

# **IODP Science Planning Committee**

**3<sup>rd</sup> Meeting, 14-17 June 2004**

**Yokohama Institute for Earth Sciences  
Japan Agency for Marine-Earth Science and Technology  
Yokohama, Japan**

## **Science Planning Committee - SPC**

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Jamie Austin	Institute for Geophysics, University of Texas at Austin, USA
Keir Becker (vice-chair)	Rosenstiel School of Marine & Atmospheric Science, University of Miami, USA
Hans Brumsack	Institut für Chemie und Biologie des Meeres (ICBM), Universität Oldenburg, Germany
Mike Coffin (chair)	Ocean Research Institute, University of Tokyo, Japan
Bob Duncan	College of Oceanic & Atmospheric Sciences, Oregon State University, USA
Gabriel Filippelli <sup>a</sup>	Department of Geology, Indiana University–Purdue University Indianapolis, USA
Andy Fisher*	Earth Sciences Department, University of California, Santa Cruz, USA
Benoît Ildefonse	Laboratoire de Tectonophysique, ISTEEM, Université Montpellier II, France
Hisao Ito	Geological Survey of Japan
Kenji Kato	Institute of Geosciences, Shizuoka University, Japan
Hodaka Kawahata	Geological Survey of Japan
Jeroen Kenter	Faculty of Earth and Life Sciences, Vrije Universiteit, The Netherlands
Hiroshi Kitazato <sup>b</sup>	Institute for Frontier Research on Earth Evolution (IFREE), JAMSTEC, Japan
Chris MacLeod	Department of Earth Sciences, Cardiff University, United Kingdom
Ken Miller	Department of Geological Sciences, Rutgers University, USA
Ted Moore	Department of Geological Sciences, University of Michigan, USA
James Mori	Disaster Prevention Research Institute, Kyoto University, Japan
Terry Quinn	College of Marine Science, University of South Florida, USA
Yoshiki Saito <sup>c</sup>	Geological Survey of Japan
Wonn Soh	Deep Sea Research Department, JAMSTEC, Japan
Yoshiyuki Tatsumi	Institute for Frontier Research on Earth Evolution (IFREE), JAMSTEC, Japan
Zuyi Zhou	Department of Marine Geology and Geophysics, Tongji University, China

<sup>a</sup>Alternate for Andy Fisher.

<sup>b</sup>Alternate for Kenji Kato on last day.

<sup>c</sup>Alternate for Wonn Soh during proposal ranking exercise.

\*Unable to attend.

## **Liaisons**

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Jamie Allan	National Science Foundation (NSF), USA
Shoji Arai (ISSEP)	Department of Earth Sciences, Kanazawa University, Japan
Tim Byrne (ISSEP)	Department of Geology and Geophysics, University of Connecticut, USA
Gilbert Camoin (ESSEP)	CEREGE-CNRS, France
Nobuhisa Eguchi	IODP Management International, Inc., Sapporo Office, Japan
Dan Evans	ECORD Science Operator (ESO), British Geological Survey, United Kingdom
Barry Katz (PPSP)	Energy Technology Company, ChevronTexaco, USA
Yoshihisa Kawamura	Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Hans Christian Larsen	IODP Management International, Inc., Sapporo Office, Japan
Yoshihiro Masuda (TAP)	Department of Geosystem Engineering, University of Tokyo, Japan
Catherine Mevel	ECORD Management Agency (EMA), Institut de Physique du Globe de Paris, France
Makoto Okada (SciMP)	Department of Environmental Sciences, Ibaraki University, Japan
Kyoko Okino (SSP)	Ocean Research Institute, University of Tokyo, Japan
Frank Rack	JOI Alliance, Joint Oceanographic Institutions, Inc. (JOI), USA
Jeff Schuffert	IODP Management International, Inc., Sapporo Office, Japan
Yasuhisa Tanaka	Ministry of Education, Culture, Sports, Science, and Technology (MEXT), Japan

## **Guests**

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Seiko Asaka	Ocean Research Institute, University of Tokyo, Japan
Jack Baldauf	JOI Alliance, Texas A&M University, USA

Rodey Batiza	National Science Foundation (NSF), USA
David Cyranoski	Nature Japan K.K., Japan
Eiichi Kikawa	OD21 Program Department, JAMSTEC, Japan
Kenji Kimura	Ministry of Education, Culture, Sports, Science, and Technology (MEXT), Japan
Hajimu Kinoshita	Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan
Tsuyoshi Kogo	Ministry of Education, Culture, Sports, Science, and Technology (MEXT), Japan
Shin'ichi Kuramoto	Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Tadao Matsuzaki	OD21 Program Department, JAMSTEC, Japan
Toru Nishikawa	Advanced Earth Science and Technology Organization (AESTO), Japan
Kiyoshi Otsuka	Advanced Earth Science and Technology Organization (AESTO), Japan
Yoichiro Otsuka	IODP Management International, Inc., Washington, D.C. Office, USA
Takehiro Sasayama	OD21 Program Department, JAMSTEC, Japan
Jean Claude Sibuet (Leg 210)	IFREMER, France
Kiyoshi Suyehiro	Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan
Uko Suzuki	Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Asahiko Taira	Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Ken Takai	Frontier Research System for Extremophiles, JAMSTEC, Japan
Takeo Tanaka	Advanced Earth Science and Technology Organization (AESTO), Japan



# IODP Science Planning Committee

3<sup>rd</sup> Meeting, 14-17 June 2004

Yokohama Institute for Earth Sciences  
Japan Agency for Marine-Earth Science and Technology  
Yokohama, Japan

## EXECUTIVE SUMMARY

### 1.4. Approve last SPC meeting minutes

**SPC Consensus 0406-1:** The SPC approves the minutes of its second meeting on 23-26 March 2004 in Washington, D.C., USA.

### 1.5. Approve SPC meeting agenda

**SPC Consensus 0406-2:** The SPC approves the revised agenda for its third meeting on 14-17 June 2004 in Yokohama, Japan.

#### 1.6.1. Review draft SPC terms of reference

**SPC Motion 0406-3:** The SPC recommends revising three clauses of its terms of reference as follows:

1.2 Mandate. The SPC encourages the international community to develop and submit drilling proposals for the IODP. The SPC can initiate and terminate temporary SAS groups as needed. The SPC ~~recommends~~ reviews SAS membership ~~to the SPPOC, particularly~~ with respect to disciplinary balance. The SPC recommends SAS meeting frequency...

1.5 Membership. The SPC will consist of seven members from Japan, seven members from the U.S., ~~and~~ four members (three voting and one non-voting) from the ECORD, and one member (non-voting) from China. All appointees to the SPC shall satisfy the fundamental criteria of having the ability and commitment to provide mature and expert scientific direction to IODP planning. Each member should have a designated alternate to serve in his or her absence. The term of membership will be three years and at least one third of the members shall rotate off the committee annually, so that the SPC membership is replaced every three years. Re-appointment shall be made only in exceptional circumstances. ~~Any changes in the SPC member representation (i.e., naming of alternates for members for meetings without prior approval of the alternates by the SPPOC) must be reviewed by the SPPOC for approval.~~ The fields of specialization on the SPC shall be kept balanced as far as possible by requests to national and consortia program committees. If an SPC member misses two meetings in succession, the SPC chair or vice-chair will discuss the problem of SAS representation with the appropriate ~~country~~ national or consortia representative(s) on the SPPOC.

1.6 Liaison. The Vice-President of Science Planning at the IODP-MI, the directors of the implementing organizations, or nominees thereof, and representatives of the lead agencies are permanent, non-voting liaisons. The SPC chair is the liaison to the SPPOC, and the SPC assigns other liaisons to the SSEPs, ~~PPSP~~ EPSP, and other SAS panels and groups.

*Moore moved, Miller seconded; 16 in favor, 1 absent (Kato)*

## **2.4. Schedule for scoping groups, task forces, and RFP's**

**SPC Consensus 0406-4:** The SPC recognizes that because of fiscal constraints, a request for proposals (RFP) for publications cannot be issued in time to provide publication support of the first IODP expeditions. In view of SPC Consensus 04-03-18, the committee reaffirms that “Each implementing organization be responsible for providing scientific content for its platforms, but that one contractual organization be a central point for technical editing, layout, and production, thus ensuring uniformity of style.” The committee recognizes that the current situation is unusual and encourages the IODP-MI: 1) to have the implementing organizations of expeditions not covered under the RFP prepare the content of the expedition reports, and 2) to contract with one organization for technical editing, layout, and production of the reports. The committee also encourages the IODP-MI to issue an RFP for publications as soon as possible and to inform the SPC of any changes in publication strategy.

### **4.1. IODP SAS review**

**SPC Consensus 0406-5:** The SPC receives the mid-term report from its own SAS Review working group (Duncan, Ildefonse, Tatsumi), commends the efforts of the group to date, and looks forward to receiving a final report at the October 2004 SPC meeting.

### **4.2 IODP SAS Terms of Reference**

**SPC Consensus 0406-6:** The SPC receives the revised terms of reference for the SAS panels from its own SAS Terms of Reference working group (Kenter, Mori, Prell), requests minor modifications, and forwards the revised terms of reference with modifications to the SPPOC for consideration.

### **4.3. Travel and CO<sub>2</sub> emissions**

**SPC Consensus 0406-7:** The SPC endorses the voluntary efforts of the IODP community to offset CO<sub>2</sub> emissions related to participating in SAS activities.

## **5. Clarify status of Proposal 545-Full3 – second expedition**

**SPC Consensus 0406-8:** The SPC recognizes that the Juan de Fuca Hydrogeology expedition (301) represents the first phase of a multi-phase effort involving installation of a CORK array across several sediment-covered ridges. To assess properly the appropriateness of proceeding to the next phase and the utility of this array, the SPC and OPCOM must receive a prompt report on the aforementioned expedition from the co-chief scientists and the JOI Alliance, detailing the scientific and operational progress towards the stated objectives of Proposal 545-Full3. OPCOM should consider that report at its next meeting (fall 2004) and forward its recommendation to the SPC in time to evaluate the next phase of Juan de Fuca Hydrogeology studies for inclusion in the prioritized SPC groupings for FY2005 and FY2006 program planning, as developed at this SPC meeting. The committee anticipates augmenting those groupings without re-ranking at the October 2004 SPC meeting.

## 6. Review of Proposal 650-APL

**SPC Consensus 0406-9:** The SPC 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 expected 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 September 2004 meeting, with input from the proponents and the ECORD Science Operator as appropriate, and provide a report and a recommendation at the October 2004 SPC meeting.

## 7. SSEPs report

**SPC Consensus 0406-10:** The SPC accepts SSEP Recommendations 0405-01 on guidelines for submitting addenda versus revised proposals and 0405-03 on reviewing ancillary project letters (APLs) and forwards them to IODP-MI for implementation.

**SPC Consensus 0406-11:** The SPC receives SSEP Recommendations 0405-02 on guidelines for submitting preliminary and full proposals, 0405-04 on prioritizing proposals, and 0405-05 on the terms of SSEP co-chairs. The committee requests the SSEPs to reconsider issues associated with Recommendation 0405-02.

**SPC Motion 0406-12:** The SPC appoints Michael Underwood as a new co-chair of the Science Steering and Evaluation Panels (SSEPs), effective following the November 2004 SSEPs meeting.

*Moore moved, Austin seconded; 13 in favor, 4 absent (Becker, Duncan, Soh, Quinn)*

### 9.1. Select proposal pool to rank

**SPC Consensus 0406-13:** In view of recent ICDP drilling of the Chicxulub impact structure and planned geophysical work, the SPC decides to exclude Proposal 548-Full2 from the current pool of proposals for global scientific ranking. The committee suggests that the proponents organize a joint IODP/ICDP workshop to discuss major scientific questions related to the Chicxulub impact structure, once new seismic data from onshore and offshore become available. The major goal of such a workshop should be to specify the drilling targets evolving from the latest cratering models and recent ICDP drilling, and to locate the best sites required to test the hypotheses and fulfill the scientific objectives of Proposal 548-Full2.

**SPC Consensus 0406-14:** The SPC recognizes the importance of installing borehole observatories within the Monterey Accelerated Research System (MARS) facility as described in Proposal 621-Full Monterey Bay Observatory. The strength of this proposal lies in the engineering investment for developing future borehole observatories and for integrating such observatories into cabled seafloor observatories. In that context, the committee deems it inappropriate to evaluate this proposal using the same scientific criteria as for other proposals and therefore decides not to include it in the current pool of proposals for global scientific ranking. Instead the SPC forwards Proposal 621-Full directly to OPCOM for possible scheduling of the engineering effort in FY2005 or FY2006. The committee requests that OPCOM provide a report and recommendation at the October 2004 SPC meeting. At that meeting, the SPC anticipates augmenting the June 2004 groupings of scientific proposals, without re-ranking, including consideration of Proposal 621-Full. The SPC also requests the SciMP and the TAP to work with MBARI and other proponents in developing a draft plan for managing the MARS-IODP borehole test facility. The SciMP and the TAP should submit a joint report for the October 2004 SPC meeting, and the SPC and OPCOM will submit a final report for the December 2004 SPPOC meeting.

#### **9.4. Select group of proposals to forward to OPCOM**

**SPC Consensus 0406-15:** The SPC forwards the top fourteen of fifteen ranked proposals to OPCOM in three groups as follows. The committee requests that OPCOM propose scheduling options for FY2005 and FY2006 that honor and adhere to these ranking groups as closely as possible.

Group I includes the top seven proposals. This group equates in priority to the Group I proposals previously forwarded to OPCOM and currently awaiting scheduling (519-Full2 South Pacific Sea Level, 545-Full3 Juan de Fuca Flank Hydrogeology, 564-Full New Jersey Shelf, and 589-Full3 Gulf of Mexico Overpressures). The committee recommends scheduling the Group I proposals if at all possible within operational constraints.

Group II includes the next three proposals (#8-10). The committee recommends considering these proposals as alternatives only if the Group I proposals cannot fill the schedule.

Group III includes the lower four proposals (#11-14). The committee recommends considering these proposals as alternatives only if those in Groups I and II cannot fill the schedule. Although scheduling should and will be guided primarily by the results of the global scientific ranking, the SPC recommends limiting the drilling options of Proposal 581-Full2 Late Pleistocene Coralgall Banks to several sites around one of the drowned reefs at Southern Bank, while nonetheless addressing as many of the proposed scientific objectives as possible. Likewise, the committee recommends limiting the drilling options of Proposal 573-Full2 Porcupine Basin Carbonate Mounds to several sites around one mound.

**SPC Consensus 0406-16:** The SPC recognizes the scientific potential of a complex drilling project (CDP) in the Middle America Trench off Costa Rica. However, Proposals 537-CDP4 and 537A-Full3 entail certain scientific and balance issues that need to be addressed before the first stage can be considered for drilling. Following the response of the proponents to the SPC reviews of these two proposals, the committee may consider establishing a detailed planning group (DPG) to work with the proponents on clarifying the scientific objectives of the CDP and the drilling strategy in the component proposals.

**SPC Consensus 0406-17:** The SPC supports efforts to understand the timing, rates, and impact of the uplift of the Himalayan-Tibetan Plateau as elucidated in Proposal 595-Full3 Indus Fan and Murray Ridge. The committee strongly endorses the proposed idea to test the feasibility of the project in two phases, beginning with shallow drilling at the Murray Ridge site (MU-1B). This will allow the proponents to explore how they might quantify some of the variables involved in reconstructing sediment volumes, noting that previous Indian Ocean drilling has not yet provided a robust erosion record even for the Neogene. For this reason, the committee requests that OPCOM form a project-scoping group to maximize site drilling objectives and develop a drilling plan at Murray Ridge that optimizes this potential.

**SPC Consensus 0406-18:** The SPC recommends that OPCOM explore possible scheduling options for FY2005 and FY2006 that would enable coring the two Irminger Basin (IRM) sites of Proposal 572-Full3 North Atlantic Late Neogene-Quaternary Climate without requiring a support vessel. Such possibilities might include rescheduling the second North Atlantic Paleoclimate expedition into the optimal weather window or incorporating the IRM sites into another expedition. If the IRM sites get scheduled, alternate sites should not be drilled on the North Atlantic Paleoclimate expeditions.

**SPC Consensus 0406-19:** In light of a lead agency report on new possibilities for potential non-riser operations in FY2005 and FY2006, the SPC requests that OPCOM reconsider its April 2004 decision to delay an independent evaluation of existing hazard survey data for Proposal 589-Full3 Gulf of Mexico Overpressures. Such an evaluation should be conducted as soon as possible to allow for potential scheduling of this highly ranked program in FY2005 or FY2006.

## 10. Reef Drilling Working Group

**SPC Consensus 0406-20:** The SPC receives the working group report (Quinn, Kato, Kenter, and Evans) on the environmental impact of coral reef drilling and forwards it to the Environmental Protection and Safety Panel (EPSP) for comment.

### Executive Session on SAS–IODP-MI interactions

**SPC Motion 0406-21:** The SPC enters into executive session to discuss interactions between the SAS and IODP-MI.

*Moore moved, Austin seconded; 17 in favor*

**SPC Consensus 0406-22:** The SPC recognizes its role in providing scientific advice to IODP-MI through the SPPOC as a fundamental part of its mandate to represent the scientific community supporting the IODP. The committee forwards a ranking of proposals to the OPCOM for development of scheduling options and must remain closely involved in subsequent decisions about the drilling schedule because evaluations of scheduling options involve scientific prioritization. The SPC welcomes iterative scheduling discussions with the OPCOM and reaffirms the SPC mandate to provide an advisory vote on the drilling schedule from options provided by the OPCOM and to forward this vote to IODP-MI through the SPPOC as part of annual program planning.

**SPC Motion 0406-23:** The SPC concludes its executive session on interactions between the SAS and IODP-MI.

*Moore moved, Tatsumi seconded; 16 in favor, 1 absent (Becker)*

## **12. IODP core distribution**

**SPC Consensus 0406-24:** The SPC recommends storing DSDP, ODP, and IODP cores in the Bremen, Gulf Coast, and Kochi core repositories based in principle on the geographic considerations presented by IODP-MI at this meeting. The SPC requests regular progress reports as IODP-MI works on the timing and fiscal details of this initiative.

## **14.2. Microbiology WG report**

**SPC Consensus 0406-25:** The SPC accepts the microbiology working group report and forwards it to IODP-MI and the implementing organizations.

## **14.3. Sample, Data, and Obligations Policy**

**SPC Consensus 0406-26:** The SPC accepts the revised IODP Sample, Data, and Obligations Policy and forwards it to the SPPOC for consideration.

## **16. Review of motions and consensus items**

**SPC Consensus 0406-27:** Few people have served the international scientific ocean drilling community for as long, as well, and in so many different and important ways as James A. Austin, Jr. This may be a totally inadequate way for us to thank Jamie for all that he has done for the ODP and the IODP, but let us at least acknowledge our great debt to him. Jamie has dedicated much of his career to scientific ocean drilling as a proponent and a participant of many drilling expeditions. He has been a valued colleague on many of the advisory committees (Atlantic Regional Panel, PCOM, ESSEP, SCICOM, SPC) that have evaluated and mentored the drilling proposals of other scientists. He has been a leader in planning the ODP and the IODP through his essential role in the organization of, and participation in, numerous workshops and discussion sessions (including the long term planning efforts undertaken at COSOD II, COMPOST, COMPOST II, CONCORD, and COMPLEX). Jamie was a key member of the two committees (IPSC and iPC) that laid the foundation for the new Integrated Ocean Drilling Program and helped write the IODP Initial Science Plan. He also has been willing to step forward into the administrative breach whenever a strong and knowledgeable hand was needed to guide the scientific ocean drilling programs. By serving as acting director of both the ODP and the IODP, he assured the smooth working of the former and the seamless transition into the latter. This prodigious effort over many years of service cannot be matched by anyone else in the community. We value him for his great wisdom, his broad experience, his leadership ability, his willingness to do the hard jobs, and his straightforward candor, energy, and enthusiasm about all issues important to the drilling programs. As Jamie completes his service on the SPC, we hope that this only marks the completion of one more of the many tasks that he has undertaken for the good of the scientific ocean drilling community and earnestly ask him to continue to lend his support to our efforts.

**SPC Consensus 0406-28:** Andy Fisher represents a prime example of the key contributions of scientific ocean drilling in educating marine geoscientists. As a graduate student, he participated on two early ODP legs; then he served as an ODP staff scientist and later earned a berth as ODP co-chief scientist on Leg 168. He was fully recognized as a world leader in subseafloor hydrogeology in co-leading that working group at the COMPLEX workshop, and he was then appointed to SCICOM, the iPC, and the SPC for 2001-2004. During that term he demonstrated a thorough, even-handed approach and was highly valued for his penetrating advice on all matters hydrological as well as common sense on other issues. It is entirely fitting that he was named co-chief scientist of the very first IODP expedition, which will push the limits of subseafloor hydrogeology in scientific ocean drilling. As Andy rotates off the SPC, we thank him for his service and wish him well. Eventually, we hope he will find time to recharge into the SAS, even while he continues to expand the realm of subseafloor hydrogeology.

**SPC Consensus 0406-29:** The SPC thanks Hisao Ito for his great contributions to the SPC as well as the iPC over the last three years as a seismic specialist. Ito-san is in some sense a typical Japanese gentleman; he is rather quiet and trustworthy, but hot-blooded. We definitely need such a member and hope to see him return to the SAS in the near future.

**SPC Consensus 0406-30:** This is the last SPC meeting for Ted Moore, one of the great champions of scientific ocean drilling. Ted led the IODP Planning Subcommittee (IPSC) in the Herculean task of developing the nuts and bolts of IODP from 1999 to 2001. Ted then co-chaired the interim Planning Committee from 2001 until 2003, and with his colleagues engineered the seamless transition from ODP to IODP. Now, in “retirement”, Ted prepares to cruise to the high Arctic as a member of the shipboard scientific party of the Arctic Coring Expedition. We remind Ted that though the Lomonosov Ridge may be far away, he can run but he cannot hide. The international scientific ocean drilling community will likely soon again need his unparalleled leadership and matchless integrity. Therefore, we say *arigato gozaimashita!* but not good-bye.

**SPC Consensus 0406-31:** The SPC expresses its deep appreciation to Yoshiyuki Tatsumi for his long-term dedication to the success of this committee, in particular for his energetic efforts since joining the iPC in 2001. We also acknowledge his strong contributions in initiating the IODP, including key roles in CONCORD, development of the IODP Initial Science Plan, *Earth, Oceans, and Life*, and founding and building JDESC. We fully anticipate that he will continue contributing to the success of scientific drilling in his new roles, including overseeing this committee, and we wish him the very best fortune in his future endeavors.

**SPC Consensus 0406-32:** The SPC thanks Yoshiyuki Tatsumi for his efforts in hosting this meeting and Toru Nishikawa and Seiko Asaka for their able hand in ensuring that everything went smoothly. Meeting participants truly appreciate the fine hospitality, delectable cuisine, and thirst-quenching refreshments featured at the convivial opening banquet in the Metasequoia Room, as well as the educational tour of the Earth Simulator.

# **IODP Science Planning Committee**

**3<sup>rd</sup> Meeting, 14-17 June 2004**

**Yokohama Institute for Earth Sciences  
Japan Agency for Marine-Earth Science and Technology  
Yokohama, Japan**

## **FINAL MINUTES**

**Monday**

**14 June 2004**

**09:00-17:30**

### **1. Introduction**

#### **1.1. Welcome and meeting logistics**

Mike Coffin opened the meeting at 09:00, and the participants introduced themselves. Hajimu Kinoshita welcomed everyone to Yokohama and to the JAMSTEC facilities. Yoshiyuki Tatsumi briefly explained the meeting logistics.

#### **1.2. Reports from MEXT and NSF**

Kenji Kimura reported that ECORD and China had joined the IODP as contributing and associate members, respectively. Jamie Allan announced the likely availability of four extra months of funds for operating the *JOIDES Resolution* in FY2005. He encouraged the SPC to rank enough proposals for one to two new expeditions in FY2005, preferably simple ones commensurate with anticipated additional SOCs, and as many as six new expeditions in FY2006. Allan stated that previous budget guidance to the IODP-MI remained valid for now, though the lead agencies could allocate additional SOC funds to the IODP-MI after considering an amendment to the program plan in December 2004 or January 2005.

Mevel asked if this news signaled a delay in refitting a non-riser vessel. Allan said no, as long as Congress approves the FY2005 budget, and it would allow greater flexibility by keeping the *JOIDES Resolution* on contract until FY2006. He also mentioned the possibility of conducting expeditions with the *JOIDES Resolution* in FY2006 while converting another ship. Becker asked if the SPC would conduct another ranking in October for FY2006. Coffin noted that the committee would not receive any new proposals by then. Austin asked when the lead agencies would give guidance on the FY2006 budget. Allan said not until January 2005. Austin suggested that the SPC would have to do the entire ranking now to produce the program plan by July for the SPPOC. Coffin responded that the SPPOC could approve the existing plan in July and an amended plan in December. Katz worried about how the EPSP could contribute reviews for additional scheduling for FY2005 and FY2006. Byrne wondered if the SPC could delay the ranking for FY2006 until March. Coffin said that it depended on the response from the SPPOC. He viewed the NSF report as good news overall because it could mean less of a hiatus in non-riser drilling.

#### **1.3. Reports from EMA and MOST**

Catherine Mevel expressed optimism that Canada would sign a memorandum to join ECORD this week. She expected Austria to join by early FY2005 or sooner but did not anticipate any other new members soon, though ECORD planned to approach the new EU countries. Mevel reported that the EC 7<sup>th</sup> Framework Program would put more emphasis on basic research and participation in international programs, thus potentially allowing for IODP funding. She mentioned that the UK IODP meeting last week associated with the official launch of the Arctic Coring Expedition had received good media coverage throughout Europe. Mevel

concluded by noting with much sadness the recent passing of Helmut Beiersdorf, a stalwart leader of scientific ocean drilling in Germany.

Soh asked if ECORD had considered approaching Australia and New Zealand. Mevel said no, they did not plan on expanding outside Europe, except for Canada, which had approached ECORD.

Zuyi Zhou reported that China will hold a symposium for IODP planning in Beijing in November 2004. The China-IODP science committee held its first meeting in February 2004 and discussed the Chinese IODP science plan, reports from working groups established to develop IODP proposals on paleoenvironments and on the tectonics of the South China Sea, coordination with other international programs, functions of the IODP-China office now established at Tongji University, and the theoretical institute on the deep biosphere and accompanying distinguished lecture series on geomicrobiology planned for June 2004 at Tongji University. Zhou explained that the Chinese IODP science plan, though not yet available in English, focuses on the three main themes of the deep biosphere and sub-seafloor ocean, paleoenvironments, and tectonics of West Pacific margins. He added that China has now identified most of its SAS panel members since officially joining the IODP in late April.

#### **1.4. Approve last SPC meeting minutes**

Coffin sought a consensus to approve the minutes from the previous meeting. The committee offered no comments.

**SPC Consensus 0406-1:** The SPC approves the minutes of its second meeting on 23-26 March 2004 in Washington, D.C., USA.

#### **1.5. Approve SPC meeting agenda**

Coffin asked for proposed changes or additions to the agenda. The committee offered no comments.

**SPC Consensus 0406-2:** The SPC approves the revised agenda for its third meeting on 14-17 June 2004 in Yokohama, Japan.

#### **1.6. SPC procedures and protocol**

##### **1.6.1. Review draft SPC terms of reference**

Coffin cited the history of developing the SPC terms of reference. He then reviewed the current wording of the individual sections and noted some of the most recent changes. The committee offered no comments on Sections 1.1 General Purpose, 1.3 Structure, 1.7 Vote and Quorum, and 1.8 Chair and Vice-Chair. Coffin proposed a minor change in Section 1.2 Mandate on reviewing SAS membership instead of recommending it to the SPPOC. Moore asked if that implied taking approval of SAS membership away from the SPPOC. Coffin said yes and noted that the executive authority never had such approval in the past. Austin recommended having panel member lists and CVs available for review. MacLeod suggested asking for *pro forma* one-page CVs. Miller preferred not to proscribe too much. Coffin noted in Section 1.4 Meetings the recommended schedule of two meetings per year, in March and August. Austin remarked that the schedule must mesh with the proposal deadlines and SSEPs meetings. Becker suggested removing the specific months from the terms of reference. Moore advised changing it only if necessary. Coffin proposed minor changes in Section 1.5 Membership to reflect the membership of China and to delete the statement on SPPOC approval of SPC alternates. He questioned why the SPPOC should approve SPC alternates when it does not approve regular SPC members. Coffin noted in Section 1.6 Liaison the necessity of changing the abbreviation PPSP to EPSP because of the recent change in the

name of the panel. The committee agreed to recommend amending Sections 1.2, 1.5, and 1.6 as proposed.

**SPC Motion 0406-3:** The SPC recommends revising three clauses of its terms of reference as follows:

1.2 Mandate. The SPC encourages the international community to develop and submit drilling proposals for the IODP. The SPC can initiate and terminate temporary SAS groups as needed. The SPC ~~recommends~~ reviews SAS membership ~~to the SPPOC, particularly~~ with respect to disciplinary balance. The SPC recommends SAS meeting frequency...

1.5 Membership. The SPC will consist of seven members from Japan, seven members from the U.S., ~~and~~ four members (three voting and one non-voting) from the ECORD, and one member (non-voting) from China. All appointees to the SPC shall satisfy the fundamental criteria of having the ability and commitment to provide mature and expert scientific direction to IODP planning. Each member should have a designated alternate to serve in his or her absence. The term of membership will be three years and at least one third of the members shall rotate off the committee annually, so that the SPC membership is replaced every three years. Re-appointment shall be made only in exceptional circumstances. ~~Any changes in the SPC member representation (i.e., naming of alternates for members for meetings without prior approval of the alternates by the SPPOC) must be reviewed by the SPPOC for approval.~~ The fields of specialization on the SPC shall be kept balanced as far as possible by requests to national and consortia program committees. If an SPC member misses two meetings in succession, the SPC chair or vice-chair will discuss the problem of SAS representation with the appropriate ~~country~~ national or consortia representative(s) on the SPPOC.

1.6 Liaison. The Vice-President of Science Planning at the IODP-MI, the directors of the implementing organizations, or nominees thereof, and representatives of the lead agencies are permanent, non-voting liaisons. The SPC chair is the liaison to the SPPOC, and the SPC assigns other liaisons to the SSEPs, ~~PPSP~~ EPSP, and other SAS panels and groups.

*Moore moved, Miller seconded; 16 in favor, 1 absent (Kato)*

Coffin highlighted the statement in Section 1.2 that the SPC approves by at least a two-thirds majority the annual drilling schedule as forwarded from OPCOM. He presented various excerpts from the SPPOC minutes confirming the intent for the SPC to approve the final schedule, and he wondered how this would work now that the SPPOC had transferred OPCOM from the SAS to the IODP-MI. Coffin also presented from the IODP-MI an optimum timeline for OPCOM activities and a structural diagram showing how the SPC would interact iteratively with OPCOM across the divide between the advisory structure and management, but he worried that neither the timeline nor the diagram indicated that the SPC would have approval of the schedule. Coffin identified two choices for the SPC of either approving the schedule forwarded from OPCOM or making iterative adjustments without voting to approve. He also emphasized that the science committee in the past often made significant changes to the schedule presented from OPCOM.

Becker preferred leaving the first option in the SPC mandate and wondered what the IODP-MI imagined would satisfy the SPC. Moore observed that the structural diagram did not show a connection between the SPC and the SPPOC. He suggested that since the OPCOM also reports to the SPPOC then the SPPOC must arbitrate if necessary. Miller expressed concern about having insufficient scientific oversight of the scheduling exercise. He noted that JOIDES had originally formed OPCOM as a subcommittee of SCICOM to take care of details

with the operators, but they still came back with more information to the whole committee for approval. Austin said that the IODP-MI plan assumed that the SPC members on OPCOM constituted an executive authority of the SPC. He therefore wanted to codify that the SPC members on OPCOM represented the whole committee. Moore objected that even the most knowledgeable scientists could not cover everything, so the schedule should come back to the whole committee. Quinn stressed the importance of counting votes for the sake of accountability. Coffin concluded that the committee did not have to do anything except leave in its mandate the statement on approving the schedule by a two-thirds vote, unless they preferred making an additional statement to impart the flavor of this discussion to the SPPOC. Ildefonse preferred issuing a loud and clear message to the SPPOC in addition to leaving the mandate unchanged.

Austin suggested waiting for the OPCOM report and approving the plan later. Becker clarified that the SPC had already approved the FY2004-2005 schedule at its previous meeting. Larsen added that no OPCOM report appeared on the agenda. Austin cited that as evidence of a communications problem and called for more open communication with OPCOM. He expressed disappointment, for example, at not seeing any material from the April OPCOM meeting in the SPC agenda book. Miller also regretted not having the OPCOM minutes or the OPCOM chair available at this meeting. Tanaka suggested disseminating the draft OPCOM minutes now. Rack indicated that the draft report might contain very preliminary budget estimates. Coffin explained that the OPCOM meeting participants had received the draft minutes but did not yet have permission to distribute them to others. Larsen later gave approval to distribute the draft OPCOM report at this meeting.

#### **1.6.2. Conflict-of-interest statements**

Coffin presented the current conflict of interest statement, as clarified by the SPPOC to exclude proponents from serving as watchdogs on other proposals. Austin asked about the status of institutional conflicts. Miller asked if it included site survey cruises as well. MacLeod wondered about scheduled site surveys. Coffin wanted to have all potential conflicts declared now, and then he would initially decide, subject to full SPC review, if any true conflicts existed. The committee members and other participants declared the following direct or potential conflicts of interest regarding the proposals on the agenda.

***Current proponent:*** Becker (545-Full3), Kenter (650-APL), Soh (603-CDP3, 603A-Full2), Camoin (650-APL), and Suyehiro (537A-Full3).

***Former proponent of an earlier version:*** Becker (553-Full2, 584-Full2, 603-CDP3) and Ito (603-CDP3, 603B-Full2).

***Collaborator on proposal, but not listed as proponent:*** Camoin (581-Full2)

***Nominee for co-chief scientist of related expedition:*** Quinn (650-APL)

***Colleague at same institution as proponents:*** Austin (537-CDP4, 600-Full, 603-CDP3), Coffin (477-Full4, 595-Full3, 603CDP, 603A-Full2, 603B-Full2), Duncan (547-Full4), Ildefonse (537A-Full3), Kenter (595-Full3), MacLeod (555-Full3, 557-Full2, 573-Full2, 584-Full2), Miller (584-Full2), Moore (522-Full3, 545-Full3, 584-Full2), Soh (537-CDP4, 537A-Full3, 584-Full2, 603B-Full2), Tatsumi (537-CDP4, 537A-Full3, 584-Full2, 603-CDP, 603A-Full2, 603B-Full2), and Suyehiro (537-CDP4, 584-Full2, 603-CDP, 603A-Full2, 603B-Full2)

***Colleague at same institution as site-survey planners:*** Austin (548-Full2)

***Proponent of a related, but rejected, site-survey proposal:*** Austin (595-Full3)

Coffin determined that all current proponents definitely had a direct conflict of interest. He decided not to regard institutional conflicts as grounds for excusal and said that he would consider all other potential conflicts on an individual basis. Coffin reiterated that conflicted committee members must leave the room during the entire discussion and global ranking of proposals. He also noted that the SPC must clarify for itself and OPCOM the status of the unscheduled portion of Proposal 545-Full3 (see Agendum 5).

### **1.6.3. Robert's Rules of Order**

Coffin briefly reviewed several points of order concerning the proceedings of the meeting.

## **2. IODP Management International, Inc. (IODP-MI) report**

### **2.1. Statement from the President**

Hans Christian Larsen distributed a letter to the SPC from the IODP-MI president and highlighted several of its points, particularly the need for a transition period to define the proper boundary between advice and management. He also noted that panel chairs would receive an honorarium from the IODP-MI.

Austin asked about defining the advisory and management roles. Moore reemphasized that the link between advice and management goes through the SPPOC because the SPC reports to the SPPOC, not to OPCOM or the IODP-MI. Larsen asked if any difference existed between the reporting and advisory pathways. Moore replied not really. Coffin clarified that some SPC advice goes directly to the IODP-MI and the implementing organizations. Miller proposed making a statement on reaffirming the SPC mandate to approve drilling schedules through reporting to the SPPOC. Coffin suggested letting the SPC working group refine such recommendations for later. Austin questioned the need of having both an SPC working group and a SPPOC *ad hoc* committee reviewing the SAS. Coffin explained that the SPPOC asked for input from the SPC, and he hoped the timing and coordination of the efforts would work. Mori preferred having a single group with appropriate representatives from each committee. Larsen said that the IODP-MI expects a single, unified report from the SPPOC.

### **2.2. Status of establishing IODP-MI offices**

Larsen listed the current personnel of the Washington, D.C. office and mentioned its upcoming move to a new permanent location in late September. He anticipated seeing the Web site online by the end of June, with a quick-start or mini-guide to the program posted there. Larsen listed the current personnel in the Sapporo office and noted three advertised positions for new staff, including a program data and publications manager, a data management specialist, and an associate science coordinator. He reported that many well-qualified candidates had applied, but budget realities might preclude hiring for FY2005. Larsen praised the surroundings and facilities of the new office located on the campus of Hokkaido University. He stated that the Sapporo office would continue operating its own Web site, but the URL would change in the near future. Larsen added that the 13- to 14-hour time difference between the two offices makes things difficult, but everyone would learn how to adjust.

### **2.3. Schedule for OPCOM**

Larsen described the goal of creating an OPCOM-SPC meeting schedule that would allow the IOs more lead-time for expedition planning. He indicated that the SPC would hold only two meetings per year, with ranking conducted at the spring meeting. He then outlined a proposed meeting schedule for a generic eighteen-month period.

Austin thought that the proposed schedule looked more formal and less flexible than the iterative procedure advocated by the president. He asserted that the SPC did not just want to

receive a drilling schedule from OPCOM and rubber-stamp it, but rather receive multiple schedules and choose one. Moore suggested that such a process could fit in the proposed schedule. Miller observed that the generic schedule showed the SPC just commenting on the proposed drilling schedule rather than advising, and he characterized that as a subtle but important distinction. Kenter thought it still amounted to providing advice, and he preferred having it recorded as such. Austin remarked that management can follow SAS advice or not at its own peril.

Coffin cited the difficulty of discussing important issues and making decisions by email. He stressed that the previous system had withstood the test of time and embodied efficiency with only two meetings per year of the science and operations committees together. Larsen understood and wondered again about the level of authority invested in the SPC members on OPCOM. Coffin believed that a few members alone simply could not provide a sufficient range of expertise. Becker described the role of the SPC members on OPCOM as ensuring that a good range of options would come forth. Austin thought that the SPC could still deliberate on the drilling schedules by email, provided they would have a report or minutes available from OPCOM meetings. Moore favored having a formal meeting where the entire committee could discuss the options and vote on a schedule. Miller said that the proposed meeting schedule would allow for group discussion and endorsement, supplemented by email information as available.

Becker asked if the responsibility for communicating back to the SPC belonged to the OPCOM chair or the SPC members reporting directly back to the committee. Moore suggested that the chair should always hold such responsibility. Coffin believed that the entire advisory structure and wider community retained a strong interest in getting informed about scheduling decisions. Larsen asked if it would suffice to post the information on the Web. Miller worried that making a draft report ready for the public would delay access to the committee. Coffin concluded that the SPC could advise OPCOM on the desired form and delivery of the report.

#### **2.4. Schedule for scoping groups, task forces, and RFPs**

Larsen reported on the status of several project-scoping groups. He noted that the Arctic scoping group had disbanded and the NanTroSEIZE scoping group would hold its first meeting in late June 2004, whereas the Tahiti project did not require a scoping group at the moment because the operator could handle matters for now, and establishment of the Indus Fan and CRISP scoping groups would wait until after OPCOM had developed general protocols for such groups. Larsen identified the current membership of the NanTroSEIZE Scoping Group as including representatives from the proponents, the SPC, the SSEPs, the TAP, CDEX, and the IODP-MI.

Duncan asked about the assessment phase of scoping and how that would occur after disbanding the initial scoping group. Larsen recognized the importance of the assessment phase and said that the scoping group membership could evolve over time, but he viewed it as a forward-looking group initially rather than a review group. He also would hesitate to have the same group doing planning and assessment. Katz said that the EPSP has a review group independent from the initial planning group. Becker remarked that CDPs would require evaluation during the project as part of the project management system. Coffin noted that the IODP-MI had not had enough time yet to digest the discussion and recommendations included in the project management system report. Austin suggested that the IODP-MI should

return with a discussion of the project management system and what parts they wanted to incorporate.

Ildefonse wondered who would do the assessment of ACEX, since it would happen soon. Larsen replied that it depended on whether the assessment happened immediately or not until after knowing the results. Austin asserted that ACEX must have an operational assessment to determine the cost effectiveness such an expensive project before doing it again. Coffin added that the operational assessment should occur as soon as possible while the events stayed fresh in mind. Mevel assured everyone that ECORD would certainly need to do an operational assessment of ACEX.

Moore suggested that the NanTroSEIZE Scoping Group could use more independent expertise in engineering and risk assessment. Kuramoto believed that CDEX could handle those matters sufficiently with input from the SAS. Larsen emphasized that the list did not reflect a desire to have only one independent engineer but merely to make an effort to get started.

Larsen reported that funding for the current Site Survey Data Bank (SSDB) extended through January 2005, with additional funding requested through September 2005. He announced that the IODP-MI Sapporo office would issue a request for proposals (RFP) for a new SSDB in September 2004, with a proposal deadline in October 2004 for instituting a contract by March 2005 at the earliest. Larsen expected to convene a final RFP planning meeting with a subset of the SSP in August 2004. He presented several excerpts from the data-bank working group that would provide the basis for the RFP, and he emphasized the goal of creating an entirely digital, Web-based SSDB that should lead to closer integration of the proposal and seismic databases and could affect where the SSP would hold its meetings.

Byrne worried about drowning the system in data and asked for clarification on merging proposals and the data bank. He explained that the SSEPs traditionally did not get involved in data review because the external reviewers do not have access to the data. Moore urged making it clear to industry participants that the data would remain proprietary. Katz said that the digital concept also could affect where the EPSP would hold its meetings. He still saw resistance among the panel members to working exclusively with digital data and said that they really need to have high-resolution hardcopies available. Larsen asked about the best timing for the transition from one system to another. Katz suggested that some flexibility existed, but the panel could not wait until the last minute for guidance. Allan suggested that it might work better not to change completely and instantaneously to an exclusively digital database. Larsen understood that one could digitize even old analog data, and he regarded now as the right time to make the change, when instituting the new program. Austin remained uncertain about the availability of sufficient funds to implement the vision for the new data bank.

Larsen reported that the IODP-MI currently lacked funding to institute new data management and publications functions in FY2005, but they planned to add new staff in late FY2005 to undertake those initiatives in FY2006. He explained that the IOs would have responsibility in the meantime for program publications, and he cited the urgency of resolving the policies and guidelines for publishing scientific results. Larsen outlined the concept for a successor to the *JOIDES Journal* that would cover all scientific drilling. He said that the lead agencies had expressed interest in the concept and the ICDP had reacted positively to the idea of contributing content. Larsen welcomed the SPC to advise on this issue.

Austin asked whether the ICDP would contribute any funds toward the publication. Larsen replied that the details remained undetermined. Coffin asked about the availability of printed expedition reports. Larsen mentioned the idea of printing only on demand. Miller noted that the expedition report for ACEX would need to come out before the IODP-MI could issue an RFP for publications. Allan stated that no contractual obligations existed at the moment for FY2004. Mevel clarified that the ACEX report would come out in FY2005. Austin worried that without a single publications coordinator identified at the beginning, each IO might embark on its own path and thus make it very difficult for the program to produce a coherent and efficient set of publications. Evans explained that although the ECORD budget for FY2004 did not provide for publishing the ACEX report, they would produce the scientifically edited content and present it to the designated publications contractor as appropriate for FY2005. Coffin reminded the committee that they had already made recommendation on publications, whereas the IODP-MI now indicated that other priorities would take precedence in FY2005. He suggested that the SPC might still want to recommend that publications should take priority over some other issues. Miller stressed the importance of getting the ACEX report published in a timely manner. Rack stated that the JOI Alliance had responded to a query from the IODP-MI concerning publications. Kenter thought that sounded a little vague. Austin wanted to reaffirm the previous advice that a single organization should produce all program publications. Coffin asked the publications working group to draft a recommendation for later consideration.

On Thursday morning, Miller presented a proposed recommendation on publications. Austin noted that the statement remained intentionally vague on how long the current situation would last, and he suggested revisiting the issue on a regular basis. Kenter asked about the nature of the one organization mentioned in the statement as receiving the contract. Moore said that the answer would depend on the response to the RFP.

**SPC Consensus 0406-4:** The SPC recognizes that because of fiscal constraints, a request for proposals (RFP) for publications cannot be issued in time to provide publication support of the first IODP expeditions. In view of SPC Consensus 04-03-18, the committee reaffirms that “Each implementing organization be responsible for providing scientific content for its platforms, but that one contractual organization be a central point for technical editing, layout, and production, thus ensuring uniformity of style.” The committee recognizes that the current situation is unusual and encourage the IODP-MI: 1) to have the implementing organizations of expeditions not covered under the RFP prepare the content of the expedition reports, and 2) to contract with one organization for technical editing, layout, and production of the reports. The committee also encourages the IODP-MI to issue an RFP for publications as soon as possible and to inform the SPC of any changes in publication strategy.

## **2.5. Final expedition and site designation scheme**

Larsen reviewed the final scheme for designating IODP expeditions and sites. He described it as simple, logical, inexpensive, and quick to implement, as well as consistent with legacy databases and amenable for search purposes. Larsen noted that expedition names would not distinguish between platforms or IOs, but site numbers would, as recommended by the SAS.

Coffin asked if the SPC had to approve the names of the upcoming expeditions at this meeting. Austin wanted to ensure that expedition names would properly reflect the scientific objectives and preferred not leaving that task to the IODP-MI. Baldauf stated that the SPC would have to provide immediate input if they wanted to change anything in the ready-to-distribute prospectus of scheduled expeditions.

## **2.6. IODP mini guide**

Larsen announced that an IODP mini-guide would appear soon in the last issue of the *JOIDES Journal*.

Yoichiro Otsuka reported on IODP-MI education and outreach efforts, undertaken primarily through establishing a standing task force to advise on immediate education and outreach priorities, prepare a long-range plan, and develop appropriate guidelines and policies. The task force held its first meeting in late May 2004 in Washington, D.C. Otsuka listed the participants from the U.S., Japan, and Europe and cited the priorities of creating an IODP logo, compiling resources, establishing a portal Web site, writing short definitions of the program, engaging in promotional activities, and drafting a set policies and procedures for communicating with the international community.

Duncan asked if the task force involved professional educators. Otsuka said yes, one or two so far. Tatsumi stressed the importance of defining what constitutes national versus international efforts. Otsuka said that the workshop report contains many detailed recommendations, and now the program has to find funding to support the activities. Kenter asked if the participants of the workshop equated to the task force. Otsuka replied yes. Coffin suggested that the task force membership should remain flexible to bring in experts as needed. Otsuka believed that the task force itself offered flexibility, but he preferred having a constant membership for consistency.

## **3. Implementing Organization (IO) reports**

### **3.1. CDEX**

Yoshi Kawamura reported that JAMSTEC had changed its full name as of April 2004 but retained the same acronym. He updated the status of the *Chikyu*, mentioning the ongoing commissioning of the drilling equipment and the BOP, sea trials by the shipbuilder, and an integrated function test, with final delivery of the ship to JAMSTEC expected by April 2005. Kawamura said that the ship had reentered dry dock to place the BOP onboard. He described the engineering site survey for the training cruise off northeastern Japan and noted the upcoming presentation of the site-survey plan to the EPSP in June. Kawamura outlined a basic schedule for establishing scoping groups for the NanTroSEIZE, Indus Fan, and Costa Rica projects, and he showed a tentative five-year timeline for planning the first riser expedition. Kawamura cited several outreach activities involving a university and museum campaign through J-DESC and the Asia Oceania Geoscience Society (AOGS) meeting on 5-9 July 2004 in Singapore.

Kuramoto reported on the development of database technology by the CDEX Information Services group and cited the needs and motivations behind the effort. He described the new system as flexible and robust, easy to add new components, very compatible with other systems, and capable of handling site-survey, logging, and core data. Kuramoto briefly outlined the data transfer technology, saying that it relied on standard tools in hand and would provide free access to authorized users through the high-security, high-speed infrastructure available at the JAMSTEC Yokohama Institute for Earth Sciences. He added that users would need only a PC and a Web browser to access and use the system. Kuramoto described the basic developments as completed. He showed a test example of how to use the system and welcomed everyone to try the hands-on demonstration adjacent to the meeting room and provide feedback.

Coffin asked about the types of geophysical data that the system could incorporate. Larsen asked specifically about heat-flow data. Kuramoto replied that the system could handle most kinds of geophysical data, including heat flow.

### **3.2. JOI Alliance**

Frank Rack reported on JOI Alliance activities. He identified several new staff members at JOI and new personnel assignments at TAMU and described the internal team approach to integrated management. Rack presented the current operations schedule, but acknowledged likely changes based on the latest guidance from the lead agencies. He reported that JOI had signed a contract for non-riser vessel operations in FY2004-05 and had already accepted the vessel and commenced the mobilization process. Rack said that the alliance had submitted an FY2005 program plan to the IODP-MI for approval of SOCs, completed an environmental assessment for Phase 1 activities, received approval of a vessel indemnification request submitted to the NSF, and established new protocols for vessel security in compliance with the International Ship and Port Facility Security Code. He described the vessel security protocols in greater detail, pertaining to the effects of three escalating levels of security threat. Rack reported on the teacher selected to participate on Juan de Fuca Hydrogeology Expedition 301 as part of the teacher at sea initiative. He also noted that the alliance had identified willing co-chiefs for all scheduled expeditions, completed the staffing for the first expedition, begun the process for several others, and formalized the concept of the joint scientific party for the North Atlantic I and II Expeditions. Rack described the high-latitude marine contingency plan for mitigating the risks associated with weather and sea ice on the North Atlantic expeditions. He concluded by outlining various elements of the JOI Alliance outreach to stakeholders, including soliciting comments from the IODP SAS on the ship design, reviewing responses to the invitation to tender, planning the onboard science capability of the new vessel, introducing the community to the MREFC Web site, holding town meetings, and inviting the USSAC chair to serve as non-voting member of the vessel selection team.

Austin asked how the new information on FY2005-2006 operations would affect the JOI Alliance plans. Rack replied that the most critical overlap pertained only in the event of conducting non-riser drilling operations simultaneously with the refitting of another non-riser vessel. Moore asked about the final plans for implementing Proposal 543-Full2 CORK in Hole 642E. Rack reported that OPCOM decided to drill a new hole for the CORK based on the science rationale, and the JOI Alliance had factored that into its budget for this fiscal year. Miller expressed concern that OPCOM had approved a scientific issue that the SPC had not fully reviewed or endorsed. He wondered if that gave OPCOM too much authority. Coffin reminded the committee of the decision made at the last SPC meeting (SPC Consensus 0403-23) to request an addendum from the proponents before the OPCOM meeting, which they provided. He also noted that OPCOM added Proposal 641-APL Costa Rica CORK II to the schedule and dropped two sites from the North Atlantic I and II Expeditions because of weather concerns, though perhaps those sites could get rescheduled if drilling operations get extended through FY2005. Coffin added that Proposal 589-Full3 Gulf of Mexico Overpressures remained at OPCOM but had not undergone any safety review.

Miller questioned the implicit extension of the sample moratorium on the first part of the North Atlantic Expedition.

### **3.3. ESO**

Dan Evans reported on activities of the ECORD Science Operator (ESO). He listed the status of four MSP expeditions, including the Arctic Coring Expedition (ACEX) scheduled to get underway in August 2004, the Tahiti project planned for 2005, and the New Jersey Shelf and Great Barrier Reef projects now in the early planning stages. Evans noted that the proponents of the Great Barrier Reef project planned to conduct a seismic survey in November 2004, and the ESO held an initial meeting with the lead proponent of the New Jersey Shelf project. They also met with the lead proponent of the Tahiti project to prepare the FY2005 program plan. Evans explained that the plan for Tahiti involved three nearshore transects and required a ship with dynamic positioning capability. Evans announced that the ESO had signed the contracts for the ACEX ships and drilling rig, and although the original logging contractor pulled out of negotiations because of new ownership, he anticipated getting a new and better quote from another contractor. Evans illustrated the outfitting of the ACEX drilling ship with the moonpool and the drilling rig and said that work continued on finalizing the scientific prospectus, setting up the database, finalizing the ice management plan, making additional core-barrel assemblies, and purchasing expendable supplies. He updated the development of the piston coring assembly, noting that the ESO had tested it successfully in the lab and on land and would test it again in the North Sea after the first phase of mobilization. Evans added that the expedition would carry the DOSECC system as an alternative piston corer, at a cost equivalent to one day of ship time, but this back-up corer would take one day to switch out and would not work with the wireline coring assembly. He also noted the unavailability of the memory logging system because of the change in logging contractor. Evans mentioned several education and outreach activities for ACEX, such as launch parties and artist and teacher participation. He then presented the schedule for the operational phase, indicating that the expedition would begin mobilizing in June in Aberdeen, Scotland, and finish mobilizing in early August in Landskrona, Sweden. Evans cited the availability of up to twenty-three days for on-site operations, followed by a two-stage demobilization that would reverse the mobilization scheme. He also reported that the onshore science party would meet in the old Bremen core repository beginning on 1 November, and the length of the meeting would depend on the amount of core collected.

Moore asked where the artists and teachers would board on ACEX. Evans answered that the artists would board on the nuclear icebreaker and the teachers probably on the *Oden*. Brumsack asked about the plan for porewater measurements on ACEX. Evans said that the ESO received input from the SciMP and everything now looked in order. Austin questioned the need for using a vessel with dynamic positioning for drilling on the shallow-water reef off Tahiti. Evans replied that it would eliminate some of the concerns about the environmental impact on the reef, and he also characterized the water as not that shallow. Quinn wondered if the technology had evolved for obtaining good cores on a coral reef using a DP system without heave control. Austin suggested using a taut-line anchored barge as a cheaper alternative.

## **4. IODP SAS**

The committee initially postponed this item until Wednesday before Agendum 10 and eventually returned to it late Thursday morning after the executive session.

### **4.1. Review**

Benoit Ildefonse outlined the approach taken by the SPC working group to solicit community input on evaluating the SAS. He said that they kept in mind the science driven nature of the program and that the SAS should remain as flexible, efficient, and transparent as possible.

The group distributed a short questionnaire to J-DESC, USSAC, and ESSAC and received a fairly good response. They also received independent comments from an ICDP representative. Ildefonse briefly summarized the results of the survey.

Yoshiyuki Tatsumi delivered a preliminary report from the SAS working group, describing it as providing a framework for further discussion. The report focused on the functions, membership, and management of the SAS panels and integration with other international research programs, and it called for maintaining a flexible SAS that would operate with maximum efficiency and transparency. Tatsumi characterized the SAS terms of reference as generally well received, though certain questions arose concerning the functions of the TAP and the ILP. He suggested that perhaps an *ad hoc* advice team could perform the functions of the TAP, whereas various other components of the program management could handle most of the activity of the ILP. Tatsumi suggested reducing the overall number of technical panel members, either by reducing the number of panels or the number of members on the panels, and he urged greater flexibility in balancing the technical panel membership in favor of expertise rather than nationality. Tatsumi said that the co-chair system had worked well and the chair with vice-chair system could also work well. He stated that individual panels had seriously addressed the cultural and language challenges of having a diverse international membership, but communication between panels could still improve significantly. Tatsumi advocated better integration with other international research efforts to expand the IODP community and explore broader scientific issues. He viewed the appointment of liaisons as an effective way to share information, but one that exacted a toll on human resources and travel costs. Tatsumi cited several other potentially effective avenues such as workshops and syntheses on specific themes, a journal on scientific drilling, and coordination through national committees.

Allan asked if the group examined whether the SciMP covered too broad of a scope. Ildefonse said yes, they did perceive that as a problem. Coffin noted that the SciMP itself disagreed and felt satisfied with the scope of its mandate. Ildefonse saw that as a clear indicator of a communication problem if the panel and the community perceived matters so differently. Moore thought that publications in particular presented a stretch for the SciMP. Miller suggested that the SPC should have oversight of publications.

Byrne wondered about the motivation behind the recommendations on the ILP, when so far that panel had met only twice. Ildefonse conceded that opinions could change as more information became available. MacLeod asked about the overlap between the SSP and the EPSP. Ildefonse clarified that the concern related to an overlap between the SSP and the SSEPs. MacLeod suggested that perhaps a similar concern applied toward involving the TAP in the proposal evaluation process. Moore described the ILP as brand new and still carving out its own niche, and the IPSC originally conceived the TAP as a forward-looking panel rather than one that would react to technical problems after the fact. He also noted that the TAP co-chairs wanted to have a small core group of members and bring in other expertise as needed. Ildefonse said that the comments on the TAP and the ILP indicated that the community perceived those panels as more reactive in nature. Masuda asked if the TAP could still reconsider its terms of reference at the next TAP meeting. Coffin confirmed that they could, but any changes would require SPC approval before going to the SPPOC. Ildefonse welcomed more input to the SPC working group, particularly on the forward-looking role of the TAP.

Soh wondered how to improve the transparency of the SAS. Ildefonse believed it would help to have a single Web site and prompt delivery of meeting minutes. Austin asserted that every

member of the SAS has a responsibility to inform the community about SAS and IODP activities. MacLeod hoped to reach out to a broader scope of the community. Coffin regretted that many panel members did not fully understand how the advisory system and the program worked. He commended the working group for their efforts in obtaining input and urged the entire committee to contribute to the final report due in October. Duncan asked about the pathway for the report. Coffin responded that the SPPOC working group would consider the mid-term report in July, and the final SPC report would probably appear as an appendix of the final SPPOC report.

**SPC Consensus 0406-5:** The SPC receives the mid-term report from its own SAS Review working group (Duncan, Ildefonse, Tatsumi), commends the efforts of the group to date, and looks forward to receiving a final report at the October 2004 SPC meeting.

#### **4.2. Terms of Reference**

Jim Mori presented the results from the SPC working group on the SAS terms of reference. He explained that they took the terms of reference presented at the March 2004 SPC meeting and worked on making the language consistent across the various panels, and they tried to avoid the more difficult structural issues that other working groups should address. Mori described the specific points of change pertaining in general to all panels. He again urged maintaining flexibility in membership for all panels except the SSEPs.

Allan noted that the official program memoranda specify the entitlements for panel memberships, and countries or consortia have the freedom not to exercise their entitlement. Kenter thought that the SPC agreed to strive toward achieving the obligations. Katz saw no need to specify the membership of each panel in the terms of reference if already defined elsewhere. Ildefonse added that it would also eliminate the need to change the terms of reference for each panel every time the program membership changed. Coffin suggested including a generic membership clause that refers to the entitlements defined in the memoranda.

**SPC Consensus 0406-6:** The SPC receives the revised terms of reference for the SAS panels from its own SAS Terms of Reference working group (Kenter, Mori, Prell), requests minor modifications, and forwards the revised terms of reference with modifications to the SPPOC for consideration.

#### **4.3. Travel and CO<sub>2</sub> Emissions**

Jeroen Kenter reported on an emerging trend for organizations with frequent travelers to compensate for the associated CO<sub>2</sub> emissions by purchasing offsets from various environmental organizations. He proposed that the IODP should adopt such a policy in these times of increasing environmental awareness.

Miller asserted that policy issues belonged to the SPPOC and not the SPC. Coffin noted that the SPC had an advisory function on policy matters. Ildefonse asked how the concept might work for the IODP. Kenter answered that it could happen either on a personal, individual basis or collectively by the program. Austin estimated that such an offset would significantly increase the program travel budget. Miller suggested that the offset should also include emissions from the drilling platforms as well, and that would increase the cost considerably. Brumsack understood the reluctance to address this issue now, but he believed it would gain greater public awareness in the near future and the program would eventually have to face it. Austin asked how many committee members would do it voluntarily. Only a few indicated they would. Allan viewed this as perhaps a good reason to consider video conferencing. Katz

remarked that teleconferencing worked well for some activities such as information sharing, but it did not work very well at all for making decisions or resolving disagreements. He noted that the ILP tried to have a virtual meeting but could not make it work. Katz recommended looking for more efficient ways to conduct meetings and reduce the number of guests. Miller suggested that the committee could endorse the concept of meeting participants making voluntary efforts to offset CO<sub>2</sub> emissions.

**SPC Consensus 0406-7:** The SPC endorses the voluntary efforts of the IODP community to offset CO<sub>2</sub> emissions related to participating in SAS activities.

### **5. Clarify status of Proposal 545-Full3 – second expedition**

Keir Becker left the room as a proponent of Proposal 545-Full3. Coffin outlined the issue of how to handle the remaining unscheduled science of this proposal. Ito reviewed the past SPC comments and recommendation on this proposal and described the operations that would occur on the first expedition and what would remain for the second. He stressed that the committee had previously recognized that separating the two phases by one to two years would improve the scientific results. Ito outlined the potential options for the SPC and noted that the first expedition could provide feedback for the second, as well as more experience working with CORKs in hostile environments.

Kenter asked how much it would hurt the original science objectives by not doing the second expedition. Ito explained that the overall project required a combination of boreholes to accomplish the objectives related to three-dimensional properties, anisotropy, and tracer experiments. Miller said that since the SPC had already approved the science, it only amounted to the question of who would decide whether the initial CORKing operations had succeeded. Moore suggested getting a report on the first expedition at the October 2004 SPC meeting before giving OPCOM approval to proceed. Brumsack advised taking all opportunity to evaluate the success of the first expedition. Baldauf noted the likely availability of the preliminary expedition report by September 2004. Miller suggested requesting a presentation from the co-chiefs at the next SPC meeting. Quinn agreed with inviting the co-chiefs and noted that this represented not only the first IODP expedition but also the first with multiple phases. Austin doubted getting an objective assessment from the co-chiefs but wondered how else to do it. He also linked this issue to the general assessment of CDPs.

Coffin cited the spectrum of multi-phase projects now planned, including the back-to-back Oceanic Core Complex expeditions, the two North Atlantic Paleoclimate expeditions separated by several months, and this project where the second part remained unscheduled. Moore viewed the drilling sites as highly interdependent for this project, but less so for the North Atlantic. Larsen asked about the contingency plan in the event of complete technical failure on the first Oceanic Core Complex expedition and whether the SPC evaluated those risks in the first place. MacLeod explained that various contingency scenarios existed, including drilling a series of shorter holes to meet many of the objectives. Coffin added that the SPC charge did not involve evaluating operational risks, only the science.

Coffin summarized the consensus of asking for an expedition report before making a recommendation to OPCOM. MacLeod added that the second expedition required a successful first expedition. Austin stated that OPCOM must determine the level of independent assessment needed. Katz suggested using the existing advisory structure to conduct assessments. Miller imagined that some projects might require an *ad hoc* committee to do the assessment. Ildefonse asserted that the process should not change from one project to another. He suggested framing the discussion in terms of the project management system.

Austin clarified that he meant a truly external, unbiased review. Coffin said that the proposed project management system clearly gave the assessment function to management after the initial phases of project scoping. Larsen envisioned involving one or two independent reviewers combined with the SAS. Masuda viewed the cross-well experiments as very interesting from an engineering perspective and challenging from a technical standpoint. He favored involving the full range of SAS expertise in the assessment process, either through individual panels such as the TAP or else through *ad hoc* committees. Austin suggested that this case could provide a good example for conducting an iterative electronic review to assess the expedition report.

Coffin asked if the committee wanted to advise the IODP-MI to do the assessment of the first expedition. Moore thought it would work in this particular case for evaluating the progress toward achieving the goals of a specific proposal. Filippelli agreed that this represented a separate case not equivalent to CDPs. Katz noted the possibility of drilling holes successfully but still not achieving the scientific goals. Coffin proposed discussing the general issues further after the IODP-MI indicated how they would implement PMS. He asked Ito, Austin, and Kenter to draft a recommendation on Proposal 545-Full3.

The committee returned to this issue on Wednesday afternoon. Becker again left the room. Ito presented a draft recommendation. Baldauf asked if the SPC would have enough time to give approval by the late September OPCOM meeting. Coffin said yes. Kenter thought that the committee had discussed the option of getting an independent assessment. Austin said that OPCOM could ask for one, but it would have to go to the SPC at the same time as OPCOM.

**SPC Consensus 0406-8:** The SPC recognizes that the Juan de Fuca Hydrogeology expedition (301) represents the first phase of a multi-phase effort involving installation of a CORK array across several sediment-covered ridges. To assess properly the appropriateness of proceeding to the next phase and the utility of this array, the SPC and OPCOM must receive a prompt report on the aforementioned expedition from the co-chief scientists and the JOI Alliance, detailing the scientific and operational progress towards the stated objectives of Proposal 545-Full3. OPCOM should consider that report at its next meeting (fall 2004) and forward its recommendation to the SPC in time to evaluate the next phase of Juan de Fuca Hydrogeology studies for inclusion in the prioritized SPC groupings for FY2005 and FY2006 program planning, as developed at this SPC meeting. The committee anticipates augmenting those groupings without re-ranking at the October 2004 SPC meeting.

## **6. Review of Proposal 650-APL**

Kenter and Camoin left the room as proponents. Quinn left the room as a potential co-chief of the related Tahiti expedition derived from Proposal 519-Full2. Ito and Austin served as watchdogs in explaining the technical issues and the scientific rationale of the proposed ancillary project. They also noted that the proponents sought external funding for the experiments.

The committee recognized that the proposed project would augment the primary objectives of the Tahiti expedition by providing an independent method of determining porosity and permeability beyond acquiring core samples, plus the prospect of imaging a modern reef environment would generate a lot of interest in industry as well as the general scientific community. The committee identified potential environmental issues pertaining to the sparker experiments, installing PVC pipes in the boreholes, and the use of ocean bottom cables. They also discussed the possibility of using onshore sites for some of the tomography experiments, the difficulty of reoccupying old holes with the geophysical instruments, and especially the

feasibility of pulling the PVC pipes out of the boreholes. Although the committee worried that these complexities could easily require more than three days of platform time, they very much favored seeing if some of the experimental techniques would work. Coffin asked Ito and Austin to draft a recommendation for later consideration.

The committee returned to this issue on Wednesday afternoon. Kenter, Quinn, and Camoin again left the room because of conflicts of interests. Ito presented a draft recommendation. The committee agreed that the EPSF should eventually review the project, but not before the proponents obtained the external funding. They also preferred focusing for now more on the science of the project than the technology.

**SPC Consensus 0406-9:** The SPC 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 expected 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 September 2004 meeting, with input from the proponents and the ECORD Science Operator as appropriate, and provide a report and a recommendation at the October 2004 SPC meeting.

#### **7. SSEPs report**

Camoin summarized the results of the May 2004 SSEPs meeting in Granada, Spain. He listed the proposals reviewed, summarized the dispositions, identified the conflicts of interest among the SSEPs members, and explained the five-star rating scale for the proposals forwarded to the SPC. Camoin reported that an internal working group on proposal handling had suggested no longer accepting addenda for proposals at the SSEPs level, requiring preliminary proposals except for CDPs, ensuring that the SSEPs review all APLs, rejecting preliminary proposals after the second try, and not rejecting full proposals until after external review. Camoin also described the format of the final SSEPs review when forwarding a proposal to the SPC and said that proponents would receive the final review but not the rating.

Byrne presented the results of a second working group on present and future IODP science. He identified several scientific themes as well represented among the active proposals and a longer list of themes as not well represented, and he identified various geographic areas and environments with limited coverage. Byrne cited the difficulties of tool development and obtaining site-survey data as problems that could inhibit proposal development in certain areas, and he suggested establishing planning groups and sponsoring thematic workshops as ways to increase proposal pressure and attract a wider community. Byrne presented the results of a third working group on the SSEPs five-star rating system. He explained the lack of a consensus on defining the exact meaning of the different rating levels other than as a relative priority scale. Byrne also presented guidelines for replacing SSEPs co-chairs and reported that the panel recommended Mike Underwood as his replacement from among three nominees.

Coffin deferred further discussion of the SSEPs recommendations until later in the meeting. The committee resumed the discussion on late Thursday afternoon. Camoin presented the SSEPs recommendations in a more concise and direct format.

**SSEP Recommendation 0405-01:** All additional data submitted by proponents to the SSEPs must be incorporated in a revised version of the proposal rather than addenda.

Miller expressed concern about making the guidelines too restrictive. Camoin explained the advantage to the SSEPs of keeping a proposal as a single package and eliminating an opportunity to circumvent the page limits. Austin favored the idea and said it would help proponents and improve the proposals, especially for external reviewers. MacLeod thought it still might occasionally suffice to submit a short letter. Filippelli noted that proponents could still submit response letters for certain purposes.

**SSEP Recommendation 0405-02:** All new proposals, with the exception of CDP components, should be submitted as a preliminary proposal following SAS guidelines. New full proposals should be submitted only with pre-approval of the SSEPs co-chairs.

Moore opposed requiring preliminary proposals because not all proponents needed to submit a preliminary proposal. He noted furthermore that getting site-survey data often depended on receiving a favorable evaluation of a full proposal and not just a preliminary proposal. Miller agreed that it could unnecessarily slow down experienced and fast-paced proponents. He would approve it as a recommendation but not as a requirement. Quinn preferred keeping flexible and imagined that the proposed solution could cause more problems than it would solve. Brumsack wanted to preserve a pathway for experienced proponents and identified the more important issue of determining when to reject proposals. Coffin argued that requiring approval from the SSEPs co-chairs amounted to a non-uniform standard because the co-chairs change. He proposed that the SSEPs return with a revised recommendation.

**SSEP Recommendation 0405-03:** The SSEPs should review all APLs and provide a recommendation and justification to the SPC.

Moore recognized the usefulness of routing all APLs through the SSEPs, except it excluded the possibility of accepting late-arriving APLs before SPC meetings. Coffin confirmed that the last two APLs arrived late and received approval from the SSEPs co-chairs but not from the whole panel.

**SSEP Recommendation 0405-04:** The SSEPs should group each proposal forwarded to the SPC using a five-star system with five stars representing the very highest priority. The five-star and one-star categories should be used sparingly.

Ildefonse believed that fewer categories should suffice because the SSEPs can reject proposals and should not forward the one- or two-star proposals to the SPC. Moore would let the SSEPs use any scheme they wanted. Miller suggested using the one- and two-star categories internally to indicate reject and not ready to forward. Kuramoto wondered how well the rating worked given the current ranking by the SPC. Austin called the SSEPs rating a priority scale and not the same as ranking. MacLeod asked if the rating would go to the proponents or appear in the minutes. Camoin said the SSEPs would provide it strictly for the SPC.

**SSEP Recommendation 0405-05:** The SSEPs co-chairs can serve two or three years, but no more than five continuous years as a SSEPs member and co-chair. The terms are normally staggered.

The committee offered no comments on the terms of service for SSEPs co-chairs.

**SPC Consensus 0406-10:** The SPC accepts SSEP Recommendations 0405-01 on guidelines for submitting addenda versus revised proposals and 0405-03 on reviewing ancillary project letters (APLs) and forwards them to IODP-MI for implementation.

**SPC Consensus 0406-11:** The SPC receives SSEP Recommendations 0405-02 on guidelines for submitting preliminary and full proposals, 0405-04 on prioritizing proposals, and 0405-05 on the terms of SSEP co-chairs. The committee requests the SSEPs to reconsider issues associated with Recommendation 0405-02.

SSEP Recommendation 0405-06: The SSEPs nominate Mike Underwood as SSEPs co-chair following the November 2004 SSEPs meeting.

Camoin summarized the qualifications of the nominee to fill the anticipated vacancy of a SSEPs co-chair after the next SSEPs meeting. Moore spoke in support of the nominee.

**SPC Motion 0406-12:** The SPC appoints Michael Underwood as a new co-chair of the Science Steering and Evaluation Panels (SSEPs), effective following the November 2004 SSEPs meeting.

*Moore moved, Austin seconded; 13 in favor, 4 absent (Becker, Duncan, Soh, Quinn)*

Coffin raised the issue of what material the SPC should receive in the prospectus of proposals from the IODP-MI Sapporo Office. The committee agreed that they only needed to see the most recent version of the proposals, reviews, and response letters and not the complete set of files. Coffin raised several other questions about the guidelines for active proposals, such as how long a proposal should remain with the SPC without going forward to OPCOM, how long an unmodified proposal and unscheduled proposal should remain with the OPCOM, and how often CDP proposals should get updated. Austin did not see any problems at the moment and suggested that the committee could focus on other higher priority issues. Coffin deferred the matter and asked the SSEPs to address it at their next meeting.

The committee adjourned for the day at 17:45.

**Tuesday**

**15 June 2004**

**09:00-17:30**

## **8. Presentation and discussion of proposals**

In compliance with the IODP conflict-of-interest policy, conflicted SPC member Wonn Soh did not attend the entire proposal review and ranking session. Yoshiki Saito served as an alternate for Soh during the session. Coffin reviewed the procedure for presenting, discussing, and ranking proposals. He also presented a sample review letter and emphasized the importance of the second and third watchdogs taking notes during the discussions. Mori encouraged all watchdogs to review the history of a proposal when presenting it. Becker asked if the review letters would go to the proponents after this meeting or wait until after the scheduling meeting in October. Coffin replied that the reviews certainly must get recorded now but perhaps should wait until October for delivery. Austin argued for giving the proponents feedback as soon as possible. He wondered how to give a consistent message for previously ranked proposals. Miller asked who would determine the relative ranking of proposals forward to OPCOM at different times. Coffin noted that only three full proposals and part of another still resided with OPCOM.

The committee reviewed the nineteen drilling proposals in the order specified below, with the proposals grouped according to the three main themes of the IODP Initial Science Plan. For each proposal, the lead watchdog presented the scientific objectives, the committee discussed the objectives in detail, and the SSEPs co-chairs offered a final assessment of the scientific priority as determined by the SSEPs.

<b>Proposal</b>	<b>Short title</b>	<b>Watchdogs</b>	<b>Conflicts</b>
<b><i>Deep Biosphere and Subseafloor Ocean</i></b>			
547-Full4	Oceanic Subsurface Biosphere	Kato/Moore/Ito	None
553-Full2	Cascadia Margin Hydrates	Kato/Ito/Moore	None
555-Full3	Cretan Margin	MacLeod/Duncan/Ito	None
557-Full2	Storegga Slide Gas Hydrates	Miller/Tatsumi/Mori	None
573-Full2	Porcupine Basin Carbonate Mounds	Kenter/Quinn/Saito	None
584-Full2	TAG II Hydrothermal	Tatsumi/Kawahata/Brumsack	None
621-Full	Monterey Bay Observatory	Ito/Becker/Kato	None
<b><i>Environmental Change, Processes, and Effects</i></b>			
477-Full4	Okhotsk/Bering Plio-Pleistocene	Kawahata/Brumsack/Moore	None
482-Full3	Wilkes Land Margin	Moore/Saito/Miller	None
548-Full2	Chicxulub K-T Impact Crater	Brumsack/Mori/Filippelli	None
581-Full2	Late Pleistocene Coralgall Banks	Quinn/Kenter/Kawahata	None
595-Full3	Indus Fan and Murray Ridge	Filippelli/Saito/Quinn	None
600-Full	Canterbury Basin	Filippelli/Miller/Kawahata	None

The committee adjourned for the day at 18:35.

**Wednesday**

**16 June 2004**

**09:00-17:30**

### **8. Presentation and discussion of proposals (continued)**

<b>Proposal</b>	<b>Short title</b>	<b>Watchdogs</b>	<b>Conflicts</b>
<b><i>Solid Earth Cycles and Geodynamics</i></b>			
522-Full3	Superfast Spreading Crust	Duncan/MacLeod/Kenter	None
537-CDP4	CRISP Overview	Ildefonse/Mori/Austin	None
537A-Full3	CRISP Stage 1	Mori/MacLeod/Duncan	Suyehiro
603-CDP3	NanTroSEIZE Overview	Austin/Ildefonse/Tatsumi	Soh
603A-Full2	NanTroSEIZE Phase 1	Ildefonse/Austin/MacLeod	Soh
603B-Full2	NanTroSEIZE Phase 2	Tatsumi/Austin/Ildefonse	None

### **9. Global ranking of proposals**

#### **9.1. Select proposal pool to rank**

Coffin proposed excluding the overarching CDP proposals from the ranking and discussing the other fifteen proposals one at a time. The committee agreed to rank the individual CDP components separately within the context of their associated overarching CDP proposal and sought to clarify the number of proposals that could get scheduled in FY2005 and FY2006. Allan repeated that the SPC should prepare to schedule one or two expeditions in FY2005 and up to six expeditions in FY2006. Larsen recommended forwarding more proposals rather than fewer to provide management with greater flexibility. He also noted that OPCOM decides matters by consensus and has several members from the SPC. The committee decided without debate to include Proposals 477-Full4, 482-Full3, 522-Full3, 547-Full4, 553-Full2, 555-Full3, 557-Full2, 584-Full2, 600-Full, 603A-Full2, and 603B-Full2 in the pool for global ranking.

The committee considered not ranking Proposal 537A-Full3 because of the critical scientific concerns raised earlier. Members worried that the project could rank high enough to go to OPCOM even though they regarded it as not ready for drilling. The committee debated whether the proponents could address the SPC comments in an addendum or needed to revise

the proposal, though recognizing the previous SPC intent not to request revised proposals (see SPC Motion 03-09-05). Members wanted to send a clear message to the proponents and noted that the proponents had chosen their own path after receiving advice and nurturing from the SAS. Eventually the committee agreed to rank Proposal 537A-Full3 first and then worry about what to forward to OPCOM and how the proponents could respond.

The committee believed that Proposal 548-Full2 clearly would not compete well in the ranking because it still lacked sufficient site-survey data, and members worried that another low ranking could seriously damage it. The committee suggested that the proponents needed better imaging to improve their model and recognized that if the proponents revised the proposal as intended then it had to return to the SSEPs. Members also recalled the previous intent to form a detailed planning group after seeing the new survey data. The committee agreed not to re-rank Proposal 548-Full2 at this meeting, and Coffin asked the watchdogs to draft a recommendation for later review.

On Thursday morning before the recess, Brumsack presented a recommendation on Proposal 548-Full2. Coffin proposed including a statement on incorporating the results of ICDP drilling. The committee also discussed whether to recommend holding a workshop, creating a working group, or establishing a detailed planning group, and they decided to advise organizing a joint workshop so as not to imply financial support from the program.

**SPC Consensus 0406-13:** In view of recent ICDP drilling of the Chicxulub impact structure and planned geophysical work, the SPC decides to exclude Proposal 548-Full2 from the current pool of proposals for global scientific ranking. The committee suggests that the proponents organize a joint IODP/ICDP workshop to discuss major scientific questions related to the Chicxulub impact structure, once new seismic data from onshore and offshore become available. The major goal of such a workshop should be to specify the drilling targets evolving from the latest cratering models and recent ICDP drilling, and to locate the best sites required to test the hypotheses and fulfill the scientific objectives of Proposal 548-Full2.

The committee considered limiting the scope of Proposal 573-Full2 before ranking it but decided to follow the precedent from the previous ranking exercise and rank the science of the whole proposal and then determine whether to forward only part of it to OPCOM for scheduling. The committee decided the same for Proposal 581-Full2 after initially considering to limit its scope or split it into two pieces before ranking it.

The committee noted that Proposal 595-Full3 lacked sufficient site-survey data except for the Murray Ridge sites. Members recognized that the proposal initially began as two separate proposals and considered splitting it again into two pieces and ranking only the Murray Ridge component now and forming a DPG for the Indus Fan part. The committee decided however to follow the same precedent as above and rank the whole proposal as presented and then advise OPCOM about splitting it if necessary.

Coffin recommended forwarding Proposal 621-Full to OPCOM without ranking it. He also suggested removing the scientific component to decrease the operational time and expense. Baldauf noted that the original proposal called for twenty-one days of operations. The committee agreed, while recognizing that an engineering expedition could always have a small science party attached. Coffin also proposed asking the SciMP and the TAP to address the issue of how to manage the test bed facility and asked the watchdogs to draft a recommendation for later review.

On Thursday morning before the recess, Ito presented a recommendation on forwarding Proposal 621-Full to OPCOM without ranking it. After briefly discussing whether to recommend specifically cutting out the proposed science, the committee accepted merely describing the project as an engineering effort.

**SPC Consensus 0406-14:** The SPC recognizes the importance of installing borehole observatories within the Monterey Accelerated Research System (MARS) facility as described in Proposal 621-Full Monterey Bay Observatory. The strength of this proposal lies in the engineering investment for developing future borehole observatories and for integrating such observatories into cabled seafloor observatories. In that context, the committee deems it inappropriate to evaluate this proposal using the same scientific criteria as for other proposals and therefore decides not to include it in the current pool of proposals for global scientific ranking. Instead the SPC forwards Proposal 621-Full directly to OPCOM for possible scheduling of the engineering effort in FY2005 or FY2006. The committee requests that OPCOM provide a report and recommendation at the October 2004 SPC meeting. At that meeting, the SPC anticipates augmenting the June 2004 groupings of scientific proposals, without re-ranking, including consideration of Proposal 621-Full. The SPC also requests the SciMP and the TAP to work with MBARI and other proponents in developing a draft plan for managing the MARS-IODP borehole test facility. The SciMP and the TAP should submit a joint report for the October 2004 SPC meeting, and the SPC and OPCOM will submit a final report for the December 2004 SPPOC meeting.

## 9.2. Balloting by SPC members

Each SPC member assigned the numerical rankings of one to fifteen to the fifteen proposals in the pool. The members submitted their rankings on signed ballots.

## 9.3. Tabulate results

Eguchi and Schuffert collected the ballots and tabulated the results as follows.

Rank	Proposal #	Short Title	Mean	Stdv
1	522-Full3	Superfast Spreading Crust	3.18	2.30
2	603A-Full2	NanTroSEIZE Phase 1	3.47	2.45
3	603B-Full2	NanTroSEIZE Phase 2	3.76	2.77
4	477-Full4	Okhotsk/Bering Plio-Pleistocene	5.12	3.43
5	482-Full3	Wilkes Land Margin	5.94	3.27
6	553-Full2	Cascadia Margin Hydrates	6.35	3.12
7	600-Full	Canterbury Basin	6.88	3.57
8	595-Full3	Indus Fan and Murray Ridge	8.82	2.88
9	547-Full4	Oceanic Subsurface Biosphere	9.24	3.99
10	557-Full2	Storegga Slide Gas Hydrates	9.65	4.05
11	581-Full2	Late Pleistocene Coralgall Banks	10.53	2.94
12	584-Full2	TAG II Hydrothermal	10.88	2.96
13	555-Full3	Cretan Margin	11.18	2.24
14	573-Full2	Porcupine Basin Carbonate Mounds	12.06	2.95
15	537A-Full3	CRISP Stage 1	12.94	1.95

#### **9.4. Select group of proposals to forward to OPCOM**

Coffin proposed sending at least the top seven proposals to OPCOM for scheduling and sending the eighth-ranked proposal but recommending drilling first at only the Murray Ridge site. No one disagreed. Coffin also suggested considering the ninth- and tenth-ranked proposals. Duncan questioned the need to limit the number of proposals going forward since the ranking should suffice to indicate priority. Coffin replied that the committee could decide individually on the lower-ranked proposals. Moore noted that the committee had significant concerns about the lowest two and could ask for a response from the proponents before the October SPC meeting. Austin suggested forwarding the whole list now for maximum flexibility and also asking for feedback for the October SPC meeting. Quinn recalled that the committee had identified a higher priority tier among the proposals forwarded to OPCOM the last time. Miller suggested forwarding all of the proposals in three priority groups consisting of the top seven, the next three, and the last five. Coffin questioned whether or not to forward the lowest ranked proposal. Austin regarded it as unready for scheduling but noted that it could fall on the ship track. Mori agreed about the lack of readiness for scheduling. Coffin asked Miller to draft a recommendation on forwarding proposals to OPCOM, incorporating statements from the watchdogs on shortening Proposals 573-Full2 and 581-Full2. He also asked the watchdogs to draft a recommendation on Proposal 595-Full3 for considering later.

On Thursday morning before recess, Miller presented a recommendation on forwarding proposals to OPCOM. Byrne asked how these proposals ranked relative to the other unscheduled proposals already residing with OPCOM. Coffin stated that the only proposals remaining at OPCOM equated to those in Group I.

Kenter presented a recommendation on considering Proposal 581-Full2 for partial scheduling. Moore characterized it as very cheap and easily doable, despite how it ranked. Miller stressed that MSP projects could not get scheduled as a matter of convenience or opportunity. Becker suggested not specifying it for FY2005-2006. MacLeod thought this proposal had a lower priority than the other MSP proposals already awaiting scheduling and thus wanted to re-rank it in the future with other MSP proposals. Quinn confirmed that the other two unscheduled MSP proposals went forward in Group I and clearly have a higher priority. Austin did not want to start separating proposals on a platform basis or make an advance commitment to too many MSP proposals. Moore suggested deciding what to do with this proposal after seeing the scheduling options from OPCOM. Coffin said that the Group I proposals could again remain with OPCOM after the October scheduling, and the others would come back to the SPC for future re-ranking. The committee approved the recommendation and ultimately incorporated it in the overall recommendation on proposals forwarded to OPCOM (see below).

Kenter presented a recommendation on considering Proposal 573-Full2 for scheduling as a partial expedition. Ildefonso advised saying one mound instead of one or more sites. He also suggested not referring to it as a mini-expedition because that made it sound like an operational issue. MacLeod stressed that the committee would really like to see one mound get drilled and did not view it as a last resort. Moore said that the committee decided to rank the whole proposal and now had to work with the result. Quinn trusted that the SPC members on OPCOM would make known the preference of the committee. Austin added that the SPC could revisit the matter in October when reviewing the scheduling scenarios from OPCOM. The committee approved the recommendation after minor comments and ultimately incorporated it in the overall recommendation on proposals forwarded to OPCOM.

**SPC Consensus 0406-15:** The SPC forwards the top fourteen of fifteen ranked proposals to OPCOM in three groups as follows. The committee requests that OPCOM propose scheduling options for FY2005 and FY2006 that honor and adhere to these ranking groups as closely as possible.

Group I includes the top seven proposals. This group equates in priority to the Group I proposals previously forwarded to OPCOM and currently awaiting scheduling (519-Full2 South Pacific Sea Level, 545-Full3 Juan de Fuca Flank Hydrogeology, 564-Full New Jersey Shelf, and 589-Full3 Gulf of Mexico Overpressures). The committee recommends scheduling the Group I proposals if at all possible within operational constraints.

Group II includes the next three proposals (#8-10). The committee recommends considering these proposals as alternatives only if the Group I proposals cannot fill the schedule.

Group III includes the lower four proposals (#11-14). The committee recommends considering these proposals as alternatives only if those in Groups I and II cannot fill the schedule. Although scheduling should and will be guided primarily by the results of the global scientific ranking, the SPC recommends limiting the drilling options of Proposal 581-Full2 Late Pleistocene Coralgall Banks to several sites around one of the drowned reefs at Southern Bank, while nonetheless addressing as many of the proposed scientific objectives as possible. Likewise, the committee recommends limiting the drilling options of Proposal 573-Full2 Porcupine Basin Carbonate Mounds to several sites around one mound.

Byrne asked if the March 2005 ranking could contribute to the FY2006 schedule. Coffin announced the intent of using the March 2005 ranking for developing the FY2007 schedule. Larsen asked if the funding agencies would provide any budget guidance in time for the OPCOM meeting. Allan replied that it depended on whether the U.S. Congress would pass the new budget by then or just adopt a continuing resolution. Austin mentioned preparing the FY2004 program plan without budget guidance and cautioned that reality might differ from what everyone expected. Katz indicated that the EPSP needed guidance on what proposals they should review at their next meeting. Baldauf suggested starting with the Group I proposals and also considering Proposal 589-Full3, the unscheduled portion of Proposal 545-Full3, and the unscheduled Irminger Basin sites from Proposal 572-Full3.

The committee discussed the response to the proponents of Proposals 537-CDP4 and 537A-Full3. Members recognized the scientific potential of the project and viewed it as an opportunity for management and OPCOM to work on implementing the project management system. They also recognized the possibility of forming a DPG pending the response of the proponents. Given the problem of scientific balance, the question arose of whether to keep the proposal at the SPC level and merely ask for a response letter or an addendum or else ask for a revised proposal that would have to go back to the SSEPs according to normal procedures. Although the SSEPs had already judged the current proposals as mature enough to forward to the SPC, members believed that the proponents could and should improve them, especially to clarify the issue of scientific balance in Proposal 537-CDP4. The watchdogs drafted and the committee modified the following recommendation.

**SPC Consensus 0406-16:** The SPC recognizes the scientific potential of a complex drilling project (CDP) in the Middle America Trench off Costa Rica. However, Proposals 537-CDP4 and 537A-Full3 entail certain scientific and balance issues that need to be addressed before the first stage can be considered for drilling. Following the response of the proponents to the SPC reviews of these two proposals, the committee may consider establishing a detailed

planning group (DPG) to work with the proponents on clarifying the scientific objectives of the CDP and the drilling strategy in the component proposals.

Filippelli presented a recommendation on Proposal 595-Full3 and questioned if it should refer to a project-scoping group or something else. Moore agreed with calling it a project-scoping group because it would involve operators and proponents. Austin wanted to make sure that it would not include the Indus Fan component. Coffin asked the watchdogs to revise the recommendation. He suggested specifying that the SPC would reconsider the proposal after the proponents collected further seismic data, and meanwhile it could stay with OCPOM.

**SPC Consensus 0406-17:** The SPC supports efforts to understand the timing, rates, and impact of the uplift of the Himalayan-Tibetan Plateau as elucidated in Proposal 595-Full3 Indus Fan and Murray Ridge. The committee strongly endorses the proposed idea to test the feasibility of the project in two phases, beginning with shallow drilling at the Murray Ridge site (MU-1B). This will allow the proponents to explore how they might quantify some of the variables involved in reconstructing sediment volumes, noting that previous Indian Ocean drilling has not yet provided a robust erosion record even for the Neogene. For this reason, the committee requests that OPCOM form a project-scoping group to maximize site drilling objectives and develop a drilling plan at Murray Ridge that optimizes this potential.

#### **Additional advice to OPCOM**

Coffin announced that OPCOM would hold its next meeting on 29 September to 1 October in Washington, D.C. The committee discussed providing additional advice to OPCOM on scheduling the Irminger Basin sites from Proposal 572-Full3, on conducting the shallow hazard safety survey for Proposal 589-Full3, and on logging during the Arctic Coring Expedition (ACEX).

**Proposal 572-Full3 Irminger Basin sites** Coffin explained that OPCOM had excluded the two Irminger Basin sites from the previously scheduled North Atlantic I and II Expeditions because of the need for a support vessel during the associated time window. He wanted to recommend including those sites in the FY2005 or FY2006 schedule if at all possible. Baldauf cited the options of either rescheduling the second expedition or inserting the Irminger Basin sites elsewhere in the schedule during a better weather window.

Ildefonse noted that rescheduling the second expedition for later would heighten the existing concerns about the effects of the time lag on the unified science party. MacLeod wondered if any of the new proposals could fit in the slot for the second expedition. Becker asked about dropping the scheduled alternate sites from the first two expeditions if OPCOM could find a way to schedule the Irminger Basin sites separately. Austin also certainly preferred drilling the primary sites instead of the alternate ones. Baldauf asked about keeping the Norwegian Margin Bottom Water expedition linked to the North Atlantic II expedition or fitting it in some other way. The committee preferred the current linking. Coffin asked Becker to draft a recommendation on scheduling the Irminger Basin sites.

On Thursday morning before recess, Becker presented a recommendation on incorporating the two Irminger Basin sites in the schedule for FY2005 or FY2006. Austin recalled the earlier SPC recommendation to consider the two North Atlantic expeditions as a single science party. He wondered how including these sites separately might complicate matters. Miller suggested not worrying about that now.

**SPC Consensus 0406-18:** The SPC recommends that OPCOM explore possible scheduling options for FY2005 and FY2006 that would enable coring the two Irminger Basin (IRM) sites

of Proposal 572-Full3 North Atlantic Late Neogene-Quaternary Climate without requiring a support vessel. Such possibilities might include rescheduling the second North Atlantic Paleoclimate expedition into the optimal weather window or incorporating the IRM sites into another expedition. If the IRM sites get scheduled, alternate sites should not be drilled on the North Atlantic Paleoclimate expeditions.

**Proposal 589-Full3 hazard safety survey** Coffin explained the issue of encouraging OPCOM to undertake a shallow hazard safety survey for Proposal 589-Full3. Austin described it as an issue of timeliness as well as readiness and called for better communication with OPCOM. Katz indicated that the EPSP required such a survey. Coffin asked Becker to draft a recommendation for later consideration.

On Thursday morning before recess, Becker presented a recommendation on conducting the safety survey for Proposal 589-Full3. Austin referred to it as definitely a POC and a matter for OPCOM. Allan doubted that the budget could allow for it this year. Katz stated that the EPSP could still review the project in December if the survey occurred at the beginning of the next fiscal year. He thought the contractors felt they could accomplish that. Austin said that since the proposal had already moved to OPCOM for implementation, the SPC could only reaffirm its support for the science. Coffin noted the previous delay of the survey because of advice received from the funding agencies on the FY2005 schedule.

**SPC Consensus 0406-19:** In light of a lead agency report on new possibilities for potential non-riser operations in FY2005 and FY2006, the SPC requests that OPCOM reconsider its April 2004 decision to delay an independent evaluation of existing hazard survey data for Proposal 589-Full3 Gulf of Mexico Overpressures. Such an evaluation should be conducted as soon as possible to allow for potential scheduling of this highly ranked program in FY2005 or FY2006.

**Arctic Coring Expedition (ACEX)** Moore left the room as a member of the ACEX science party. Larsen presented an update from OPCOM on the ACEX operations. He explained that in light of the delay in contracting for logging operations, cutting the logging plan would yield a potential savings of \$300K and 3-5 days of operations. Larsen cited the pros and cons of using those savings for drilling instead of logging.

Austin believed that the co-chiefs certainly viewed cores as more important than logs. Miller recognized the value of logging but emphasized the greater importance of coring first. Evans noted that the program could always save money on MSP expeditions by not logging, but the proposal called for logging every site, and the scientific program had included memory and wireline logging from the start. He said that OPCOM and the scoping group had discussed the potential savings of replacing wireline logging with memory logging, despite its experimental nature in this environment. Evans cautioned that if the SPC recommended against logging now, it would set a precedent in terms of planning principles. Becker recalled that the co-chiefs identified recovery of a complete section as their top priority to the Arctic scoping group, and logging could aid that goal in the event of poor recovery. He felt very uncomfortable setting a precedent of pulling logging from the plan.

Larsen stated that the expedition lacked full funding, and logging operations comprised the only element not contracted so far. Ito noted that other drilling projects almost always faced the problem of eliminating logging, whereas the IODP had set a standard of including logging on every expedition, and he would regret seeing that change now. Larsen clarified that the IODP-MI had not proposed eliminating logging but just wanted to make the SPC aware of

potential ways to cut costs. Miller wondered if any possibility existed for doing basic logging more cheaply. Kenter saw logging as important because even five or six holes might not yield complete recovery. Austin doubted that logging would succeed at sites of such poor recovery, but he objected to the idea of not taking the logging equipment.

Coffin stated that all past decisions on waiving the logging requirement for sites deeper than 400 m had always come to this level for approval, and he did not hear a consensus from the SPC not to follow that precedent. Brumsack understood that any core from the Arctic would fill a wide gap in knowledge. He also viewed logs as beneficial but definitely a secondary priority. Duncan suggested letting the science party decide on site if it just concerned a matter of time. MacLeod clarified it as a matter of taking the logging equipment or not, otherwise it would not save any costs. Ildefonso did not want to underestimate the importance of logging and preferred sending the tools and letting the science party decide. Ito also preferred adhering to the standard of logging, though he recognized the difficulties associated with MSP projects and suggested asking the SciMP to address the issue. Coffin noted that the SciMP petrophysics report identified logging as part of the minimum standard measurements across platforms. Kenter wanted to request the maximum realistic effort to get logging data because it sounded like the co-chiefs might lean immediately toward eliminating logging. Becker supported having the basic logging suite onboard since the Arctic scoping group report called for logging any cored sites.

MacLeod wanted to clarify the number of days for drilling operations. After some discussion about the exact number of days, Evans stated that the cost of the logging tools equated to three fewer days of operations. Austin asked the ESO to confirm the exact number of days on site. Evans explained that he could not state an exact figure because the costs had fluctuated significantly over the last few weeks and probably would continue doing so. He cited the examples of sharply increasing fuel costs and the fact that the BGS had assumed the cost for piston core development instead of the IODP-MI. Kenter added that the changes had already consumed the contingency budget. Austin wanted to determine the minimum number of days acceptable for doing science considering the overall budget.

Miller expressed concern about jeopardizing the success of the whole \$12 million expedition over \$300,000 for logging. Quinn expressed similar disappointment over those circumstances. Tatsumi agreed that sampling cores must take priority. Kato thought that if the prospectus included logging then the program should provide it. He inquired if the IODP really could not find a way to provide the relatively small amount of extra funds required. Larsen responded that logging constituted a POC, whereas the IODP-MI only had control of the SOCs. Allan predicted that the program would likely face more hard decisions such as this one because the task of separating POCs and SOCs had proved difficult and allowed much less flexibility in moving funds between budget categories and contractors.

Austin expressed disappointment that the committee received this information without warning. He urged better communication between OPCOM and the SPC. Mevel hoped everyone would recognize the contribution of ECORD to implement this highly ranked project. Larsen expressed surprise at the character of the discussion over what he considered a straightforward matter. Coffin believed that the committee had delivered a clear message and he proposed moving on. He also noted that the SPC had sorely missed the presence of the IODP-MI vice-president for operations at this meeting, and he suggested recommending that the SPPOC require a formal link between that position and the SPC.

## 10. Reef drilling WG report

Terry Quinn reported on behalf of the reef drilling working group, comprised of himself, SPC members Kenji Kato and Jeroen Kenter, and ESO representative Dan Evans. Quinn reviewed the goals and current state of knowledge on reef drilling. He outlined several guiding principles for MSP operations in reef environments, such as 1) minimizing ecological perturbations by adopting drilling practices that limit physical destruction of living and dead reefs, 2) minimizing accumulation of drilling detritus on the seafloor, and 3) conducting an environmental assessment.

Allan inquired what the IODP-MI intended to do with this advice. Larsen noted the question. Baldauf suggested incorporating these principles in an overarching statement developed by the EPSP. He added that the operators would also develop their own principles. Katz suggested not including the third statement as an issue because of drilling deep-water corals. Kato explained that the group meant for the third principle to apply to the first reef drilling expedition and not necessarily to subsequent ones. Evans agreed with Katz and referred to the Porcupine Mounds as amenable to drilling with the non-riser vessel. Allan urged caution in publicizing any principles that might imply liability. Quinn characterized the principles as just draft statements at the moment. Coffin asked the working group to revise the statements for the next day.

**SPC Consensus 0406-20:** The SPC receives the working group report (Quinn, Kato, Kenter, and Evans) on the environmental impact of coral reef drilling and forwards it to the Environmental Protection and Safety Panel (EPSP) for comment.

## 11. ODP Leg 210 report

Jean-Claude Sibuet presented some of the initial results from ODP Leg 210 to the Newfoundland Margin. He cited the objective of understanding one side of the conjugate Atlantic margins. Sibuet reported that they drilled one site on oceanic crust and another in the transitional domain. They recovered early Cretaceous to Eocene mudstone and black shale with interbedded sandstone units and two diabase sills, but they did not penetrate below the lower sill. They also recovered serpentinitized mantle breccias at the oceanic site. Sibuet claimed that the results closely resembled those obtained thirty years ago from Site 398 on the Iberian Margin.

Allan noted that certain aspects of the leg had approached the operational limits of the *JOIDES Resolution*, and this raised the interesting possibility for the IODP of using the *Chikyu* in non-riser mode for heavy operations and using a lighter, less costly ship for normal non-riser operations. Larsen asked if the lack of logging data hampered correlating the sill with the U reflector. Sibuet replied that the sill and the U reflector seemed to coincide with an unconformity. Duncan asked about the origin of the sills. Sibuet noted some similarity with other sills 200 km southward, but he could not say anything more definite at the moment. Miller called it surprising to find sills on a non-volcanic margin and asked if it suggested that the margin had a more volcanic nature. Sibuet found it a bit shocking as well and regretted not knowing the nature of the basement below the sill. Coffin asked about plans for more drilling to reach the original objectives of penetrating the basement. Sibuet answered that he had discussed it with the engineers and would like to return.

Thursday

17 June 2004

9:00-15:00

SPC member Wonn Soh returned to the meeting. Alternate member Hiroshi Kitazato replaced the absent Kenji Kato for the day. Before the morning recess, the committee concluded several items of unfinished business from the previous days, as indicated above under Sections 9.1 and 9.4. Following a short recess, Coffin proposed convening an executive session to discuss relations between the SAS and the IODP-MI. The committee agreed and remained in executive session from 10:45 until 12:00.

**SPC Motion 0406-21:** The SPC enters into executive session to discuss interactions between the SAS and IODP-MI.

*Moore moved, Austin seconded; 17 in favor*

**SPC Consensus 0406-22:** The SPC recognizes its role in providing scientific advice to IODP-MI through the SPPOC as a fundamental part of its mandate to represent the scientific community supporting the IODP. The committee forwards a ranking of proposals to the OPCOM for development of scheduling options and must remain closely involved in subsequent decisions about the drilling schedule because evaluations of scheduling options involve scientific prioritization. The SPC welcomes iterative scheduling discussions with the OPCOM and reaffirms the SPC mandate to provide an advisory vote on the drilling schedule from options provided by the OPCOM and to forward this vote to IODP-MI through the SPPOC as part of annual program planning.

**SPC Motion 0406-23:** The SPC concludes its executive session on interactions between the SAS and IODP-MI.

*Moore moved, Tatsumi seconded; 16 in favor, 1 absent (Becker)*

## 12. IODP core distribution

Hans Christian Larsen stated that the IODP-MI took advice from the previous SPC meeting in drafting a policy for distributing cores among the three IODP repositories. He proposed a geographic distribution scheme whereby cores from the North and South Atlantic, the Arctic, and the Mediterranean would reside in Bremen; those from the Caribbean, the Gulf of Mexico, the eastern Pacific, and the Southern Ocean would reside at TAMU; and those from the western Pacific and marginal seas and the Indian Ocean would reside in Kochi.

Coffin asked about the JOI Alliance plan for redistributing DSDP and ODP legacy cores. Larsen preferred considering that as a separate issue. Allan remarked that the NSF had always intended making the DSDP and ODP cores available to the new program, and those core will transfer to the IODP. Tatsumi imagined the possibility of wanting to make exceptions to the geographic distribution for scientific reasons. Larsen agreed that the program should retain that flexibility. MacLeod wanted to know the costs of moving cores around. Coffin clarified that the IODP-MI wanted advice on the general plan before they actually started budgeting for it. He asked for any principle objections to the geographic distribution scheme. No one objected and Coffin asked Quinn to draft a recommendation.

Larsen explained the JOI Alliance plan for consolidating DSDP and ODP cores in fewer repositories and asked if it should follow the same guiding policy of geographic distribution. Austin preferred having the budget information before deciding on a scheme. Larsen explained again that the IODP-MI just wanted advice from the SPC on whether to investigate such a plan. Moore argued that it made the most sense from a scientific perspective to distribute the cores based on geographic origin.

Quinn presented a draft recommendation. Coffin asked if the committee wanted to include the DSDP and ODP cores. Ildefonse said that it would mean that the Kochi repository would receive DSDP and ODP cores soon and not stand empty until the first cores arrive from the *Chikyu*. Katz viewed it as an inefficient use of limited funds to ship old cores around the world rather than just storing them in the nearest repository. Allan indicated that the lead agencies had not yet received a comprehensive plan for IODP core storage and thus had not concurred on any plan. MacLeod asked if any other funding agencies had joined the discussion. Allan said yes. Ito suggested asking the SciMP to consider other aspects besides geographic distribution, such as microbiological storage considerations, analytical instruments, core cuttings, etc.

**SPC Consensus 0406-24:** The SPC recommends storing DSDP, ODP, and IODP cores in the Bremen, Gulf Coast, and Kochi core repositories based in principle on the geographic considerations presented by IODP-MI at this meeting. The SPC requests regular progress reports as IODP-MI works on the timing and fiscal details of this initiative.

### **13. Observatories and the IODP**

Kiyoshi Suyehiro reported on the ION vision. He showed the distribution of current borehole observatories and results from the Western Pacific Observatory. Suyehiro described a two-phase approach for drilling and installing observatories, with commingled program funds used for drilling boreholes and sometimes installing instruments and national funds used for instruments and monitoring. He gave details on specific installations and described an example scenario for the IODP involving a drilling proposal, site surveying, developing and testing equipment, drilling a hole with observatory specifications, installing an autonomous recording system, installing the observatory infrastructure, and maintenance. Suyehiro outlined several points to consider such as creating a universal infrastructure, viewing observatories as an integral part of drilling, deep penetration, and the need for innovative principal investigators. He wondered how principal investigators would interact with the IODP and how much of the scientific outcome the IODP wanted to encompass, given the greater emphasis on observatories in the Initial Science Plan.

Coffin characterized the IODP as extremely committed to observatories and trying to bring more under the IODP umbrella. He added that the SPC needed more input on this subject from other SAS panels such as the SciMP and the TAP. Moore regarded observatories as integral to certain scientific objectives of the IODP. He asked about ways to support and supplement the costs and link to other scientific objectives. Allan remarked that the lead agencies determined for FY2005 that casing represented a POC and instruments represented a national cost. Austin referred to the history of ION in the ODP and said that the importance of innovative PIs had certainly not decreased. Coffin asked if the IODP had any active ION proposals in the system. Camoin replied that the SSEPs had reviewed an overarching preliminary proposal in May 2003 and recommended developing a full proposal, but the proponents had not yet submitted one. Rack cited the USSAC-sponsored workshop in Seattle, a recent NSF-sponsored downhole tools workshop, and the Ocean Observatories Initiative (OOI) project office now operating at JOI and CORE as evidence of continuing strong links. Suyehiro hoped that the IODP would provide an international umbrella. Ildefonse urged the IODP to endorse this kind of science. Austin noted that the Initial Science Plan already endorsed it, and the program would respond to proposals.

## **14. Other business**

### **14.1. Synthesis volumes**

The committee postponed discussing this issue for lack of time and because the intended leader of the discussion, Bob Duncan, had already left the meeting.

### **14.2. Microbiology working group report**

Coffin reviewed the history of the microbiology working group report and noted that the SPPOC had not indicated clearly why they did not approve it. Austin stated that the SPPOC had not viewed it as an urgent matter and deferred it until the after the establishment of the real IODP-MI. Okada reviewed the charge from the iPC to form a working group under the iSciMP. He presented four detailed recommendations from the working group report and suggested that the best way to increase the number of microbiologists participating in the program probably involved increasing the number of microbiology proposals. Working group member Ken Takai wondered if the SPPOC had enough microbiological expertise to understand the recommendations.

Kawahata asked if the working group had discussed sample curation systems. He cited the difficulty of transporting samples stored in liquid nitrogen by air but said that microbiologists might expect or require more rapid sample transport than offered by ship. Takai explained that the working group report did not really address that issue. He agreed that liquid nitrogen could pose a problem for air shipment, whereas dry ice would not. Takai added that scientists could visit the shore-based labs to work on samples. Rack suggested that the IODP-MI needed a task force to translate recommendations into specific processes that the IOs could implement. Coffin proposed forwarding the report to the IODP-MI and the IOs and letting them determine how to implement it.

<b>SPC Consensus 0406-25:</b> The SPC accepts the microbiology working group report and forwards it to IODP-MI and the implementing organizations.
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### **14.3. Sample, Data, and Obligations Policy**

Coffin reviewed the history of developing the sample, data, and obligations policy. He reported that the SPPOC had questioned certain aspects of the previous version of the policy and did not approve it. Okada presented the latest revised version from the SciMP, describing it as almost the same policy as presented at the last SPC meeting. He reviewed the specific SPPOC questions and the answers from the SciMP.

Ildefonse thought that the SPPOC worried about whether a three-person review board provided enough transparency, and he wondered if this answer would satisfy them. MacLeod recalled that the editorial review board had formerly consisted of two co-chiefs, a staff scientist, and an external member. Miller believed that the SPPOC members probably now understood that the nature of the review only required three reviewers, but they preferred discussing it at their next meeting instead of by e-mail.

<b>SPC Consensus 0406-26:</b> The SPC accepts the revised IODP Sample, Data, and Obligations Policy and forwards it to the SPPOC for consideration.
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## **15. Future meetings**

### **15.1. Liaisons to other panels and programs**

Coffin proposed waiting to name new liaisons until after learning the identity of the five new SPC members.

## **15.2. 4<sup>th</sup> and 5<sup>th</sup> SPC meetings,**

### **15.2.1. 25-27 October 2004, Corvallis, Oregon, USA**

Bob Duncan announced that he planned to conduct a field trip the day before the SPC meeting. He also confirmed the availability of reasonably priced accommodations.

### **15.2.2. xx-xx March 2005, Lisbon, Portugal**

Benoit Ildefonse cited three options for the meeting venue and identified the host as Fernando Barriga of the University of Lisbon. The committee agreed to decide later on the exact dates.

## **16. Review of motions and consensus items**

SPC members presented the following tributes to five departing SPC members and to the hosts of this meeting.

**SPC Consensus 0406-27:** Few people have served the international scientific ocean drilling community for as long, as well, and in so many different and important ways as James A. Austin, Jr. This may be a totally inadequate way for us to thank Jamie for all that he has done for the ODP and the IODP, but let us at least acknowledge our great debt to him. Jamie has dedicated much of his career to scientific ocean drilling as a proponent and a participant of many drilling expeditions. He has been a valued colleague on many of the advisory committees (Atlantic Regional Panel, PCOM, ESSEP, SCICOM, SPC) that have evaluated and mentored the drilling proposals of other scientists. He has been a leader in planning the ODP and the IODP through his essential role in the organization of, and participation in, numerous workshops and discussion sessions (including the long term planning efforts undertaken at COSOD II, COMPOST, COMPOST II, CONCORD, and COMPLEX). Jamie was a key member of the two committees (IPSC and iPC) that laid the foundation for the new Integrated Ocean Drilling Program and helped write the IODP Initial Science Plan. He also has been willing to step forward into the administrative breach whenever a strong and knowledgeable hand was needed to guide the scientific ocean drilling programs. By serving as acting director of both the ODP and the IODP, he assured the smooth working of the former and the seamless transition into the latter. This prodigious effort over many years of service cannot be matched by anyone else in the community. We value him for his great wisdom, his broad experience, his leadership ability, his willingness to do the hard jobs, and his straightforward candor, energy, and enthusiasm about all issues important to the drilling programs. As Jamie completes his service on the SPC, we hope that this only marks the completion of one more of the many tasks that he has undertaken for the good of the scientific ocean drilling community and earnestly ask him to continue to lend his support to our efforts.

**SPC Consensus 0406-28:** Andy Fisher represents a prime example of the key contributions of scientific ocean drilling in educating marine geoscientists. As a graduate student, he participated on two early ODP legs; then he served as an ODP staff scientist and later earned a berth as ODP co-chief scientist on Leg 168. He was fully recognized as a world leader in subseafloor hydrogeology in co-leading that working group at the COMPLEX workshop, and he was then appointed to SCICOM, the iPC, and the SPC for 2001-2004. During that term he demonstrated a thorough, even-handed approach and was highly valued for his penetrating advice on all matters hydrological as well as common sense on other issues. It is entirely fitting that he was named co-chief scientist of the very first IODP expedition, which will push the limits of subseafloor hydrogeology in scientific ocean drilling. As Andy rotates off the SPC, we thank him for his service and wish him well. Eventually, we hope he will find time to recharge into the SAS, even while he continues to expand the realm of subseafloor hydrogeology.

**SPC Consensus 0406-29:** The SPC thanks Hisao Ito for his great contributions to the SPC as well as the iPC over the last three years as a seismic specialist. Ito-san is in some sense a typical Japanese gentleman; he is rather quiet and trustworthy, but hot-blooded. We definitely need such a member and hope to see him return to the SAS in the near future.

**SPC Consensus 0406-30:** This is the last SPC meeting for Ted Moore, one of the great champions of scientific ocean drilling. Ted led the IODP Planning Subcommittee (IPSC) in the Herculean task of developing the nuts and bolts of IODP from 1999 to 2001. Ted then co-chaired the interim Planning Committee from 2001 until 2003, and with his colleagues engineered the seamless transition from ODP to IODP. Now, in “retirement”, Ted prepares to cruise to the high Arctic as a member of the shipboard scientific party of the Arctic Coring Expedition. We remind Ted that though the Lomonosov Ridge may be far away, he can run but he cannot hide. The international scientific ocean drilling community will likely soon again need his unparalleled leadership and matchless integrity. Therefore, we say *arigato gozaimashita!* but not good-bye.

**SPC Consensus 0406-31:** The SPC expresses its deep appreciation to Yoshiyuki Tatsumi for his long-term dedication to the success of this committee, in particular for his energetic efforts since joining the iPC in 2001. We also acknowledge his strong contributions in initiating the IODP, including key roles in CONCORD, development of the IODP Initial Science Plan, *Earth, Oceans, and Life*, and founding and building JDESC. We fully anticipate that he will continue contributing to the success of scientific drilling in his new roles, including overseeing this committee, and we wish him the very best fortune in his future endeavors.

**SPC Consensus 0406-32:** The SPC thanks Yoshiyuki Tatsumi for his efforts in hosting this meeting and Toru Nishikawa and Seiko Asaka for their able hand in ensuring that everything went smoothly. Meeting participants truly appreciate the fine hospitality, delectable cuisine, and thirst-quenching refreshments featured at the convivial opening banquet in the Metasequoia Room, as well as the educational tour of the Earth Simulator.

The committee adjourned the meeting at 17:20.