsibilities of management. Pisias responded that the SAS should have the choice of whether or not to review the prospectus. Coffin suggested that perhaps the SAS have input through its representatives on OPCOM. Larsen saw no problem with that as long as the proposals included logging plans. Christie objected again to requiring logging plans in proposals. The committee agreed on the compromise of recommending that either the proposal or prospectus must justify the absence of a logging plan.

SPC Consensus 0410-12: The SPC receives SciMP Recommendation 0406-1 and accepts the principle that all IODP sites should be logged. The committee recommends that the absence of planned logging at any IODP proposed sites must be explained and justified in the related proposal or expedition prospectus.

Okada presented SciMP Recommendation 0406-02 on the drill cuttings team report, including specific recommendations on appropriate sampling parameters, processing drill cuttings, and storing them as permanent archives.

SciMP Recommendation 0406-02: SciMP recommends to SPC acceptance of the drill cuttings team report, and requests SPC distribute it to the IOs and IODP-MI. The full report and attached documents are found in Appendix 9. IODP scientists should recognize the limitation of cutting usage as well as their usefulness. SciMP recommends:

- a) Appropriate sampling parameters, such as the sample interval and volume of drill cuttings, should be decided according to the scientific objectives of the expedition.
- b) Drill cuttings initially processed by on-site specialists should be forwarded to the on-site scientific laboratories as soon as possible.
- c) Washed and dried cuttings should be stored as permanent archives. All cuttings data should be stored in database with Cutting Sample ID.
- d) Access to mud logging data including drilling/geological information should be made available for browsing and storage in science database.

Coffin asked for comments on the drill cuttings team report. Becker characterized the recommendations as quite sensible and recommended accepting them. The committee agreed.

SPC Consensus 0410-13: The SPC accepts SciMP Recommendation 0406-2 and forwards the SciMP drill cuttings team report to the IODP-MI.

Lovell presented SciMP Recommendation 0406-3 on acquiring x-ray CT scanners.

SciMP Recommendation 0406-3: SciMP recommends that acquisition of x-ray CT scanners be given a high priority for shipboard and shore-based laboratories in IODP.

Becker expressed reluctance to accept individual recommendations on specific instruments instead of receiving some sort of prioritized list. Coffin proposed tabling this particular recommendation, and the committee agreed.

SPC Consensus 0410-14: The SPC receives SciMP Recommendation 0406-3 on acquiring x-ray CT scanners but defers discussing it in the absence of any information on the relative priority of other specific instruments recommended for shipboard and shore-based laboratories.

Lovell presented SciMP Recommendation 0406-4 on having a science coordinator attending SciMP meetings and taking minutes.

SciMP Recommendation 0406-4: SciMP recognizes the value of having a science coordinator from the IODP-MI Sapporo office at its meetings. Among other contributions, participants from that office have historically provided valuable updates on cruise/research proposals, and have also provided programmatic memory. Such updates have defined project-specific needs that fall within the advisory purview of SciMP. SciMP requests that the science coordinator record the minutes of the meeting, thus optimizing the advisory role of the SciMP member now compromised by that task.

Coffin strongly supported the idea and rationale for having at least one science coordinator attend all SAS meetings. He noted that a science coordinator already produces minutes for SPPOC and SPC meetings, but undertaking that task for the SciMP would likely interfere with other responsibilities, plus he could not see how to justify providing that service to only one SAS panel and not the others. The committee accepted the first part of the recommendation, but not the second part, and forwarded it to the IODP-MI.

SPC Consensus 0410-15: The SPC receives SciMP Recommendation 0406-4 and recommends to the IODP-MI that a science coordinator should attend all SciMP meetings but should not have responsibility for recording the minutes of those meetings.

Okada presented SciMP Recommendation 0406-05 on establishing a micropaleontology working group or task force, integrating micropaleontology reference centers (MRCs) within

the IODP, coordinating digital taxonomic dictionaries and cyber atlases with other national and international initiatives, capturing post-cruise data, reducing sampling by the MRCs, and encouraging the MRCs to explore other funding possibilities.

SciMP Recommendation 0406-05: SciMP recommends to SPC acceptance of the paleontology and MRC working group report, and requests SPC distribute it to the IOs and IODP-MI as soon as possible. The full report of the working group is found in Appendix 14. SciMP recommends:

- a) The SciMP recommends the establishment of a Paleontology Working Group, perhaps as an IODP-MI task force. Membership should include appropriate persons from SciMP, at least one Micropaleontological Reference Center (MRC) curator, and other experts as needed. Issues to be considered include: development of digital atlas and taxonomic dictionaries, acquisition of technical support on board drilling platforms, interaction of MRCs with scientific communities, sample preparation procedures, control of the quality of paleontologic data and other related matters.
- b) SciMP recommends that the MRCs should (1) be renamed as Integrated MRCs (IMRCs), and (2) continued in IODP as an integrated component. Formal inclusion of IMRCs collections and curators will provide an important resource to IODP for the production of micropaleontologic training and public education materials, for maintaining quality control of paleontologic and biostratigraphic data within IODP, as a liaison to the broader micropaleontologic community, and for insuring an archival legacy of IODP micropaleontologic recovery. "Formal inclusion" could include participation as panel or task force representatives, making regularly scheduled presentations to SciMP, and other activities of the IODP.
- c) IODP must coordinate their efforts regarding digital taxonomic dictionaries and cyber atlases and related issues with other national and international initiatives such as CHRONOS, NEPTUNE, and others. SciMP recognizes the importance of international cooperation and interaction among the IOs and the micropaleontologists community and encourages collaborations with IMRC curators to develop these dictionaries to be used on the IODP drilling platforms. The microfossil groups to be covered should include calcareous nannofossils, planktic foraminifera, benthic foraminifera, diatoms, silicoflagellates, radiolarians, and palynomorphs (dinoflagellates and pollen). The taxonomic dictionaries for the Cenozoic and Mesozoic should be updated and expanded on a regular basis (e.g., once per year).
- d) The SciMP recommends that post-cruise data capture and updating of older data become an ongoing activities of IODP, working in cooperation with relevant various expert groups, e.g. IMRCs, CHRONOS, NEPTUNE, and ODSN. Both taxonomic dictionaries and chronology updates should be core products available via the proposed Information Services Center (ISC).
- e) The MRCs should reduce their sampling to recover only key remaining gaps in current coverage, as they have requested.
- f) The MRCs should explore funding possibilities to insure the timely completion of the IMRC sample set and on-line publication together with the relevant age information.

SciMP also supports the following "Consensus Statement" from the paleontology working group:

SciMP realizes the critical importance of chronostratigraphy in guiding drilling operations and interpreting earth history in the new multiplatform IODP structure. The SciMP therefore stresses the importance of paleontologists' participation in the panel.

Coffin asked how many MRCs exist now and who pays for them. Rack said six or seven, with the museums supporting the collections and the samples belonging to the program. Allan framed the question of whether to support this activity through commingled funds. Pisias noted that the program had never supported this activity in the past. Fryer recalled that one of the criteria when originally establishing the MRCs called for the institution to support it in perpetuity. Miller suggested asking the SciMP to get statistics from the MRCs on the level of usage. Pisias recommended ceding the samples to the MRCs and letting them find the support. Rack added that if the museums receive the samples on permanent loan then they could use internal funds for support.

Lovell recognized the last five recommendations as problematic but hoped that the SPC could at least approve the first recommendation on establishing the working group. Fryer asked about the meaning of acquiring onboard technical support. Baldauf noted that some expeditions have had such support but not on a routine basis because it takes support away from some other lab. Nomura stressed the importance of having the proper assemblage of technical expertise onboard. Coffin summarized the choice of either establishing a working group under the SciMP, supported by program member organizations, or creating a task force under the IODP-MI. He proposed tabling this report until later for further input from the IODP-MI.

SPC Consensus 0410-16: The SPC receives SciMP Recommendation 0406-05 on the SciMP paleontology working group report and the six recommendations therein.

Lovell presented SciMP Recommendation 0406-6 on integrating petrophysical disciplines for IODP working groups and discussions.

SciMP Recommendation 0406-6: SciMP recommends the integration of petrophysical disciplines for the formation of IODP working groups, interaction with the IOs, and discussions of technical and scientific feasibility and significance in the IODP.

Coffin proposed just receiving this recommendation because it represented an internal SciMP matter. The committee agreed.

SPC Consensus 0410-17: The SPC receives SciMP Recommendation 0406-6 on integrating petrophysical disciplines for IODP working groups and discussions.

Lovell presented SciMP Recommendation 0406-7 on the revised physical properties working group report.

SciMP Recommendation 0406-7: SciMP recommends to SPC acceptance of the physical properties working group report and requests SPC distribute it to the IOs and IODP-MI as soon as possible. The full report of the working group is found in Appendix 15 and includes descriptions of standard and minimum measurements across the IODP and on specific platforms. Specific recommendations of the physical properties working group include:

- a) The final ODP operations for physical properties measurements be taken as a minimum requirement for IODP Phase I operations, but with the addition of resistivity. Furthermore, we recommend that the following be urgently considered: color reflectance upgrade, implementation of calibration standards, and upgrade of natural gamma ray.
- b) The MST/MSCL should be standardized on both the riser and non-riser vessels and be incorporated into mission-specific platform (MSP) projects. Discrete samples should be taken for OA/OC and calibration procedures of ephemeral properties against the MST.

SciMP also supports the following "Consensus Statement" from the physical properties working group:

SciMP should examine petrophysical plans in detail for each MSP expedition. This examination is to ensure the proposed measurement strategy adequately meets the requirements of the science objectives and the legacy nature of IODP data.

The committee briefly discussed the specifications for an upgraded natural gamma detector. Coffin proposed accepting the revised report and forwarding it to the IODP-MI. The committee agreed.

SPC Consensus 0410-18: The SPC accepts SciMP Recommendation 0406-7 and forwards the revised SciMP physical properties working group report to the IODP-MI.

Lovell presented SciMP Recommendation 0406-8 on the petrophysics QA/QC working group report that recommends requesting the IOs to provide detailed information on their procedures for quality assurance and quality control.

SciMP Recommendation 0406-8: SciMP recommends to SPC acceptance of the petrophysics QA/QC report and requests SPC distribute it to the IOs and IODP-MI as soon as possible. The full report is found in Appendix 17. Specific recommendations include:

- a) IOs be requested to provide details of proposed QA/QC measures, including calibration, for all petrophysics measurements appropriate to their platform. These should address initial calibration, and quality assurance and control on a short-term (daily) and long-term (monthly) timescale for routine continuous and discrete measurements and occasional measurements.
- b) IOs be requested to provide details of how they propose assessing and recording QA/QC with respect to third parties (e.g. logging contractors). This request primarily concerns how the third-party calibration is dealt with and initially assumes there will not be any additional burden on third parties.
- c) IOs be requested to provide details and implementation plans for performance records: these should enable easy identification of problems, drifts/anomalies in measurements, and address how the science party can access the records.
- d) IOs be requested to provide suggestions for explicit training of scientists and technicians in QA/QC and calibration to ensure data accuracy and precision are comparable. This should concern individual and cross-platform issues.

Coffin asked if the IOs had any involvement in creating the recommendations. Lovell said yes, but the panel expected a continuing dialog. Coffin preferred keeping the report with the SciMP until they finish dealing with the IOs. Baldauf suggested forwarding it to the IODP-MI now for consideration at the IOs meeting this week. Kuramoto and Evans supported the idea. Coffin proposed accepting and forwarding the report and the committee agreed.

SPC Consensus 0410-19: The SPC accepts SciMP Recommendation 0406-8 and forwards the SciMP petrophysics QA/QC report to the IODP-MI.

Lovell presented SciMP Recommendation 0406-9 on conducting APC temperature measurements.

SciMP Recommendation 0406-9: SciMP recommends that APC temperature measurements be taken at least at one hole per site at a frequency of one measurement per approximately 30 m, with a suggested minimum of three measurements per site.

Becker viewed the recommendation as too specific because of its operational implications. Coffin proposed receiving it and requesting a more flexible recommendation from the SciMP. Bekins noted that one can use heat flow to infer fluid flow, but it requires more than one measurement per site. Rack believed that the recommendation also involved upgrading the tool and ensuring its availability. Skinner inquired about the desirability of measuring temperature under hole conditions that might not suit using the APC. Christie suggested phrasing the recommendation in terms of science instead of operations. Bekins agreed that it should refer generically to making routine temperature measurements instead of using a specific tool. Coffin asked Bekins, Lovell, and Okada to draft a new recommendation. After a short recess the committee accepted the following statement.

SPC Consensus **0410-20**: The SPC receives SciMP Recommendation 0406-9 and recommends wherever feasible measuring the temperature profile at each sedimentary IODP site.

Lovell presented SciMP Recommendation 0406-10 on the downhole measurements working group report.

SciMP Recommendation 0406-10: SciMP recommends to SPC acceptance of the downhole tools working group report and requests SPC distribute it to the IOs and IODP-MI as soon as possible. The full report of the working group is found in Appendix 16 and includes descriptions of common standards and minimum requirements across IODP and platform specific recommendations. Specific recommendations of the downhole tools working group include:

- a) QA/QC data, for both logging and other downhole tools, such as calibration data, QC logs, correction parameters should be stored in the science database where possible so that scientists can access the data.
- b) SciMP recommends that logging plans for the riser platform take advantage of availability of large diameter tools to maximize scientific achievements.
- c) For both operational and scientific purposes, SciMP recommends frequent and effective use of LWD/MWD for drilling.

SciMP also supports the following "Consensus Statement" from the downhole tools working group:

Sonic log has a huge potential, however it also has a lot of issues before scientists utilize its data; especially stoneley wave and S (flexial) data. Sonic waveform data should be distributed by standard format in science community. Sonic waveform data should be recorded, where possible. IOs should provide scientists every information to utilize the data.

Becker noted that the high cost of LWD would likely prohibit its frequent use. Coffin suggested dropping the reference to frequent and just recommending effective use.

SPC Consensus 0410-21: The SPC accepts SciMP Recommendation 0406-10, except for recommending frequent use of LWD and MWD, and forwards the SciMP downhole measurements working group report to the IODP-MI.

Okada presented SciMP Recommendation 0406-11 on core description and archiving of sampled materials, including core splitting, core images, smear slides, thin-sections, and core archiving.

SciMP Recommendation 0406-11: SciMP recommends to SPC acceptance of the core description working group report and requests SPC distribute it to the IOs and IODP-MI as

soon as possible. The full report of the working group is found in Appendix 18. Core description and archival of sampled materials is an essential component of IODP expeditions and requires standardized preparation and description, integrated core processing flow, and a comprehensive database, as addressed in the core description working group report. SciMP recommends:

- a) The development of precise splitting techniques of cores to provide maximum quality of surfaces to be described.
- b) The integration of core images in a multi-data browsing system so as to integrate imagery and non-destructive measurements for core description.
- c) The preparation and creation of reference smear and thin-section collections common to all platforms and on-land facilities.
- d) An adequate core archiving strategy for all core samples recovered during IODP expeditions to insure post project description and sampling requirements.
- e) An adequate archiving strategy for drill cuttings, when available.

Teagle expressed concern about adding new imaging techniques and still allowing space for visual core description. Rack asked if the working group had considered the CDC report. Okada did not know if they did. Coffin proposed receiving the report and requesting more information as indicated in the discussion.

SPC Consensus 0410-22: The SPC receives SciMP Recommendation 0406-11 on the SciMP core-description working group report and requests the SciMP to provide more information on adding new core imaging techniques, allowing sufficient shipboard laboratory space for visual core description, and whether the core description working group considered the Conceptual Design Committee (CDC) report for the IODP non-riser drilling vessel.

Okada presented SciMP Recommendation 0406-12 on the paleomagnetism working group report. He summarized the revised report and noted one new recommendation on using non-magnetic core barrels.

SciMP Recommendation 0406-12: SciMP recommends to SPC acceptance of the paleomagnetism working group report and requests SPC distribute it to the IOs and IODP-MI as soon as possible. The full report of the working group is found in Appendix 20. SciMP recommends:

- a) A non-magnetic core barrel be used for all IODP APC coring to minimize drilling induced magnetic overprint on sediments.
- b) U-channels will constitute the standard paleomagnetic sample in all cases when it will be feasible to perform u-channel sampling of the cores, and they should be routinely collected in IODP expeditions.
- c) Measurements and analyses should be carried out as soon as possible during the expedition.
- d) The order of measurements on discrete samples and/or u-channels is as follows: i) magnetic susceptibility, ii) natural remanent magnetization (NRM), iii) stepwise demagnetization of the NRM, iv) (stepwise) acquisition and demagnetization of an ARM, and v) (stepwise) acquisition and demagnetization of an IRM.
- e) Permanent magnets are recommended for calibration of magnetometers. Paramagnetic rare earth oxides are recommended for calibration of susceptibility meters. Calibration standards should be measured before the routine work to produce reliable data.

Committee members questioned the expense and availability of non-magnetic core barrels and suggested only recommending their use for APC coring rather than requiring it, thus

allowing flexibility for other options. Kelemen wondered about the cost effectiveness, considering that the cores still receive some magnetic overprinting from passing through the steel drill pipe. Allan emphasized the importance of involving the operators in drafting recommendations and thinking in terms of programmatic issues. Okada noted the already continuous use of non-magnetic core barrels on the *JOIDES Resolution*. Lovell agreed with saying recommend instead of use. He hoped to get feedback from the IOs on whether problems arise.

SPC Consensus 0410-23: The SPC accepts SciMP Recommendation 0406-12 and forwards the revised SciMP paleomagnetics working group report to the IODP-MI, with the caveat of merely recommending and not requiring the use of non-magnetic core barrels for all APC coring.

Lovell presented SciMP Recommendation 0406-13 on the chemistry working group report. He explained that the group derived the reported eleven recommendations and six action items from a community survey.

SciMP Recommendation 0406-13: SciMP recommends that SPC accept the report of the chemistry working group (CWG) and the recommendations contained therein, which is the result of input from the ocean drilling community regarding analytical facilities associated with IODP. SciMP requests that SPC distribute the report to the IOs and IODP-MI as soon as possible. The CWG report contains eleven specific recommendations and six action items that reflect the following overall conclusions that: a) better standardization/calibration should be employed for IODP than was available for ODP and b) technician training should be at a higher level than during ODP to maintain the equipment while on-site and also to ensure the data generated are of the highest quality. A full discussion of these and related issues can be found in the chemistry working group report (Appendix 21). SciMP endorses the following recommendations of the chemistry working group:

- 1) Sample handling procedures should be specified for each expedition such that the integrity of the drilled samples are not compromised. This should be discussed and specified during the expedition planning stage between the co-chief scientists and the IO.
- 2) SciMP recommends that there be a sufficient number of microscopes configured for each specific use to achieve the scientific objectives of a given expedition, that they be equipped with both transmitted and reflected light capabilities, be able to work up to 1600X total magnification in air (and, as much as possible, oil), as well as have the ability to take and store digital images.
- 3) SciMP recommends that a laser ablation facility (with radiation of 213 nm or less) be available on the riser and non-riser platforms for interfacing with an ICP-MS.
- 4) Standards/reference materials for each analytical facility be uniform across the different platform and IODP-affiliated shore-based laboratories.
- 5) Routine analysis of reference materials as unknowns during every analytical run must become common practice on all IODP platforms and related shore-based labs.
- 6) If third party analytical equipment is to be used on any IODP platform, its suitability should be demonstrated by the analysis of relevant reference materials *prior* to the start of the expedition.
- 7) SciMP will advise the IOs on the development of analytical and sample preparation protocols, as well as their implementation on the various IODP platforms and in shore-based laboratories. SciMP will also oversee and advise on QA/QC issues (and in the mitigation of problems) as they relate to geochemical analyses.

- 8) The CWG of SciMP recommends that facilities for accurate weighing on a moving ship be made available on the riser and non-riser platforms. Such facilities will greatly increase the quality of geochemical data generated on these platforms, enhancing their usability in scientific publications.
- 9) All IODP chemistry technicians should have at least a Masters degree and/or sufficient experience or training in analytical chemistry, geochemistry, or related fields. This is essential to ensure that the technician is skilled enough to deviate from a prescribed set of procedures should a given situation require it.
- 10) Each laboratory technician should undergo training with the respective manufacturer of the analytical facility they are to be responsible for. Such training should include maintenance, trouble-shooting, and software. There should be regular (annual?) refresher courses that would allow the technicians to stay up-to-date with hardware and software developments.
- 11) Each chemistry laboratory technician should undergo training at IODP-related (or where applicable, university research laboratories), in order to understand how to judge data quality and the problems associated with obtaining data that are of the highest quality.

Rack suggested that it would help to prioritize these types of instruments for equipping the new non-riser drilling vessel. Brumsack preferred placing emphasis on taking high quality samples and routine measurements rather than relying on expensive equipment that might not work so well in a shipboard environment or that might require a highly qualified technician. Allan stressed the importance of having a flexible system that would work well with many different users of different experience and abilities.

The committee agreed on the need for specifying sample handling procedures and accepted the first recommendation. The committee objected to specifying the magnification power in the second recommendation. Rack suggested saying configured and prioritized for each specific use. Coffin requested new wording. Lovell presented a revised recommendation the next day and the committee accepted it.

Kelemen would want to see the recommended laser ablation system developed and tested to make sure it worked onboard. Brumsack said it would probably need a dedicated technician. Kelemen believed that most hard-rock expeditions would have the necessary expertise. Miller suggested returning the third recommendation to the SciMP for further study. The committee received the third recommendation and asked the SciMP to provide more information.

Brumsack expressed concern that the fourth recommendation could lead the program to create new internationally uncertified standards. He also thought that the fifth recommendation just reflected standard practice. Baldauf commented that standardizing across all platforms could result in less flexibility. Coffin requested new wording for these two recommendations. Lovell presented a new combined recommendation the next day and the committee accepted it.

Coffin proposed receiving the sixth, seventh, and eighth recommendations and request further input from the SciMP after they finalize discussions with the IOs and the IODP-MI. Lovell presented revised versions of these recommendations the next day. Christie imagined the need to test third-party analytical equipment onboard before judging its suitability. Baldauf suggested incorporating the recommendation in the third-party tools policy. Rack noted that the seventh recommendation represented part of the SciMP mandate. Christie described the eighth recommendation as poorly defined. Coffin proposed tabling all three recommendations and the committee agreed not to accept them.

Coffin asked the SciMP co-chairs to combine the last three recommendations into one. Lovell presented a new combined recommendation the next day. Becker supported the general idea of technician training but wondered if it referred to some perceived shortcoming now. Baldauf noted that IODP-TAMU already sends technicians for outside training in scientific laboratories. Evans remarked that the Bremen sampling party would include technicians from Japan and the U.S. Rack added that these concepts comprise part of the minimum measurements discussion and defining the boundaries of responsibilities between the science party and the technicians. Coffin asked if the IOs had received needed input from the SciMP. Kuramoto replied that CDEX had presented plans to the SciMP and contacted scientists within Japan for input. Pisias stated that the SciMP should just define the standards and specifications for data quality and let management determine how to deliver it. Coffin proposed tabling the recommendation in the absence of a consensus and the committee agreed.

SPC Consensus 0410-24: The SPC receives SciMP Recommendation 0406-13 on the SciMP chemistry working group report. Based on the eleven specific recommendations given within the report, the committee recommends that:

- a) the IOs and co-chief scientists should specify during the planning stage for each expedition the sample handling procedures required to preserve the integrity of the acquired samples,
- b) every expedition should have a sufficient number of microscopes configured and prioritized for each specific use to achieve the scientific objectives, with the ability wherever possible to take and store digital images, and
- all analytical facilities across the different IODP platforms and shore-based laboratories should consistently use international standards and routinely analyze reference materials as unknowns.

Lovell presented SciMP Recommendation 0406-14 on publications.

SciMP Recommendation 0406-14: SciMP recognizes the unusual fiscal constraints and its consequences for publications for the first year of the IODP. SciMP encourages SPC/IODP-MI to insure that consistent editing, layout, and production for the IODP is established as soon as possible, as described in previous SciMP Recommendations. In particular, SciMP recommends:

- 1) That IOs prepare Expedition Reports, and other documents such as technical notes and engineering reports, until the RFP for publications is issued, and, when possible, that the IOs communicate to minimize differences in the publication process.
- 2) That a single organization be contracted for technical editing, layout and production of the reports prior to the RFP.
- 3) That an RFP for publications be issued as soon as possible so as to insure that publications of the IODP, including those of expeditions prior to the RFP for publications, are consistent and centralized.

Coffin proposed receiving the recommendation as information, considering the previous advice given in SPC Consensus 0406-4. The committee agreed without comment.

SPC Consensus 0410-25: The SPC receives SciMP Recommendation 0406-14 on IODP publications.

Lovell presented SciMP Recommendation 0312-1 as background information for SciMP Recommendation 0406-15 on sending ranked proposals to the SciMP for technological evaluation.

SciMP Recommendation 0312-1: SciMP recognizes that input on technical and data issues on IODP proposals is not adequate at this point. In order to improve the ability to plan for anticipated technical and data needs, SciMP recommends that SciMP be involved in the formal proposal review process. SciMP recommends the following operating procedure:

- 1. SciMP discontinue sending a liaison to the SSEPs meetings.
- 2. SciMP will only review those proposals that are passed from the SSEPS to SPC, and SciMP's comments will be restricted to technical and data needs only (that is, SciMP will not review a proposal for its scientific merit).
- 3. Cover sheets of forwarded proposals be distributed by the SAS Office to SciMP members immediately after SSEPs meetings. SciMP co-chairs can specifically appoint SciMP members to study specific proposals based on expertise if deemed necessary.
- 4. Proposals will be reviewed and commented upon, if necessary, by SciMP either by email or at SciMP meetings. A summary of these comments, if any, will be forwarded to SPC in time for their (SPC's) next meeting.
- 5. SciMP encourages that the SSEPs proposal watchdogs consider aspects and issues that may need to be addressed by SciMP in a systematic and consistent manner, and actively solicit input or advice from SciMP wherever necessary.

SciMP Recommendation 0406-15: The SciMP recommends that the SPC send ranked proposals to the SciMP for technological evaluation when the proposals are forwarded to OPCOM for potential scheduling.

Coffin suggested that the recommendation should refer to scientific measurements rather than technology. Kato favored the term feasibility instead of evaluation. Teagle suggested involving the SciMP at an earlier stage. Becker also saw it as too late to get SciMP input after a proposal goes to OPCOM. Byrne questioned if anyone had identified serious technological problems with some proposals that would justify such reviews by the SciMP. He preferred using the TAP for evaluating engineering proposals and trying to work with the liaisons first instead of sending proposals to other panels. Coffin noted that the SPC had not accepted changing the mandate of the TAP toward current development rather than just focusing on long-term development.

Christie wondered how well the SSEPs could identify the proposals that would benefit from a technical review. Coffin said that the SSEPs would act as a gateway to identify proposals for distributing to the SciMP co-chairs. Bekins wondered if proposals could just go to the SciMP liaison to the SPC. Coffin noted that the co-chairs could inform the IODP-MI of which SciMP members should receive specific proposals. Kato wanted to clarify in detail what the SciMP proposed to do with proposals. Schuffert asked if the SciMP would produce a written review for the proponents. Lovell answered yes, but it should not amount to a substantial document. Rack did not understand the intent of having the SciMP review proposals when the IOs could perform that function through the SSEPs.

Coffin proposed receiving the original recommendation and requesting the SciMP to develop the concept further in consultation with the IODP-MI and the IOs. He also suggested the idea of having the SciMP develop a checklist of scientific measurements for the SSEPs to use in evaluating proposals. Janecek recommended including the IOs in the process. Byrne stated that it would help to have a SciMP liaison at the November 2004 SSEPs meeting to get this done by March 2005.

SPC Consensus 0410-26: The SPC receives SciMP Recommendation 0406-15 and requests the SciMP and the TAP to work with the SSEPs and the IOs to develop a draft checklist of scientific measurements and technological and engineering needs for use by the SSEPs in evaluating proposals. The SciMP the TAP should present a merged draft checklist at the March 2005 SPC meeting.

Lovell presented SciMP Recommendation 0406-16 on downhole tool and engineering testing.

SciMP Recommendation 0406-16: SciMP recommends that IODP-MI examine potential procedures by which regular downhole tool and engineering testing could be hard-wired into the annual program plan.

Baldauf recalled allowing up to two days of testing per expedition toward the end of the ODP. Becker noted that this recommendation just called for investigating a procedure. Coffin suggested inserting a reference to observatories. The committee accepted the revised recommendation.

SPC Consensus 0410-27: The SPC receives SciMP Recommendation 0406-16 and recommends that the IODP-MI examine potential procedures for incorporating regular engineering testing and downhole tool and observatory development into the annual program plan.

Okada presented SciMP Action Item 0406-5 on managing the MBARI testbed facility. He explained that the SciMP and the TAP had formed a joint working group and would present a report at the March 2005 SPC meeting.

SciMP Action Item 0406-05: In response to a request from SPC, the SciMP and the TAP shall work with MBARI in developing a draft plan for managing the MARS-IODP borehole test site as outlined in IODP proposal 621-Full (Installation of Borehole Observatories in Monterey Bay). A joint SciMP and TAP report, with input from MBARI and other proponents, will be finalized for the October 2004 SPC meeting.

The committee concluded that it could only reaffirm its previous request for input on this issue from the SciMP and the TAP (see SPC Consensus 0406-14).

SPC Consensus 0410-28: The proponents of Proposal 621-Full Monterey Bay Observatory assert that the Monterey Accelerated Research System (MARS) management program of the Monterey Bay Aquarium Research Institute (MBARI) can be modified to accommodate the MARS-IODP test site. The SPC reiterates its earlier request (see SPC Consensus 0406-14) for the SciMP and the TAP to work with MBARI scientists (C. Paull, lead proponent) to develop a draft plan for managing the MARS-IODP borehole test sites. Issues to be considered in developing the plan include:

- a) integrating and coordinating management of the site with the MARS management program (available at www.mbari.org),
- b) managing the site in the transition from IODP to MARS-IODP management when the MARS fiber optic cable is attached to the site, and
- c) establishing a data management policy that will accommodate potential IODP users.

The SciMP and the TAP should submit a joint report for the March 2005 SPC meeting, and the SPC and OPCOM intend to submit a final report for the SPPOC to consider at its mid-2005 meeting.

Lovell presented several statements for amending the sample, data, and obligations policy and the publications policy concerning disseminating expedition results during an expedition and the subsequent moratorium, as requested by the SPC chair. Coffin explained that the request arose from concerns identified during the education and outreach task force meeting. He stressed that the program had no policy in place for current expeditions.

Ildefonse thought that the proposed changes could pose a problem for a science party member who makes rapid analyses and wants to publish during the moratorium. Klaus noted that the former policy had a requirement for getting approval from the staff scientist for publications. Allan suggested contacting the IODP-MI director of communications regarding press releases. Christie asked who authorizes the issuing of press releases. Klaus said that someone must ensure that press releases do not contain sensitive information that the science party does not want released. Becker asked if it represented a new idea to include all names of the science party on press releases. Klaus confirmed the new idea but doubted that the media would accept it because of space limitations. Evans doubted getting the agreement of the science party in a timely fashion for what to present and how to present it. Allan saw it as a matter of just getting the co-chiefs to review and approve press releases for accuracy. Miller agreed and proposed recognizing the program as responsible for press releases, but with approval of the co-chiefs. Evans suggested restricting the scientific review of press releases to factual issues and not style or presentation. He also noted that the ACEX shipboard party sent an abstract to AGU during the expedition but did not include the shore-based party, and he wondered if that represented a problem. Miller thought it seemed appropriate to exclude shore-based members who had not contributed yet to the scientific results. Coffin objected that it relegated the shore-based party to second-class status. Duncan agreed that shore-based and shipboard scientists should have the same status. Miller changed his opinion. Larsen suggested limiting abstracts until after describing core at the shore-based sampling party. Teagle thought that could blunt the impact of exciting results. Coffin proposed asking the SciMP to develop recommendations at their next meeting and the program should use the ODP procedures in the meantime.

SPC Consensus 0410-29: The SPC requests the SciMP to develop guidelines for disseminating expedition results during an expedition and during the post-expedition moratorium. The SciMP should present its recommended guidelines at the March 2005 SPC meeting, and the IODP should follow ODP procedures in the meantime.

6.1.5. TAP

TAP Co-chair Kate Moran emphasized that the TAP and the ILP do not have a predefined set of specific tasks like other panels, but they stand committed to finding ways to help the program. She characterized the membership of the TAP as two-thirds from industry, but with different types of expertise than on the ILP. Moran reported on the outcome of the June 2004 TAP meeting. She noted that the panel had undertaken a review of Proposals 519-Full2, 589-Full3, and 621-Full as requested by the SPC. Moran indicated that the TAP made recommendations on the technology of non-riser drilling in shallow hydrocarbon environments, adopting geotechnical sampling tools, designing tools for MSPs, and developing a cheap, long-term observatory. She added that the TAP concluded that the program could not standardize CORK technologies, and they would discuss the technological options for emplacing PVC liners in the Tahiti reefs. Moran proposed deleting the reference to long-term planning in the TAP mandate. She believed that the TAP should continue providing engineering development recommendations, and she viewed task forces as a good mechanism for implementing specific developments. Moran asserted that the TAP should also

help provide guidance on the technical requirements of proposed projects at an earlier planning stage, and she recommended involving TAP in operational reviews.

Bekins recommended having technical and industry members on REVCOMs. Janecek confirmed that the ACEX REVCOM had three industry representatives at its recent meeting and would always look for advice from appropriate people. Kelemen asked if a mechanism existed for submitting and evaluating engineering proposals in the SAS. Coffin answered that the SPC discussed at its last meeting how to handle such proposals in the IODP, based on one example that has already made it through to OPCOM and now awaits scheduling. Miller called it vital that the TAP continue to function and report to the SPC. Quinn stressed the importance of using this expertise earlier in the process. Byrne noted that the SSEPs occasionally recommend proposals for TAP input. Rack suggested that the TAP should work to foresee problems with proposals before the program begins any detailed operational planning. Allan saw a wealth of opportunity for the TAP to serve as a resource, including for the IOs, as long as the lines of responsibility remained clear. Moran referred to the intentional structuring of the TAP to not have responsibility for giving technical guidance and advice to the IOs, but she favored the role of occasionally giving short-term guidance on specific proposals. Pisias did not regard that as a good enough reason for eliminating the reference to long-term planning from the TAP mandate. Skinner characterized the TAP and the ILP as the biggest source of readily available technical and industry advice for the program, and he would not want to lose it.

6.1.6. ILP

ILP Co-chair Harry Doust relayed the concerns of his panel about the uncertainty of their role in the SAS and what the IODP expects or hopes to gain from industry. He explained how the ILP sees its own role as part of the SAS and noted that some members worried that the program now has second thoughts about the initial vision of interacting with industry. Doust also noted the uncertainty about the status of the current Japanese membership of the panel, and he added that the panel continued having difficulty scheduling a meeting that the majority of its members could attend. Doust presented a notional plan of ILP activities for the next five years. He reported that the panel so far had worked on the project management system and on defining industry priority research, and they had begun working on building links between the program and industry and had initiated discussions with industry management on cooperating for mutual benefit. He expected to ask industry management for more specific support once the panel sees its role clarified. Doust described the planned seismic and borehole meta-database, similar to the existing EUROSEISMIC meta-database and to systems used in major companies, and he identified certain issues related to funding, functionality, and proprietary data. He detailed the objectives and assumptions of the concept and suggested that it could involve handling by a subcontractor. Doust proposed a general process for facilitating the development of joint industry-academic proposals. He identified several areas of shared initiatives between the IODP and industry. Doust stated that the ILP looked forward to early clarification of its function and position within the program. He announced the next ILP meeting tentatively scheduled for late February 2005 in Shanghai, China.

Duncan asked how the SSEPs and the SSP received input and cooperation from the ILP on evaluating proposals and helping obtain data or advice. Doust answered that the SSEPs have informed proponents of proposals with industry interest and the panel had received a good response from proponents. Bekins appreciated that the ILP had identified proposals of industry interest and hoped that proponents learned of that interest. Doust confirmed that feedback to proponents would go through the SSEPs. Quinn reiterated the importance of taking advantage of the expertise and interest of ILP members. Liu also stressed the

importance of industry involvement in the IODP. He noted that Chinese oil companies now used ODP data from the South China Sea, and IODP-China seeks strong collaboration with Chinese industry. Tokuyama indicated that the ILP members from Japan remain interested in participating, but their companies have shown reluctance to cooperate. He assured the committee that J-DESC would continue its effort to improve the situation, though personally he would prefer reducing the number of ILP members from Japan.

Talwani stated that the IODP-MI did not intend to interfere with any SAS panels. He told of an encounter with a management representative who expressed great interest in the program and proposed having a meeting of senior-level managers to explore ideas further, and many drilling industry contractors also expressed interest in collaborating. Talwani did not realize that this might conflict with the ILP efforts, but he perceived it as happening at two totally different levels. Kenter recognized the challenge of establishing a relationship with industry and preferred coordinating the efforts through a single channel. Kato recalled the very favorable view of the concept of having an ILP during the interim period, though with much discussion of its exact role and responsibilities. Miller saw great value in collaborating with industry, particularly in getting data, but he thought the program might find other ways of doing it instead of having a standing panel meeting twice per year with balanced membership and reporting to the SPC.

6.2. SAS Review

6.2.1. Membership disciplinary, experience, and gender balance

Coffin diagrammed the expertise and gender balances of the SAS panels and committees, as prepared by the IODP-MI Sapporo office. He noted that the SPPOC had requested him to report on these matters at the next SPPOC meeting.

Ildefonse stated that the program member organizations should work to maintain an appropriate expertise balance on SAS panels and committees, and they should also consider gender balance. Filippelli wanted to do more than leave responsibility for the gender balance issue to the program member organizations. He suggested that it might help them to have a recommendation from the SPC or the SPPOC. Miller saw a need to address the problem at different levels across all aspects of the program, but he thought it might not help so much to improve the balance in the SAS. Schuffert commented that the community of lead proponents on active proposals has essentially the same gender balance as the SAS. The committee later agreed on the following statement without further comment.

SPC Consensus 0410-30: The SPC notes that the gender balance of the SAS membership closely approximates the gender balance of lead proponents on current drilling proposals, whereas a larger proportion of women participated as shipboard scientists in the later years of the ODP. The SPC encourages the IODP national and consortia offices to work to increase the number of female scientists participating in the SAS and submitting IODP proposals.

6.2.2. SPC working group final report

Benoit Ildefonse presented a near final report from the SPC working group for reviewing the SAS. He identified the sources of input considered by the working group and summarized that panel members understand the individual panel mandates, but they lack understanding of the overall structure and the role of certain panels, such as the TAP, and they perceive some overlap between the ILP and the IODP-MI and between the SSEPs and the SSP. Ildefonse recommended improving the visibility of the SAS, for example through better linking of Web sites. He presented draft definitions of the terms liaison, guest, and observer. Ildefonse asserted that the system of panel leadership works well, but he recommended splitting in smaller groups when feasible and improving communication among the panels. He also

questioned the role of the SPPOC and stressed the importance of clarifying its relationship to the SAS and to program management. Ildefonse wondered whether exchanging liaisons sufficed as a means for integrating with other international programs. He recommended reviewing the need for such exchanges and suggested the possibilities of conducting joint workshops and preparing thematic syntheses. Ildefonse listed several items to consider, including how to handle science planning, outreach, and assessment; the SPPOC role in science advice and management; whether to terminate or modify the TAP and the ILP or leave them unchanged; maintaining appropriate expertise on the panels and committees; and enhancing communication among SAS panels and committees, as well as with the program member organizations, other programs, and the public.

Pisias stated that the SPPOC would examine the SAS in terms of long-range planning and decide how the SAS should undertake the necessary task of assessing the achievements of the program. He also recommended considering how to address the lack of science proposals for certain elements of the Initial Science Plan. Ildefonse thought that PPGs served that purpose. Coffin noted that the committee would address the issues of long-term planning and proposal pressure later in the meeting (see Agendum 12). Talwani remarked that he and Coffin sent a letter to the SPPOC concerning the role of the SPPOC and how it relates to the SPC and the IODP-MI, and he suggested that the committee could consider the letter if desired.

Quinn wanted to make more effective use of the valuable human resources on the TAP and the ILP instead of changing or eliminating the panels. Byrne also expressed concern about eliminating those panels. Kenter wondered how many respondents in the survey actually called for changing the TAP and the ILP. Kato suggested discussing the issue again after hearing the TAP and ILP reports. Coffin agreed to defer further discussion of the SAS review until after hearing the TAP and ILP reports.

The committee returned to the SAS working group report on Wednesday. Ildefonse presented a revised diagram of the SAS showing the SPPOC aligned clearly as part of the SAS. He reviewed several recommendations on the role of the SPPOC as an executive authority, on program outreach and assessment, and on multi-platform and science planning. He also indicated that the TAP and the ILP should remain in the SAS and receive more direction from the SPC. Ildefonse recommended prompt delivery of minutes and reports, having science coordinators attend all SAS meetings, and closer collaboration among the SSEPs, SSP, SciMP, and EPSP on evaluating proposals. He also recommended integrating with other international programs and projects through liaisons, workshops, and mutual reports and coordinating communications with program member organizations, the public, and the scientific community. Ildefonse recommended allowing panels to select whatever system they prefer regarding chairs, co-chairs, and vice-chairs. Ildefonse recommended following Robert' Rules of Order and working in small groups whenever possible to help overcome cultural and language challenges, as well as coordinating with the program member organizations to ensure maintaining the appropriate expertise on SAS panels and committees. Ildefonse concluded with revised definitions of the terms liaison, guest, and observer.

Coffin wondered if the program could interact only with other international programs or if it could consider interacting with other national programs of interest. Miller favored having the flexibility to work with national programs, though it would definitely need SPPOC approval.

Doust thought that at least one science coordinator already attended all SAS meetings. Larsen confirmed that intention, though they had missed a couple of meetings recently because of a very busy schedule, plus he had received some questioning of the purpose and necessity. Coffin recognized the value of science coordinators for providing information on the SAS and

program activities, and he stated that they probably understand the system better than anyone else.

Coffin favored the chair and vice-chair arrangement because it makes it clear who has responsibility for communicating. Byrne responded that the SSEPs still preferred having co-chairs and took steps to name a replacement co-chair six months in advance. Tokuyama asked about the term of panel chairs. Coffin explained that panel chairs generally serve two years, except for the EPSP, and panel or committee members generally serve three years, except for only two years on the SPPOC.

Coffin asked if the proposed definition of observer accorded with the concepts embodied in the program memoranda. Allan said no it did not, because observers could attend any meeting without an invitation. Pisias suggested keeping it simple and only defining liaisons and observers. Evans asked where the IOs fit into these definitions. Allan agreed that the definition of liaison needed expanding.

Byrne proposed defining the TAP role of nurturing and evaluating engineering proposals. Larsen believed that the TAP had many experienced members who would gladly undertake that role, but it would require revising the TAP mandate. Coffin remarked that all of these recommendations, if accepted by the SPPOC, would entail modifying the SAS terms of reference. Larsen still wondered what specific things the working group found wrong with the SAS and how the reported recommendations would improve matters. Duncan responded that the report addresses the weaknesses concerning the uncertainty of the SPPOC role and improving communication among panels. Tamaki explained that the SPPOC would decide on the final SAS structure based on input from the SPC and other sources. He invited the SPC working group members to attend the SPPOC *ad hoc* committee meeting in December 2004.

SPC Consensus 0410-31: The SPC accepts the draft final report of its own SAS Review working group (Duncan, Ildefonse, Tatsumi) and, pending minor modifications, forwards it to the SPPOC *ad hoc* committee reviewing the SAS (McKenzie, chair; Delaney; Tsujii; Coffin). The SPC appreciates and commends the efforts of Duncan, Ildefonse, and Tatsumi.

Tuesday 26 October 2004 08:30-17:30

7. Review of 651-APL Irminger Basin Microbiology

The committee agreed not to discuss Proposal 651-APL Irminger Basin Microbiology because it did not appear on any of the scheduling scenarios developed by OPCOM.

8. FY2005/06 expedition schedule I

8.1. Discussion of MSP scheduling scenarios

Kenter left the room as a conflicted proponent of Proposal 650-APL. Teagle stepped in as a voting alternate for Kenter. Coffin explained the procedure of first considering the MSP scheduling for FY2005. He noted that the ESO had already begun implementing Proposal 519-Full2 South Pacific Sea Level, though the SPC had not yet formally recommended it to the SPPOC, and he opened the floor to discuss whether to approve the Tahiti component of that proposal as the MSP expedition for FY2005.

Evans stated that the ESO would meet next week with the proponents to determine the necessary amount of ship time. Coffin asked if the ESO would know the full budget before the December 2004 SPPOC meeting. Evans said no, by that time they would have available only a provisional budget approved by the ECORD Council. Coffin supposed that the final budget would then require a second amendment to the FY2005 program plan. Janecek clarified that the forthcoming amendment would concern only extending non-riser operations

because the original FY2005 program plan already included the Tahiti expedition, except for the ancillary project described in Proposal 650-APL. Coffin noted that SPC still needed to approve the expedition.

SPC Consensus 0410-32: The SPC reaffirms SPC Consensus 0403-13, including scheduling of the Tahiti component of Proposal 519-Full2 South Pacific Sea Level in FY2005, as approved by SPPOC Motion 0407-4.

Coffin reviewed SPC Consensus 0406-9 on Proposal 650-APL and updated the status of activities for gaining the necessary outside funding. Quinn asked if the SPC could approve the APL pending success of the outside funding effort. Skinner noted that the proposed project involved some environmental concerns about cementing casing in the reef. Becker suggested that without any new information the committee could not say anything beyond the earlier consensus. Miller cited the difficulty of making a cost-benefit analysis without more information. Evans confirmed that it would certainly involve some added cost, for example for the proposed three extra days of ship time. Coffin noted that the proponents did not expect a decision on the outside funding until January 2005. He asked Becker and Miller to draft a consensus statement. The committee later agreed on the following statement.

SPC Consensus 0410-33: The SPC reaffirms SPC Consensus 0406-9. The committee applauds the initiative represented by Proposal 650-APL and in particular the potential for a productive interaction among the proponents, the scientific party of the Tahiti component of Proposal 519-Full2 (the FY2005 MSP project), and industry. However, the committee cannot yet fully assess the operational, environmental, and fiscal impacts of operations associated with the proposed imaging experiments, and in particular the need to install and remove PVC liners from a subset of the holes proposed for the TAH-02A transect. The SPC therefore requests that OPCOM consider Proposal 650-APL at its earliest convenience, with input from the proponents and the ECORD Science Operator as appropriate.

The discussion turned to MSP scheduling for FY2006. Miller left the room as a proponent of Proposal 564-Full New Jersey Shallow Shelf. Christie stepped in as an alternate for Miller. Coffin identified the Great Barrier Reef component of Proposal 519-Full2 and Proposal 564-Full as the only MSP projects residing with OPCOM. He suggested approving one of them provisionally for FY2006 pending budget advice from the EMA. Coffin opened the floor for comments.

Duncan wondered if anything had mitigated the concerns about obtaining an environmental permit for drilling on the Great Barrier Reef. Coffin replied that the lead proponent of the proposed site survey expected no problem getting a drilling permit. Skinner recalled that last time it took one and a half years to get a permit, though he mentioned a reassessment underway of the permitting guidelines for scientific research.

Filippelli inquired whether the discussion concerned only the relative costs of the two projects or the relative scientific merits. Coffin advised focusing on science, given the lack of cost estimates or budget guidance. Becker expressed uncertainty about the scientific importance of the Great Barrier Reef component. Quinn explained the importance of having two sites to get the best results. Bekins asked if it would make any difference to see the results from Tahiti before going to the Great Barrier Reef. Coffin explained that the SPC already agreed on the merits of conducting the two components separately.

Evans inquired if Proposal 581-Full2 could represent an MSP operation. Droxler left the room as the lead proponent of Proposal 581-Full2. Baldauf confirmed that a portion of that proposal would require an MSP, so it made sense to do the whole thing as an MSP project. Quinn

preferred focusing on the highest ranked proposals. Evans responded that Proposal 581-Full2 might represent the only feasible option in the event of a decrease in the available budget. Quinn regarded that as a decision belonging to OPCOM.

Coffin cited the specific request from the SPPOC for an FY2006 program plan, but since the SPPOC would not receive budget guidance until after its December meeting, he wondered if the SPC could wait until March 2005 to recommend a schedule. Pisias recognized the dilemma of trying to schedule on a yearly basis despite not having a contract on that schedule, and he advised the committee not to worry about budget issues and just determine the best operationally achievable science. Christie recommended extending the timeline of scheduling MSP projects rather than trying to do it only one year ahead. Coffin noted the progress toward the goal of providing OPCOM with more projects than they could schedule at any one time.

Coffin inquired if the committee wanted to review the FY2006 MSP schedule again after approving it now or else leave it in the hands of OPCOM and the SPPOC. Duncan suggested reviewing it again in case of any concerns about readiness. Filippelli asked if the previous proposal rankings remained valid. Becker proposed reaffirming the scientific importance of the two available projects residing in the top-ranked tier and letting OPCOM select one for scheduling. Mori agreed. Becker also asked if OPCOM would deliberate before the next SPC meeting provided that budget guidance comes in January. Janecek expected so and said that the SPC could consider the result in March 2005. He requested the SPC to forward several conceptual models of the science plan for the SPPOC to consider in December 2004. Becker noted that the SPC could see it again in March 2005 before the SPPOC approves the final FY2006 plan in June 2005. He again suggested reaffirming the previous ranking given that new members had joined the committee since then. Quinn agreed on reaffirming that the top-tier proposals reside with OPCOM for potential scheduling.

8.2. Presentation of OPCOM scheduling scenarios

Kenter, Miller, and Droxler returned to the room. Tom Janecek described the scheduling process, reiterated the guidance from the lead agencies, and outlined the process for approving the addendum to the FY2005 program plan. He also outlined the approval process for the FY2006 and FY2007 program plans, the various factors considered in scheduling, and the elements of the project assessments done by the JOI Alliance. Janecek summarized the rankings of the proposals forwarded from the SPC and noted those proposals subsequently modified or potentially reducible in scope. He discussed the limitations of certain proposals and advocated a need for reviewing proposals operationally before they go to the SPC. Janecek identified several assumptions on microbiological sampling and seafloor observatories for estimating time and cost. He cited the typical operational and environmental constraints as well as issues related to procurement and long lead-times, and he identified several proposals not ready for scheduling until FY2006 as a result of those constraints.

Janecek reviewed the total funding of \$16.5 million available for four months of additional operations in FY2005 and noted the likely need for modifying the proposed science goals to match the budget. He described the general OPCOM strategy and specified the operational requirements for individual proposals. Janecek stated that the SPC must approve a scenario for the remainder of FY2005 and select conceptual models for FY2006 in two phases, through January 2006 and after. He presented three scheduling options for FY2005, two with an estimated cost of about \$18.5 million and the third slightly cheaper but less diverse scientifically.

Exp.	Model 1	Model 2	Model 3
1	573-Full2 (573-PRL5)	477-Full4 (Pt. 1)	477-Full4 (Pt. 1)
2	589-Full3 (589-Add)	621-Full	477-Full4 (Pt. 2)
3	522-Full3		
Transit:	29 days	50 days	36 days

Janecek identified three proposals (522-Full3, 600-Full, and 621-Full) as options for the early phase of FY2006, depending partly on the model selected for FY2005. He also identified five proposals (477-Full4, 482-Full3, 545-Full2, 603A-Full2, and 603B-Full2) as options for the remainder of FY2006, depending again on the preceding choices.

Tamaki remarked that the SPPOC normally approves the entire program plan rather than just the science plan. Pisias noted that this plan would also involve spending funds in FY2005 for projects in FY2006. Kenter asked for examples of items requiring a long lead-time. Baldauf said primarily CORKs. He also clarified the changes made to certain proposals since the SPC ranking. Kenter asked about the limits of flexibility. Baldauf replied that little flexibility remained after the changes already proposed to reduce costs, but all of the scenarios still exceeded the estimated budget. Quinn noted that OPCOM faced very difficult decisions in determining these options. Miller wondered about the possibility of substituting for the first expedition in Model 1. Baldauf said it would prove difficult because the first expedition in Model 1 comprised only thirty days, with limits imposed by weather windows and transit times. Kato inquired about the scientific difference of the expeditions for Proposal 477-Full4 in Models 2 and 3. Baldauf explained that the single expedition in Model 2 would visit only the Bering Sea and the second expedition in Model 3 would provide an opportunity to visit the Sea of Okhotsk. Brumsack asked if Proposal 482-Full3 would require an ice-support vessel. Baldauf said no.

8.3. Discussion of non-riser scheduling scenarios

Becker, Bekins, Teagle, and Tokuyama, left the room as conflicted proponents. Christie stepped in as an alternate for Becker. Coffin opened the floor for discussion of the scheduling scenarios developed by OPCOM. Kawahata provided additional comments from the lead proponent of Proposal 477-Full4. Baldauf cited difficulties with the weather window and clarified that the proposed objectives required more than one expedition.

Liu presented a watchdog report on Proposal 589-Add. The committee debated whether the modified plan retained enough of the science that had originally earned the high ranking for Proposal 589-Full3. They determined that the reduced project would still provide constraints on the model, could potentially penetrate the slump, and should generate interest within industry. Coffin detected a sense of strong scientific support for conducting the project as revised in the addendum. He questioned whether that involved making a commitment to go back later and complete the project as originally proposed. Baldauf confirmed that the remaining objectives could constitute an MSP project. Coffin indicated that the committee should determine by the end of the meeting what to do with the leftover pieces of proposals.

Coffin turned the discussion to Proposal 621-Full. The committee inquired about the cost to the program of installing the CORKs and the expected condition of the boreholes at the end of the proposed expedition. Baldauf replied that the estimated budget did not provide for installing the CORK infrastructure. He added that the expedition would set the casing and reentry cones, and the ship would have to return later to install the CORKs. The committee preferred saving this project for another time and doing it right.

The committee wanted to propose a schedule with the best science possible and recommend a backup plan. They recognized that Model 1 would provide the most days for science operations and involve two high-ranked proposals, though at the cost of including a low-ranked proposal that perhaps might have ranked higher in its subsequently revised and reduced form. Coffin discerned a consensus for preferring Model 1 for FY2005, with Model 3 as a more economical backup. He identified the options for FY2006 of going either north or south, possibly depending on the availability of funding for a full FY2006 schedule. Coffin asked Duncan, Kenter, and Mori to draft a recommendation.

After recessing for lunch, Duncan presented a draft recommendation. Baldauf clarified from an implementation perspective that the revised plan for Proposal 573-Full2 should entail drilling only three sites at one mound and not four sites at two mounds. The committee considered again the readiness of Proposal 621-Full and determined that the schedule for the initial phase of FY2006 would ultimately depend on the model selected for FY2005, as well as the pending budget guidance for FY2006. The committee therefore decided to make separate recommendations for FY2005 and FY2006.

SPC Motion 0410-34: After considering the scientific priorities previously determined by the SPC and the potential drilling schedules for FY2005 as presented by OPCOM, the SPC recommends Model 1 (Proposal 573-Full2 Porcupine Basin Carbonate Mounds, as modified in 573-PRL5; Proposal 589-Full3 Gulf of Mexico Overpressures as modified in 589-Add; and Proposal 522-Full3 Superfast Spreading Crust) as the preferred option and Model 3 (Proposal 477-Full4 Okhotsk and Bering Seas Paleoceanography, Parts 1 and 2) as a backup plan.

Mori moved, Fryer seconded, 13 in favor, 2 abstained (Kato, Kitazato), 3 absent (Bekins, Teagle, Tokuyama), 1 non-voting (Liu).

SPC Motion 0410-35: The SPC recommends following Model 1 in the beginning of FY2006 with a transit to the Southern Ocean to complete Proposals 600-Full Canterbury Basin and 482-Full3 Wilkes Land Margin. If Model 3 is executed in FY2005, however, the committee recommends following it with Proposals 522-Full3 Superfast Spreading Crust and 621-Full Monterey Bay Observatory.

Mori moved, Filippelli seconded, 14 in favor, 1 abstained (Kato), 3 absent (Bekins, Teagle, Tokuyama), 1 non-voting (Liu).

The committee proceeded to discuss the second phase of FY2006 scheduling. They inquired about the high costs of Proposals 603A-Full2 and 603B-Full2 and the necessity of conducting those expeditions before the start of riser drilling in 2007. Baldauf replied that the CORKs added significantly to the costs, and the non-riser expeditions did not necessarily have to precede the associated riser drilling component of the project. The committee decided to include Proposal 553-Full2 among the options in the absence of budget guidance, and they debated scheduling the remaining science of Proposal 545-Full2 before the formal program review of Expedition 301. Kato reviewed a report from the proponents on Expedition 301 and the modified work plan for the second expedition. Baldauf noted that several of the proposals had to compete for the same weather window. The committee discussed the relative priorities of Proposals 477-Full4, 545-Full3, and 553-Full2, all residing in the highest priority Group I. They noted that the first two each ranked ahead of the third in direct competition; however, the proponents of Proposal 545-Full3 had indicated that from a scientific standpoint they could wait until the following year. Coffin sensed a consensus to identify Proposal 477-Full4 as the top priority and leave the other two as alternate possibilities, and he asked Duncan to draft a recommendation. The committee later approved the following consensus statement without further debate.

SPC Consensus 0410-36: The SPC recommends for the remainder of FY2006 following Proposal 482-Full3 Wilkes Land Margin with appropriate non-riser drilling components of Proposals 603A-Full2 NanTroSEIZE Reference Sites and 603B-Full2 NanTroSEIZE Mega-Splay Faults, then Proposal 477-Full4 Okhotsk and Bering Seas Paleoceanography, Part 1. The committee also recommends the remainder of Proposal 545-Full3 Juan de Fuca Flank Hydrogeology or Proposal 553-Full2 Cascadia Margin Hydrates as a backup for Proposal 477-Full4 Okhotsk and Bering Seas Paleoceanography, Part 1.

9. Proposal handling

Coffin identified several issues regarding proposal handling, such as determining how long an unscheduled proposal may reside with OPCOM without the SPC reviewing or ranking it again, and whether project scoping groups may examine CDP component proposals that have not gone forward to OPCOM. He proposed forming a working group at the March 2005 SPC meeting following input from the SSEPs and further data compilation by the IODP-MI. The committee offered no comment.

10. IODP policy development

10.1. Third-party tools

Coffin briefly noted that the SciMP had begun working on a set of IODP guidelines for developing third-party tools. Becker asked if the guidelines would include observatories. Coffin replied that they should since the SciMP mandate now includes observatories.

SPC Consensus 0410-37: The SPC requests that the SciMP and the TAP work with the IOs to develop a draft third-party tools policy for the IODP. The SciMP and the TAP should submit a joint report for the March 2005 SPC meeting, and the SPC and OPCOM intend to submit a final report for consideration by the SPPOC at its mid-2005 meeting.

10.2. PPGs and DPGs

Coffin presented the general terms of reference for interim program planning groups (iPPGs), though the interim SAS did not establish any such groups. Duncan asked if the SPC could establish a PPG for microbiology, for example, if the program did not receive enough proposals on that subject. Coffin said yes. Doust asked if such groups should have a scientific or technical focus. Coffin said that all those in the past focused on science. Bekins stated that the previous groups interpreted their mandates in different ways, and some focused on writing proposals whereas others focused on measurement strategies. Teagle suggested having geographic PPGs.

Coffin presented the general terms of reference for interim detailed planning groups (iDPGs) though again the interim SAS did not establish any such groups. He proposed forming an SPC working group to prepare new draft terms of reference for PPGs and DPGs by the March 2005 SPC meeting. He added that the committee could then consider forming PPGs and DPGs, after reviewing any recommendations from the SSEPs as well as the proposal pressure according to the themes and initiatives of the Initial Science Plan. Teagle suggested just having planning groups that could focus on anything, rather than distinguishing between two different types. Doust thought that DPGs sounded like scoping groups, especially if concerned with only one proposal. Coffin asked for volunteers for the working group. Bekins, Ildefonse, Kawahata, Nomura, and Quinn volunteered, and Bekins agreed to serve as chair. Tamaki asked if the SPC SAS working group could prepare something on PPGs and DPGs for the December SPPOC meeting. Coffin suggested that they could include the concept in their report but not the detailed terms of reference.

SPC Consensus 0410-38: The SPC forms a working group to develop draft terms of reference for program planning groups (PPGs) and detailed planning groups (DPGs). The working group members include Bekins (chair), Ildefonse, Kawahata, Nomura, and Quinn, and the group should deliver a draft final report at the March 2005 SPC meeting.

Wednesday 27 October 2004 08:30-17:30

- 11. FY2005/06 expedition schedule II
- 11.1. Select scenarios to prioritize/approve
- 11.2. Prioritize/approve scenarios
- 11.3. Presentation of results

The committee had no further matters to discuss concerning the scheduling scenarios after identifying and prioritizing the preferred scenarios the preceding day (see Agendum 8).

11.4. Nomination of co-chief scientists

Coffin opened the discussion on nominating co-chief scientists for the additional expeditions in FY2005. Proponents Bekins, Teagle, and Tokuyama left the room. The committee proceeded with nominating potential co-chief scientists for each of the non-riser drilling expeditions recommended for scheduling in FY2005 under the preferred and alternate models (see SPC Motion 0410-34 above). Coffin asked the committee to submit any additional nominations by early the next week to the IODP-MI science coordinators so they could solicit the curriculum vitae of the nominees from the national and consortium program secretariats. He explained that the committee would prioritize the list of nominees later by e-mail after receiving the curriculum vitae.

12. IODP long term planning

12.1. Platform proposal pressure

Coffin listed several ideas for increasing proposal pressure for underrepresented scientific themes and initiatives and drilling platforms, such as forming PPGs and DPGs, placing ads for proposal deadlines in *EOS* and elsewhere, and issuing requests for proposals for riser drilling or ocean-land drilling.

Larsen indicated that the program could certainly put ads in *EOS*. Ildefonse suggested posting a notice on the Web. Teagle saw a real need for simple expeditions in low latitudes. Becker expressed caution about issuing a request for proposals for specific themes because similar attempts in the previous program never resulted in any scheduled proposals. Christie suggested organizing international workshops on specific themes and initiatives.

12.2. Development of successor to IODP Initial Science Plan

Coffin cited the history of developing the Initial Science Plan. He suggested perhaps convening an international conference in 2006 to begin developing a successor plan.

Miller saw the value of a large conference for attracting younger scientists but suggested that small workshops might suffice for now. Allan wondered if the Initial Science Plan had already gone out of date. He expressed surprise at hearing talk about revising the science plan before completely launching the program, though he understood the need for publishing a new plan before 2013, when the current program funding expires. Coffin characterized the content of the Initial Science Plan as already five years old, and since it would take at least five years to produce a new plan, he did not regard it as too early to start in 2006. He did not propose doing anything now except start thinking about it.

13. Synthesis volumes

Duncan referred to the stalled effort in past programs to produce scientific synthesis volumes. He cited past examples funded through workshops and called for sustained SAS activity and

involvement. Duncan suggested starting with the IODP Initial Science Plan and recommended a workshop format with an identifiable look coordinated through the IODP-MI. He also suggested potential themes such as architecture of the ocean crust, hotspots, plumes and large igneous provinces, Neogene transects, subduction factory, sea-level change, logging and downhole measurements, and subseafloor microbiology.

Miller liked the idea but cited the difficulty of getting such volumes published. Fryer hoped that electronic publications would provide a better opportunity for incorporating synthesis volumes. Larsen assured the committee that the publications task force would consider this issue. Filippelli reported that USSAC planned to sponsor synthesis workshops. Ildefonse urged proper coordination among the SAS, the IODP-MI, and program member organizations. Duncan did not want to place all of the responsibility on the program member organizations. Bekins asked about the personal reward for the organizer of a synthesis workshop. Duncan said that it took six months of time to organize the meeting and publish the report, and he received a small amount of funding as well as energy and scientific ideas from the meeting. Kelemen expressed concern about mixing the two very different concepts of assessment and outreach, and he emphasized the need for outside assessment. Duncan still saw a place for self assessment.

14. ODP Leg 209 report

Peter Kelemen reported on the results of ODP Leg 209 to the central Mid Atlantic Ridge, where they drilled exposed peridotites on both sides of the ridge axis. He emphasized the different morphology of fast and slow spreading ridges. Kelemen explained that they investigated the style of melt and mantle transport to the seafloor. He said that they did not find any systematic changes along strike but found the peridotite sections intruded by 20-40% gabbroic rocks, mainly evolved gabbronorites not complementary in composition to MORB. They concluded that widespread local shear zones accommodated much of the deformation, and the thermal and mechanical boundary layer extends to about 20 km depth. Kelemen also noted that they tested the RAB-C bit for logging while coring and determined that it requires further testing.

Larsen suggested testing the idea at a slow-spreading ridge near a hotspot. Allan stated that shear waves could help to distinguish gabbro from serpentinized peridotite. Duncan asked if they recovered enough surface basalt samples to match with the gabbros.

15. International Continental Scientific Drilling Program (ICDP) report

Joern Lauterjung submitted an ICDP report for the SPC agenda book but could not attend the meeting. The committee regarded the report as read and offered no comments.

16. Other business

Hodaka Kawahata presented the following statement of appreciation.

SPC Consensus 0410-39: In the IODP Initial Science Plan, the deep biosphere is a fundamental focus of the IODP, in addition to more traditional geoscientific themes. Kenji Kato is a pure microbiologist, not a geoscientist. However, he has made invaluable contributions to the iPC, the SPC, and the IODP in general through his thoughtful comments and wise counsel. Today Kato-san graduates from the SPC, but we hope that he will promote microbiological work in the IODP and develop collaborations with geoscientists, and that he will return to another IODP committee in the future to establish the SPC (Success for Paradise Communities in the IODP).

Kato urged continuing promotion of IODP science to the microbiology and other scientific communities. He announced his plans to convene an international workshop at the August

2005 meeting of the International Symposium for Subsurface Microbiology in Jackson, Wyoming.

Patty Fryer presented the following statement of appreciation.

SPC Consensus 0410-40: With full appreciation of the difficulties inherent in arranging any meeting of this scope, the SPC expresses its sincerest gratitude to Bob Duncan, Dave Christie, and the ORST students (Chris Russo, Mark Nielsen, Heather Benway, and Jennifer Joseph, who gave so generously of their time) for their superb logistical arrangements and assistance, a great hotel and meeting facility, full internet connectivity, and for their remarkable hospitality, with what one SPC member noted was the "best-catered SPC meeting" he had ever attended. The field trip was particularly enjoyed, as was the Tuesday evening reception at the Hanson Country Inn (even, apparently, by the cats).

17. Future meetings

17.1. Liaisons to other panels and programs

The committee members volunteered to serve as liaisons to the various SAS panels as indicated below, with the understanding that geographic proximity should govern the choice of liaison for specific panel meetings.

SSEPs Becker, Coffin, Kawahata, Quinn

SSP Kenter, Miller, Mori

EPSP Becker, Coffin, Kenter

SciMP Duncan, Nomura

TAP Byrne, Ildefonse, Soh

ILP Bekins, Brumsack, Kitazato

17.2. 5th and 6th SPC meetings

17.2.1. 14-17 March 2005; Lisbon, Portugal

Coffin noted that Ildefonse would work with the local host in Lisbon for the next SPC meeting. Ildefonse identified Fernando Barriga of the University of Lisbon as the local host and said that they had not yet selected the exact venue for the meeting.

17.2.2. xx-xx August 2005? Japan?

Coffin explained that he preferred not to hold the meeting in August 2005 because of prior commitments. He instead proposed holding the sixth SPC meeting on 7-9 September 2005 in Japan. Becker said that the U.S. members would have to travel on Labor Day. Mori noted that those dates coincided with entrance exams at Japanese graduate schools. Coffin proposed the dates of 24-28 October. The committee agreed. Mori volunteered to host the meeting in Kyoto, Miller in New Jersey, and Quinn in St. Petersburg, Florida.

18. Review of motions and consensus items

Coffin promised to review the motions and consensus items immediately following the meeting and to circulate a draft executive summary as soon as possible.