

# IODP Science Planning Committee

5<sup>th</sup> Meeting, 14-17 March 2005

The Altis Hotel  
Lisbon, Portugal

## *Science Planning Committee - SPC*

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Keir Becker (vice-chair)	Rosenstiel School of Marine & Atmospheric Science, University of Miami, USA
Barbara Bekins	U.S. Geological Survey, USA
Hans Brumsack	Institut für Chemie und Biologie des Meeres (ICBM), Universität Oldenburg, Germany
Tim Byrne*	Department of Geology and Geophysics, University of Connecticut, USA
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
Patricia Fryer*	Hawaii Institute of Geophysics, University of Hawaii, USA
Benoît Ildefonse	Laboratoire de Tectonophysique, ISTEEM, Université Montpellier II, France
Hisao Ito <sup>b</sup>	Geological Survey of Japan, Japan
Hodaka Kawahata	Geological Survey of Japan, Japan
Jeroen Kenter	Faculty of Earth and Life Sciences, Vrije Universiteit, The Netherlands
Hiroshi Kitazato	Institute for Research on Earth Evolution (IFREE), JAMSTEC, Japan
Chris MacLeod*	Department of Earth Sciences, Cardiff University, United Kingdom
Ken Miller	Department of Geological Sciences, Rutgers University, USA
James Mori*	Disaster Prevention Research Institute, Kyoto University, Japan
Ritsuo Nomura	Faculty of Education, Shimane University, Japan
Julian Pearce <sup>c</sup>	Department of Earth Sciences, Cardiff University, United Kingdom
Terry Quinn	College of Marine Science, University of South Florida, USA
Wonn Soh*	Institute for Research on Earth Evolution (IFREE), JAMSTEC, Japan
Tomochika Tokunaga <sup>d</sup>	Department of Geosystem Engineering, University of Tokyo, Japan
Hiroyuki Yamamoto	Department of Marine Ecosystem Research, JAMSTEC, Japan
Zuyi Zhou	Department of Marine Geology and Geophysics, Tongji University, China

<sup>a</sup>Alternate for Patricia Fryer.

<sup>b</sup>Alternate for James Mori.

<sup>c</sup>Alternate for Chris MacLeod.

<sup>d</sup>Alternate for Wonn Soh.

\*Unable to attend.

## *Liaisons, Guests, and Observers*

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Jamie Allan	National Science Foundation (NSF), USA
Jan Backman (Exp. 302)	Department of Geology and Geochemistry, Stockholm University, Sweden
Jack Baldauf	JOI Alliance, Texas A&M University, USA
Fernando Barriga (Host)	Departamento de Geologia, Faculdade de Ciências, Universidade de Lisboa, Portugal
Gilbert Camoin (SSEP)	CEREGE-CNRS, France
Harry Doust (ILP)	Faculty of Earth and Life Sciences, Vrije Universiteit, The Netherlands
Nobuhisa Eguchi	IODP Management International, Inc., Sapporo Office, Japan
Dan Evans	ECORD Science Operator (ESO), British Geological Survey, United Kingdom
Jun Fukutomi	Advanced Earth Science and Technology Organization (AESTO), Japan
Ulrich Harms (ICDP)	GeoForschungsZentrum Potsdam, Germany
Tom Janecek	IODP Management International, Inc., Washington, D.C. Office, USA
Barry Katz (PPSP)	Energy Technology Company, ChevronTexaco, USA
Kenji Kimura	Ministry of Education, Culture, Sports, Science, and Technology (MEXT), Japan
Shin'ichi Kuramoto	Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Hans Christian Larsen	IODP Management International, Inc., Sapporo Office, Japan
Mike Lovell (SciMP)	Department of Geology, University of Leicester, United Kingdom
Catherine Mevel	ECORD Management Agency (EMA), Institut de Physique du Globe de Paris, France
José Hipólito Monteiro	Departamento de Geologia Marinha, Instituto Geológico e Mineiro, Portugal
Kiyoshi Otsuka	Advanced Earth Science and Technology Organization (AESTO), Japan
Jeff Schuffert	IODP Management International, Inc., Sapporo Office, Japan

Roger Searle (SSP) Department of Earth Sciences, University of Durham, United Kingdom  
Mike Underwood (SSEP) Department of Geological Sciences, University of Missouri, USA

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## EXECUTIVE SUMMARY (v3.0)

### 1.2. Approve last SPC meeting minutes

**SPC Consensus 0503-1:** The SPC approves the minutes of its fourth meeting on 25-27 October 2004 in Corvallis, Oregon, U.S.A.

### 1.3. Approve SPC meeting agenda

**SPC Consensus 0503-2:** The SPC approves the revised agenda of its fifth meeting on 14-17 March 2005 in Lisbon, Portugal.

### 1.4.2. Conflict-of-interest statements

**SPC Consensus 0503-3:** The SPC will treat conflicts of interest separately in reviewing proposals currently eligible for possible ranking and those currently residing with the Operations Task Force (formerly OPCOM) from the September 2003 and June 2004 SPC rankings.

## 4. Implementing Organization (IO) reports

### 4.3. ECORD Science Operator (ESO)

**SPC Consensus 0503-4:** As a first priority in scheduling mission-specific platform (MSP) operations, the SPC recommends implementing only highly ranked proposals, even if it means not conducting an MSP operation in a particular year so that the IODP can obtain sufficient resources to implement the highest ranked science in other years.

## 6. SAS Panel reports

### 6.1. Science Steering and Evaluation Panels (SSEPs)

**SPC Consensus 0503-5:** The SPC receives SSEPs Recommendations 0411-3, 0411-04, and 0411-5 on the status of active proposals. The committee recommends deactivating a drilling proposal if the proponents have not submitted a revised proposal, addendum, response letter, or site-survey data within a three-year period, and proponents can only reactivate such a proposal by submitting a new proposal that receives a new identification number. The SPC also recommends that proponents of proposals that have shown no activity for the last three years receive notice that they must submit an updated proposal by 1 October 2005 to keep the proposal active. These recommendations do not apply to proposals residing with the Operations Task Force.

**SPC Consensus 0503-6:** The SPC receives SSEPs Recommendation 0411-6 on proposal handling and recommends that proposals not forwarded to the Operations Task Force because of a low ranking may return to the Science Steering and Evaluation Panel (SSEP) for possible revision and that revised proposals may cycle in this manner only once between the SPC and the SSEP.

### 6.2. Site Survey Panel (SSP)

**SPC Motion 0503-7:** The SPC approves Dale Sawyer as the new vice-chair of the Site Survey Panel (SSP), effective immediately.

*Becker moved, Quinn seconded; 16 in favor, 2 non-voting (Ildefonse, Zhou), 1 absent (Byrne).*

### **6.3. Scientific Measurements Panel (SciMP)**

**SPC Consensus 0503-8:** The SPC accepts SciMP Recommendation 0502-2 on disseminating scientific results during expeditions and moratoria and forwards it to the Science Policy and Planning Oversight Committee (SPPOC), the IODP-MI, and the implementing organizations.

**SPC Consensus 0503-9:** The SPC accepts SciMP Recommendation 0502-4 on continuing the Paleontology Working Group until the end of calendar year 2006.

**SPC Consensus 0503-10:** The SPC receives SciMP Recommendations 0502-3 on investigating real-time data transmission between downhole tools and drilling platforms; 0502-5 on continuing the Micropaleontology Reference Centers in the IODP; 0502-6, 0502-7, 0502-8, and 0502-10 on various shipboard instruments and equipment; and 0502-9 on technician training. The committee forwards these seven recommendations to the IODP-MI and implementing organizations.

### **6.5. Industry Liaison Panel (ILP)**

**SPC Consensus 0503-11:** The SPC accepts ILP Recommendation 0502-3 on revising the terms of reference for the new Industry-IODP Science Program Planning Group and forwards it to the Science Policy and Planning Oversight Committee (SPPOC).

**SPC Consensus 0503-12:** The SPC accepts ILP Recommendation 0502-5 on developing a comprehensive meta-database focusing on seismic and borehole data within industry, academic, and governmental sectors and forwards this recommendation to the IODP-MI.

**SPC Consensus 0503-13:** The SPC receives ILP Recommendations 0502-7 and 0502-8 on defining, identifying, and facilitating industry-parented proposals and forwards these recommendations to the new Industry-IODP Science Program Planning Group.

## **8. Geographic distribution of IODP, ODP, and DSDP cores**

**SPC Consensus 0503-14:** The SPC recommends that the IODP adopt the geographic-based core distribution model for IODP, ODP, and DSDP cores as presented by the IODP-MI at the December 2004 SPPOC meeting (see SPPOC Consensus 0412-3 and SPC Consensus 0406-24), except that the western Pacific boundary should extend along the Aleutian trench instead of along the eastern coast of Kamchatka. The committee further recommends an additional fundamental guideline of storing cores from the same expedition(s) in the same repository. Given that scientific and logistical concerns may occasionally justify deviating from this model, the SPC will provide guidance as appropriate on preferred repositories when forwarding proposals for the Operations Task Force to consider in developing drilling schedule scenarios.

## 10. Clarify status of proposals residing with the Operations Task Force

**SPC Consensus 0503-15:** The SPC recommends that all fully or partially unscheduled proposals forwarded previously to the Operations Task Force as part of the highest priority Group I should remain for now with the Operations Task Force for them to consider in developing drilling schedule scenarios for FY2006 and beyond. This group includes: Proposals 477-Full4 Okhotsk/Bering Plio-Pleistocene, 482-Full3 Wilkes Land Margin, 519-Full2 South Pacific Sea Level, 545-Full3 Juan de Fuca Flank Hydrogeology, 553-Full2 Cascadia Margin Hydrates, 564-Full New Jersey Shallow Shelf, 589-Full3 Gulf of Mexico Overpressures, 600-Full Canterbury Basin, 603A-Full2 NanTroSEIZE Phase 1, 603B-Full2 NanTroSEIZE Phase 2, and 621-Full Monterey Bay Observatory. To evaluate further the status of the unscheduled portions of Proposal 553-Full2 and 589-Full3, the SPC requests progress reports on Expeditions 308 Gulf of Mexico Hydrogeology and 311 Cascadia Margin Gas Hydrates at the October 2005 SPC meeting.

**SPC Consensus 0503-16:** The SPC recommends combining the objectives of the unscheduled Irminger Basin sites of Proposal 572-Full3 North Atlantic Paleoclimate with those of Proposal 651-APL Irminger Basin Microbiology in a new proposal that should also consider the initial results of Expeditions 303 North Atlantic Paleoclimate I and 306 North Atlantic Paleoclimate II.

**SPC Consensus 0503-17:** The SPC recognizes Proposal 650-APL Tahiti Reef Imaging as a potentially excellent and exciting added value to the impending IODP Expedition 310 Tahiti Sea Level. The committee remains supportive of and recommends conducting the proposed ancillary project, as long as it does not impact the highly ranked science of the scheduled drilling expedition.

**SPC Consensus 0503-18:** In the event of catastrophic hole failure on Expeditions 309 Superfast Spreading Crust II or 313 Superfast Spreading Crust III, the SPC recommends offsetting and starting a new hole with the same scientific objectives. (*Note: Superfast Spreading Crust III subsequently rescheduled as Expedition 312.*)

**SPC Motion 0503-19:** In the event that the USIO does not receive permission to drill at sites URSA-1B or URSA-2C (approximately 7.5 and 4.2 operational days, respectively) on Expedition 308 Gulf of Mexico Hydrogeology, the SPC recommends the contingency plans of either drilling alternate sites in the Brazos Trinity or Ursa Basins, expanding the geotechnical studies at the permitted sites, expanding the logging program, conducting Proposal 664-APL Gulf of Mexico Source-to-Sink (see SPC Consensus 0503-23), or some combination of these options.

Note that it is not viable to reschedule the corresponding days to the end of the current operating phase because the USIO plans to begin demobilizing the vessel during the final Balboa-Galveston transit and would thus have to compensate for the lost working days by cutting an additional 7-14 days of science from the operating schedule.

*Bekins moved, Filippelli seconded; 15 in favor, 1 opposed (Kitazato), 2 non-voting (Ildefonse, Zhou), 1 absent (Byrne).*

## 11. Global ranking of proposals

### 11.1. Select proposal pool to rank

**SPC Consensus 0503-20:** The SPC excludes Proposal 557-Full2 Storegga Slide Gas Hydrates from the current pool of proposals for global scientific ranking because of recent correspondence from the proponents indicating their intent to update the proposal in the near future with new data, new drilling sites, and refocused scientific objectives.

### 11.4. Select group of proposals to forward to the Operations Task Force

**SPC Consensus 0503-21:** The SPC forwards the top three of nine ranked proposals, 603C-Full NanTroSEIZE Plate Interface, 595-Full3 Indus Fan and Murray Ridge, and 626-Full2 Pacific Equatorial Age Transect, for the Operations Task Force to consider in developing drilling schedule scenarios for FY2007 and beyond.

**SPC Consensus 0503-22:** The SPC returns Proposal 651-APL Irminger Basin Microbiology to the Science Steering and Evaluation Panel (SSEP) for full nurturing and evaluation because the IODP cannot schedule the project during the available time window without an ice support vessel (see also SPC Consensus 0503-16).

**SPC Consensus 0503-23:** The SPC recognizes that Proposal 664-APL Gulf of Mexico Source-to-Sink involves interesting science but requires additional evaluation within the science advisory structure. The committee therefore requests the Science Steering and Evaluation Panel (SSEP) to provide a written evaluation of Proposal 664-APL by 1 April 2005. The SPC will then decide whether to forward Proposal 664-APL to the Operations Task Force as a contingency option for Expedition 308 Gulf of Mexico Hydrogeology (see SPC Motion 0503-19).

The SPC considered the following motion by e-mail in early April 2005, but the motion did not receive the required affirmative vote of at least two-thirds of all members present and eligible to vote; hence, Proposal 664-APL did not go forward to the Operations Task Force.

**SPC Motion 0504-X:** After considering the requested special review of Proposal 664-APL Gulf of Mexico Source-to-Sink provided by the Science Steering and Evaluation Panel (SSEP) in response to SPC Consensus 0503-23, the SPC forwards this ancillary project letter to the Operations Task Force as a contingency option for Expedition 308 Gulf of Mexico Hydrogeology (see also SPC Motion 0503-19).

*Becker moved, Kenter seconded; 5 in favor (Becker, Duncan, Filippelli, Kenter, Quinn), 10 opposed, 1 abstained (Bekins), 2 non-voting (Ildefonse, Zhou), 1 absent (Byrne).*

**SPC Consensus 0503-24:** The SPC decides not to forward Proposal 666-APL SCIMPI Tool Development to the Operations Task Force because of significant concerns about the feasibility of developing and adapting the proposed new tool in the short time remaining before the start of Expedition 312 Monterey Borehole Observatory in October 2005. The committee nonetheless encourages the proponents to submit an expanded proposal on the SCIMPI concept and development plan as soon as possible. (*Note: Expedition 312 Monterey Borehole Observatory subsequently cancelled.*)

**SPC Consensus 0503-25:** The SPC recognizes the importance of Proposal 668-APL Oceanic Core Complex Seismics for obtaining VSP and sonic logging data at IODP Site U1309, as originally proposed for Expeditions 304 and 305, to integrate with existing and possible future detailed seismic surveys of the region. The SPC believes, however, that a properly designed and executed OBS survey with appropriate platform and technology would best address the objectives of the proposed OBS experiments. The committee therefore requests the Science Steering and Evaluation Panel (SSEP) and the Site Survey Panel (SSP) to provide a written evaluation of Proposal 668-APL by 1 April 2005. The SSP should specifically comment on appropriate VSP source technology. The SPC will then decide whether to forward Proposal 668-APL to the Operations Task Force for potential scheduling on a contingency basis if time becomes available and if the USIO can provide the recommended VSP source.

The SPC considered the following motion by e-mail in early April 2005, but the motion did not receive the required affirmative vote of at least two-thirds of all members present and eligible to vote; hence, Proposal 668-APL did not go forward to the Operations Task Force.

**SPC Motion 0504-X:** After considering the requested special review of Proposal 668-APL Oceanic Core Complex Seismics provided by the Science Steering and Evaluation Panel (SSEP) and the Site Survey Panel (SSP) in response to SPC Consensus 0503-25, the SPC forwards the VSP and sonic logging components of this ancillary project letter to the Operations Task Force for potential scheduling.

*Duncan moved, Filippelli seconded; 10 in favor, 5 opposed (Ito, Kitazato, Miller, Nomura, Quinn), 1 abstained (Bekins), 2 non-voting (Ildefonse, Zhou), 1 absent (Byrne).*

## **12. SPC working group reports**

### **12.1. Scientific assessment of expeditions**

**SPC Consensus 0503-26:** The SPC accepts the modified report of its own working group for scientific assessment and forwards it to the Science Policy and Planning Oversight Committee (SPPOC) for consideration.

### **12.2. Program Planning Groups (PPGs) and Detailed Planning Groups (DPGs)**

**SPC Consensus 0503-27:** The SPC accepts the modified report of its own working group for program planning groups (PPGs) and detailed planning groups (DPGs) and forwards it to the Science Policy and Planning Oversight Committee (SPPOC) for consideration.

## **13. IODP proposal guidelines**

**SPC Consensus 0503-28:** The SPC establishes a working group to advise the IODP-MI Sapporo office on unifying the proposal submission guidelines, data formatting guidelines, and the Matrix working group report. The group composed initially of Coffin, Becker, and SSEP Co-chair Camoin should report at the October 2005 SPC meeting.

## **15. Development of Annual Engineering Plans**

### **15.2. FY2006 and FY2007 Engineering Plan Development**

The SPC received the CDEX and USIO engineering development proposals in late April 2005 and responded by email to specify their individual priorities. The following statement from early May 2005 summarizes the overall response.

**SPC Consensus 0505-1:** In response to an IODP-MI request, the SPC prioritizes the FY2006 engineering developments proposed by CDEX and the USIO in the following order: 1) long-term monitoring system, 2) pulsed telemetry module, and 3) common bottom-hole assembly. All three of the proposed engineering developments would contribute to the goals of the IODP Initial Science Plan, and all three deserve support at some point. The committee regards the long-term monitoring system as critical to the strategic success of NanTroSEIZE and other proposals requiring such installations, whereas the other two proposed developments represent incremental, though not insignificant, improvements of existing technology that would tactically benefit many expeditions. Given the levels of innovation, effort, and time involved in developing the long-term monitoring system, and the widely held opinion that NanTroSEIZE in particular and borehole observatories in general will comprise centerpieces of the first decade of the IODP, the SPC recommends commencing the engineering of this system as soon as possible.

### **16. Monterey Bay Observatory: MARS-IODP borehole management**

**SPC Consensus 0503-29:** The SPC receives SciMP Recommendation 0502-1 and applauds the underlying efforts to begin identifying policy and management guidelines on using IODP boreholes as seafloor observatories. The committee forwards this recommendation (and the related report from SciMP Action Item 0502-9) to the IODP-MI and its anticipated observatories task force, with the advice to consider the Monterey boreholes as a test case for developing protocols on using IODP boreholes as seafloor observatories.

### **17. Third-Party Tools policy**

**SPC Consensus 0503-30:** The SPC appreciates the work of the Scientific Measurements Panel (SciMP) to date on drafting a third-party tools policy and requests the STP to provide a temporary policy by 1 April 2005.

The SPC received the temporary third-party tools policy and passed the following motion by e-mail voting in early April 2005.

**SPC Motion 0504-1:** The SPC commends the Scientific Technology Panel (STP) for providing a temporary third-party tools policy in a timely response to SPC Consensus 0503-30. The committee accepts this temporary policy and forwards it to the Science Planning and Policy Oversight Committee (SPPOC) for consideration.

*Duncan moved, Filippelli seconded; 15 in favor, none opposed, 1 abstained (Miller), 2 non-voting (Kenter, Zhou), 1 absent (Byrne).*

### **18. Proposal confidentiality policy**

**SPC Consensus 0503-31:** The SPC accepts the slightly modified proposal confidentiality policy and forwards it to the Science Policy and Planning Oversight Committee (SPPOC) for consideration.



## 20. Other business

**SPC Consensus 0503-32:** The SPC thanks Ken Miller for his most recent contribution to scientific ocean drilling through his service on the SPC. Ken's diligence, high standards, professionalism, and dedication to all scientific drilling throughout his career serve as a model for all members of the science advisory structure.

**SPC Consensus 0503-33:** The SPC thanks Wonn Soh for his powerful work as a member of this committee since joining the first SPC meeting in Sapporo. As a marine geologist who studies sedimentary processes at active continental margins, he has made invaluable contributions to the committee and to the IODP in general through his passionate actions and comments, much like an earthquake-generated turbidity current may spread rapidly over a sedimentary basin. We are sorry that Wonn Soh leaves the SPC in the wake of a *tsunami*. However, we feel certain that he will stay active in the IODP community and continuously promote IODP science with his quake-like energy.

**SPC Consensus 0503-34:** The SPC expresses its extreme gratitude to Mike Coffin for his service as the first chairperson of the committee. All SPC members have warmly appreciated his respectful and deliberate style and his careful guidance through the initial phase of the IODP. Non-native English speakers would like to express sincere thanks to Mike for his ability to ensure that all members were fully integrated into the functioning of the committee.

**SPC Consensus 0503-35:** The SPC graciously thanks Fernando Barriga, supported by José Monteiro, for his superb efforts in hosting this meeting, and Celia Lee and Mafalda Cristavão for their able and hospitable hand in ensuring that everything, including transportation, accommodation, sustenance, meeting room relocation, and social events, went smoothly. Meeting participants truly appreciated the congenial port wine reception at the Instituto do Vinho do Porto, the festive social dinner with fado accompaniment at the Timpanas restaurant, and the fine spring weather in sunny Lisbon.

# IODP Science Planning Committee

5<sup>th</sup> Meeting, 14-17 March 2005

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MINUTES (v1.0)

Monday

14 March 2005

09:00-17:30

## 1. Introduction

### 1.1. Welcome and meeting logistics

SPC Chair Mike Coffin opened the meeting at 09:00 and asked the participants to introduce themselves. Meeting host Fernando Barriga of the University of Lisbon welcomed everyone to the city and explained the meeting logistics and social arrangements.

### 1.2. Approve last SPC meeting minutes

Coffin asked for suggested changes to the minutes of the previous meeting. The committee offered no comments and approved the minutes by consensus.

<b>SPC Consensus 0503-1:</b> The SPC approves the minutes of its fourth meeting on 25-27 October 2004 in Corvallis, Oregon, U.S.A.
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### 1.3. Approve SPC meeting agenda

Coffin proposed inserting a report from the panel chairs (PANCH) meeting under Agendum 7 and adding a presentation on mission-specific platform (MSP) options in FY2005 and FY2006 as part of the ECORD Science Operator (ESO) report under Agendum 4.3. He also noted that Agendum 9 would include two new ancillary project letters (666-APL and 668-APL) submitted just prior to the meeting and forwarded to the SPC without a full review by the Science Steering and Evaluation Panel (SSEP). The committee offered no comments and approved the modified agenda by consensus.

<b>SPC Consensus 0503-2:</b> The SPC approves the revised agenda of its fifth meeting on 14-17 March 2005 in Lisbon, Portugal.
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## 1.4. SPC procedures and protocol

### 1.4.1. SPC terms of reference

Coffin noted several minor changes to the SPC terms of reference and said that he would explain the details later.

### 1.4.2. Conflict-of-interest statements

Coffin reviewed the conflict-of-interest policy and asked the meeting participants to declare all potential conflicts. He noted that two regular SPC members (Fryer and Soh) who serve as proponents on proposals up for review (505-Full5; 603-CDP3 and 603A-Full2) would not attend the meeting and thus avoided any conflict of interest. The committee members and other meeting participants declared the following direct or potential indirect conflicts of interest regarding the proposals on the agenda.

**Proponent of proposal currently up for review:** Ildefonse (668-APL), Underwood (603-CDP3, 603A-Full2), Barriga (584-Full2).

**Proponent of proposal currently residing with the Operations Task Force:** Becker (545-Full3), Bekins (621-Full), Kenter (650-APL), Miller (564-Full), Camoin (519-Full2, 650-APL).

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

**Colleague at same institution as proponents:** Coffin (477-Full4, 505-Full5, 595-Full3, 603-CDP3, 603A-Full2, 603B-Full2), Duncan (547-Full4), Ildefonse (537A-Full3), Kenter (595-Full3), Miller (584-Full2), Searle (589-Full3).

**Proponent of proposal for scheduled expedition related to APL currently up for review:** Bekins (621-Full, Exp. 312, 666-APL).

Coffin indicated that he did not regard institutional conflicts as grounds for necessary exclusion from the proceedings. He also proposed that anyone conflicted under Agendum 10 concerning the status of proposals already residing with the Operations Task Force would not have a conflict under Agendum 9 for presenting and discussing the proposals currently up for review and possible ranking at this meeting. The committee agreed.

**SPC Consensus 0503-3:** The SPC will treat conflicts of interest separately in reviewing proposals currently eligible for possible ranking and those currently residing with the Operations Task Force (formerly OPCOM) from the September 2003 and June 2004 SPC rankings.

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

Coffin briefly reviewed several salient points from Robert's Rules of Order.

## **2. Agency reports**

### **2.1. Ministry of Education, Culture, Sports, Science, and Technology (MEXT) and National Science Foundation (NSF)**

Kenji Kimura reported that a MEXT advisory committee on domestic aspects of ocean drilling met in January 2005. He mentioned an IODP education and outreach campaign in universities and museums and a meeting in early March 2005 with Korean scientists, who would like to join the program in FY2005 but must discuss the means of funding before formally deciding. Kimura noted that the Japanese government drafted a budget in December 2004 for the Japanese FY2005. He expected to see construction of the *Chikyu* completed by the end of July 2005 and hoped that the ship would operate for the IODP by October 2007.

Jamie Allan took the NSF report as read. He added that the U.S. FY2006 budget included a \$59.8 million request for acquiring a non-riser vessel, and the following year would bring an additional \$42.1 million request for the final conversion.

Duncan asked if the current education and outreach campaign in Japan would provide materials for international usage. Kimura characterized it as only a national campaign.

### **2.2. ECORD Managing Agency (EMA)**

Catherine Mevel took the EMA report as read. She referred briefly to meetings with Poland and the Baltic countries about joining ECORD and noted that Estonia had invited her to give a presentation on the IODP. Mevel explained that ECORD had to move platform operating costs (POCs) forward to cover the expenses of Expedition 302 Arctic Coring and thus would have less funding available in FY2006. She mentioned several ESF programs in place for funding, including support for European scientists to hold workshops for preparing IODP proposals.

Filippelli asked if such workshops could aim only for developing proposals or also for synthesis activities. Mevel replied that they would convene primarily for organizing site surveys and drilling proposals but perhaps could relate to synthesis activities as well.

### **2.3. Ministry of Science and Technology (MOST)**

Zuyi Zhou outlined the structure of IODP-China. He noted that the Chinese Natural Science Foundation sponsored a meeting in January 2005 to discuss proposal development strategy, and the IODP-China Committee and Scientific Committee met in early March in Beijing.

Zhou reported that officials from the Ministry of Science and Technology (MOST) had promised to seek more funding for IODP-related research activities and hoped to see closer ties with ICDP-China as well as integration with other national research programs. Zhou also noted that China hosted the February 2005 meeting of the Industry Liaison Panel (ILP) in Shanghai and would host the May 2005 SSEP meeting, also in Shanghai.

Kawahata asked about the number of Chinese institutes currently involved in IODP research. Zhou answered that China has fewer than ten research institutes and universities nationwide with marine science programs. Coffin cited the enthusiasm and growth of national key centers such as the new marine geology laboratory at Tongji University.

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

Hans Christian Larsen reported that both offices of the IODP-MI now have nearly full staffing. He noted the recent hiring of an assistant to the president and a Web master in the Washington, D.C. Office, plus a data management specialist and publication, data, and sample integration manager in Sapporo. He also expected to hire a new science coordinator focusing on site-survey data. Larsen announced that the current site-survey data bank (SSDB) contract would extend through May 2005 and the new contract would likely start in August, leaving no service in June and July. He explained that the IODP-MI issued a request for proposals for the new SSDB in December 2004 and received three responses. Larsen added that they had just finished assessing the proposals and could begin negotiating the contract in late March.

Larsen announced that the IODP-MI has formed a data management coordination group to ensure systematic, coordinated efforts across the different platforms and implementing organizations (IOs). He said that the group requested vision statements from the IOs in December 2004, and he highlighted several issues under consideration concerning the three independent database systems currently under development by the three IOs. Larsen also reviewed the new publications policy that calls for publishing all scientific papers in the open, peer-reviewed literature and for electronic, Web-based expedition reports, with links to scientific specialty papers, peer-reviewed data reports, and synthesis papers. He outlined the types of publications under the report series and under the proceedings of the IODP and described the new scientific drilling journal that will receive regular contributions from the ICDP. Larsen cited the IODP-MI contracts with the IOs, the Advanced Earth Science and Technology Organization (AESTO) in Japan, the SSDB, and a Web site developer, and he briefly noted the schedule of IODP science advisory structure (SAS) meetings plus an IODP management retreat in late May 2005.

Duncan asked about the assessment phase. Larsen explained the plan for assessing the scientific prospectus and preliminary reports in conjunction with the SPC. He deferred discussing the matter of longer-term assessment until after the Science Planning and Policy Oversight Committee (SPPOC) decides how to handle it. Allan asked about the possibility of revising the expedition summary with later results. Larsen suggested that such results could appear in synthesis papers or in the new scientific drilling journal. Miller asserted that expedition summaries and site chapters must have a fixed date and should not change over time. He also recalled the past difficulty of getting synthesis papers.

Coffin inquired about the IODP-MI industry workshop. Larsen noted the rescheduling of the workshop for late May 2005 and explained the intent of fostering high-level links with industry. Kenter worried about the lack of coordination with the ILP because he viewed the two levels as not completely detached within industry. Larsen suggested relaying such concerns to Talwani, who organized the industry workshop. Coffin noted that Talwani had asked him to recommend speakers from the SAS for the workshop.

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

### **4.1. Center for Deep Earth Exploration (CDEX)**

Shin'ichi Kuramoto reported on CDEX activities and mentioned the memorandum of understanding established between JAMSTEC and the IODP-MI in November 2004. He updated the *Chikyu* construction and operations schedule, noting that safety concerns had delayed the delivery of the ship until the end of July 2005, and he stressed that CDEX still aimed for IODP operations beginning in early FY2007. Kuramoto reported on the site-survey status of the NanTroSEIZE project, cited the challenges of the NanTroSEIZE long-term borehole observatory, and gave an overview of the monitoring system under design. He also outlined the structure and development schedule of the SIO<sub>7</sub> data management system, including the J-CORES and DEXIS components for core and site-survey data, and he showed examples of the composite log viewer and visual core description applications. Kuramoto described the layout of the Kochi Core Center and publicized the new glossy CDEX newsletter *Chikyu Hakken* or *Earth Discovery*.

Filippelli asked whether the shakedown cruises of the *Chikyu* would involve any science or just operations. Kuramoto replied that the plans at the moment involved just operations. Larsen asked about the distribution of the newsletter. Kuramoto answered that CDEX would distribute the newsletter to the international community.

### **4.2. JOI Alliance**

Jack Baldauf reported on recent JOI Alliance activities, including the nine-year proposal for science operating costs (SOCs) submitted to the IODP-MI, the subsequent contract negotiations, the FY2005 program plan addendum to the IODP-MI and the NSF, the extended subcontracts and environmental assessment for Phase 1, and the completed FY2004 Annual Report. Baldauf briefly reviewed the accomplishments of Expeditions 303 North Atlantic Paleoclimate I, 304 Oceanic Core Complex I, and 305 Oceanic Core Complex II. He noted that the results of Expedition 303 had prompted an addendum to the prospectus of Expedition 306 and that a weather observer would sail on Expedition 306. Baldauf previewed the upcoming Expeditions 307-309 and 311-312, listing the co-chief scientists and staffing target dates and emphasizing the very tight time constraints. He also described the safety issues for Expedition 308 and noted that it would require re-supplying the drilling mud. Baldauf showed the timeline and organizational chart for the U.S. scientific ocean drilling vessel (SODV) acquisition project. He noted that the process of assessing the responses to the RFP began in February 2005, the design phase would begin by May 2005, shakedown cruises should begin in fall 2007, and IODP operations should begin by March 2008, depending on the budget and other factors. Baldauf referred to the SODV project briefing book available online and requested community feedback over the next several months.

Brumsack asked about the length of the hiatus in drilling activities. Baldauf said that it would last at least one year. Larsen asked about the mechanism for soliciting scientific advice on the design of the non-riser vessel. Baldauf expected that individuals from the scientific community would serve on the design team and later on the review committee. Kenter asked if enough time remained to solve the contingency issues for the scheduled Gulf of Mexico and Monterey expeditions. Baldauf expressed concern mainly about identifying the scientific priorities in the event of not receiving permission to drill at two of the proposed sites in the Gulf of Mexico, whereas he remained optimistic about the outcome of discussions occurring later this month concerning the Monterey sanctuary. Coffin stated that the committee would consider contingency plans under Agendum 10 for the Gulf of Mexico and Superfast expeditions.

### **4.3. ECORD Science Operator (ESO)**

Dan Evans reported on ESO activities. He noted that the scientific party of Expedition 302 Arctic Coring Expedition (ACEX) met at the old Bremen core repository for thirteen days in November 2004, whereas the next MSP scientific party would meet in the new facility. Evans described the internal assessment of ACEX as completed and submitted to the IODP-MI, and he added that the ACEX experience and review committee recommendations should benefit the planning of the Tahiti Sea Level Expedition scheduled for this year. Evans diagrammed the Tahiti drilling sites and mentioned the project handbook in preparation and the measurements plan submitted to the Scientific Measurements Panel (SciMP). He said that the ESO had selected the science party, obtained the drilling permits, and issued the ship tenders in January 2005, but they had not signed any contracts yet. Evans described two of the three tendered vessels as fully compliant but very expensive, allowing only twenty days on site and therefore not feasible for achieving all of the scientific objectives. He described the third vessel as not fully compliant but cheaper and allowing forty days on site; however, the ESO must examine its capabilities.

Miller asked about the ESO budget for FY2005. Evans cited a budget of \$5 million in POCs and 1.8 million in SOCs. Coffin stated that the committee must explore the contingency plans tomorrow for the Tahiti Sea Level Expedition.

#### ***MSP options for FY2005 and FY2006***

On Wednesday afternoon, Dan Evans described the MSP options for FY2005 and FY2006. Camoin, Kenter, and Miller left the room as conflicted proponents of available MSP proposals. Evans explained the current position of ship tenders for the Tahiti Sea Level Expedition. He stated that if the third vessel proves acceptable then the ESO would conduct the Tahiti expedition in FY2005. If the third vessel proves unacceptable, however, then the ESO could either conduct no operations in FY2005, conduct the Tahiti expedition using combined funds from FY2005 and FY2006, or combine Tahiti back to back with an FY2006 expedition using the same vessel, though practical and financial constraints might preclude the latter option. Evans noted that the ESO must submit a program plan and cost estimate for FY2006 by the middle of this April, but the most likely targeted project, Proposal 564-Full New Jersey Shallow Shelf, would cost approximately twice the available budget. He suggested that ECORD could afford an expedition for Proposal 581-Full2 Late Pleistocene Coralgall Banks in FY2006, but that proposal has not gone forward to the Operations Task Force. He also suggested the possibility of conducting Tahiti and Coralgall Banks expeditions back to back in FY2005 and FY2006, though such a joint operation might still exceed the available funds.

Doust asked about the chances of negotiating a lower rate for the first two Tahiti vessels and what it would cost to upgrade the third vessel. Evans conceded the possibility of negotiating a lower rate but at the moment did not envisage upgrading the third vessel. Becker asked about the possibility of sharing FY2006 and FY2007 funds to conduct Proposal 564-Full New Jersey Shallow Shelf in FY2006. Mevel said that she could not answer that question before the next ECORD Council meeting, but it seemed more feasible to consider that expedition for FY2007. Coffin asked about sharing FY2005 and FY2006 funds. Mevel agreed on the possibility. Janecek wondered about sharing SOCs. Allan said that the funding agencies would discuss that issue.

Mével stated that the ECORD funding agencies recognized that the *JOIDES Resolution* would not operate for most of FY2006, and they would strive to conduct an MSP project. Allan mentioned the expectation of conducting an MSP project every year. Mével believed that the memorandum of participation does not call for an MSP project every year, but ECORD

brought funds forward to conduct the Arctic Expedition, and that leaves an impending shortfall. Janecek asked if the funding agencies might develop a better opinion on the idea of not conducting an MSP expedition in a particular year. Kimura replied that the funding agencies would discuss the issue in the near future, and they would certainly want to know the opinion of the SAS.

Katz wondered if the Great Barrier Reef component of Proposal 519-Full2 represented a realistic option for FY2006 given the timing of the site survey and processing the data. Coffin noted the repeated delays in funding the necessary survey. He also raised the question of whether to provide more proposals to the Operations Task Force. Quinn preferred the idea of accumulating funds to conduct a higher-ranked proposal in the following year, and he definitely did not want to compromise the Tahiti Sea Level expedition with a second-tier ship. Coffin asked Quinn to draft a recommendation for the funding agencies.

**SPC Consensus 0503-4:** As a first priority in scheduling mission-specific platform (MSP) operations, the SPC recommends implementing only highly ranked proposals, even if it means not conducting an MSP operation in a particular year so that the IODP can obtain sufficient resources to implement the highest ranked science in other years.

## **5. Science Planning and Policy Oversight Committee (SPPOC) report**

Mike Coffin reviewed SPPOC Motion 0412-4 on approving the amended FY2005 schedule. He also briefly reviewed SPPOC Consensus 0412-7, 0412-8, 0412-9, 0412-10, and 0412-11 on the strategy for implementing the SPPOC mandate, 0412-12 on accepting the revised sample, data, and obligations policy, 0412-13 on accepting the revised publications policy, and 0412-14 on accepting the health, safety, and environment policy.

Bekins asked whether the SPPOC addressed the SPC concerns on the conflict-of-interest policy. Coffin replied that the SPPOC took no further action to revise the conflict-of-interest policy or require fully transparent voting by the SPC.

## **6. SAS Panel reports**

### **6.1. Science Steering and Evaluation Panels (SSEPs)**

Gilbert Camoin reported on the November 2004 SSEPs meeting in Okinawa, Japan. He listed the proposals reviewed, identified the conflicts of interest, and summarized the dispositions. He also summarized the final reviews and ratings of the four proposals forwarded to the SPC. Camoin presented SSEPs Consensus 0411-3 and Recommendations 0411-4 and 0411-5 on the status and handling of active and inactive proposals.

**SSEPs Consensus 0411-3:** The SSEPs recommend that the IODP-MI Office inform proponents of proposals that have not been reactivated since the beginning of the Interim Period (2001) that their proposals will be deactivated if they do not submit an updated version of their proposal for the next proposal submission deadline, April 1st 2005.

**SSEPs Recommendation 0411-4:** The SSEPs recommend to consider proposals as active if proponents have sent a progress report (e.g., summarizing site survey status, new data, etc.) to the IODP-MI Office within a three-year period.

**SSEPs Recommendation 0411-5:** The SSEPs recommend that inactivated proposals be removed from consideration by the SAS. After three years of inactivity, a proposal can only be reactivated by submitting a new proposal with a new number.

Coffin asked for comments on the SSEPs recommendations. Quinn wondered about the downside of eliminating proposals. Schuffert inquired about the purpose of deactivating

proposals for reasons other than judging them as unacceptable for scheduling. Coffin explained the need for having an accurate picture of proposal pressure for long-range planning. Kenter favored deactivating stale proposals. Brumsack also favored restricting the number of active proposals in the system and eliminating those that stand no chance of being implemented. He wondered if the program had ever scheduled a proposal that had shown no activity for several years. Becker said yes but noted that three and a half years had already passed since the transfer of proposals from JOIDES. Eguchi noted that only two weeks remained until the April 2005 proposal deadline. Coffin proposed accepting the premise of SSEP Consensus 0411-3 but with an October deadline for revised proposals. The committee agreed.

Coffin asked for additional comments on the other two SSEPs recommendations. Becker wondered if a progress report would constitute an addendum. Camoin said not necessarily, it could involve merely a letter of communication. Larsen foresaw administrative problems and wondered about the effects on highly ranked proposals that might show no activity for a while. Camoin suggested that such proposals would just require a letter to remain active. Larsen preferred receiving a revised proposal rather than just a letter. Becker proposed requiring a revised proposal within three years for all proposals remaining within the SAS, but only a progress report once a proposal has passed out of the SAS and resides with the Operations Task Force. Duncan agreed that proposals with the Operations Task Force should not need revising. Katz argued that the science behind a proposal could change after a couple of years with the Operations Task Force. Miller agreed that proposals could easily become outdated. Coffin remarked that some of the proposals now with the Operations Task Force have not been updated in three years. Eguchi wanted to clarify the concept of what would constitute a progress report or other update, as opposed to the standard categories defined in the proposal submission guidelines. Coffin sought a consensus for modifying the SSEPs recommendations to exclude proposals residing with the Operations Task Force and to accept the full range of existing proposal or data submission categories as an acceptable means of keeping a proposal active. The committee offered no further comments and accepted the proposed modifications by consensus.

**SPC Consensus 0503-5:** The SPC receives SSEPs Recommendations 0411-3, 0411-04, and 0411-5 on the status of active proposals. The committee recommends deactivating a drilling proposal if the proponents have not submitted a revised proposal, addendum, response letter, or site-survey data within a three-year period, and proponents can only reactivate such a proposal by submitting a new proposal that receives a new identification number. The SPC also recommends that proponents of proposals that have shown no activity for the last three years receive notice that they must submit an updated proposal by 1 October 2005 to keep the proposal active. These recommendations do not apply to proposals residing with the Operations Task Force.

Camoin presented SSEPs Recommendation 0411-6 on the cycling of proposals between the SPC and the SSEPs.

**SSEPs Recommendation 0411-6:** The SSEPs recommend that proposals not forwarded to the Operations Task Force based on their low ranking be returned to the SSEPs for possible revision and that revised proposals be cycled in this manner between the SPC and the SSEPs only once.

Becker thought it sounded too restrictive. Coffin proposed merely inserting the word may and accepting the modified recommendation. The committee consented.



**SPC Consensus 0503-6:** The SPC receives SSEPs Recommendation 0411-6 on proposal handling and recommends that proposals not forwarded to the Operations Task Force because of a low ranking may return to the Science Steering and Evaluation Panel (SSEP) for possible revision and that revised proposals may cycle in this manner only once between the SPC and the SSEP.

### **6.2. Site Survey Panel (SSP)**

Roger Searle reported on the February 2005 SSP meeting in Durham, U.K. He said that the panel generally supported the minor changes in its new draft terms of reference, and he added that they reached a consensus not to have presentations from vendors at SSP meetings. Searle explained the scheme for classifying the data completeness of proposed drilling sites, identified the declared conflicts of interest among SSP members, and summarized the classification of proposals with new data and those just forwarded to the SPC. He also announced that the panel recommended Dale Sawyer as its new vice-chair to replace outgoing co-chair Kyoko Okino. Searle volunteered to assume the chair position and proposed that Sawyer take over as chair after serving only eighteen months as vice-chair.

Coffin proposed delaying the vote on approving Sawyer until after the committee members had an opportunity to review his *curriculum vitae*. The committee voted the next day and unanimously approved Sawyer as the SSP vice-chair.

**SPC Motion 0503-7:** The SPC approves Dale Sawyer as the new vice-chair of the Site Survey Panel (SSP), effective immediately.

*Becker moved, Quinn seconded; 16 in favor, 2 non-voting (Ildefonse, Zhou), 1 absent (Byrne).*

### **6.3. Scientific Measurements Panel (SciMP)**

Mike Lovell reported on the outcome of the February 2005 SciMP meeting in Kona, Hawaii. He briefly reviewed a series of seven consensus statements and fifteen action items for information only and presented a series of ten recommendations for SPC approval. Lovell referred briefly to SciMP Recommendation 0502-1 on forming an observatories working group and noted the separate discussion to follow under Agendum 16. He then presented SciMP Recommendation 0502-2 on disseminating scientific results during expeditions and moratorium periods, in response to SPC Consensus 0410-29.

SciMP Recommendation 0502-02: SciMP recommends the following protocols regarding the dissemination of results during expeditions and moratorium periods:

- A. Where shore-based scientists form part of an Expedition Scientific Party, operators should provide daily progress reports to all shore-based expedition scientists.
- B. The full expedition scientific party must be recognized in press releases made during the expedition and scientists must be given the opportunity to review press releases. Press releases made during the expedition should be through IODP-MI.
- C. Co-chiefs are required to summarize the input to press releases from all participating scientists and present the revised version within a reasonable time frame. All critical scientific information pertaining to the expedition should only be conveyed to the press from the co-chiefs. However, this may be a problem because there will be cases where press releases would be made in languages that the co-chiefs are unfamiliar with. Therefore, the co-chiefs should prepare summaries that contain information that the science party can use for dissemination to the press in any language.
- D. The co-chiefs and IODP-MI should be notified of any press release made by any member of the science party during the post expedition moratorium period, as it may be difficult to solicit input from the entire science party for every press release.

E. During the expedition and moratorium all public dissemination of results must credit IODP specifically. Scientific communications must be co-authored by the full ship and shore based expedition parties (except where they have chosen to opt out). The science party must be given the opportunity to review all papers and abstracts submitted during this time.

Becker thought that points C and D seemed contradictory. Lovell did not believe so. Miller suggested that point C should also specify that press releases should go through the IODP-MI, for consistency with point B. Allan remarked that the program could not tell the co-chief scientists not to talk to the press, plus the science party members might hold divergent opinions. Miller doubted that the program could control press releases beyond those originating from the platform. Evans noted that the contract with the IODP-MI requires the IOs to issue press releases. Becker asked to clarify whether such releases go to the press or to the IODP-MI. Evans replied that they transmit them to the IODP-MI. Baldauf stated that the media would not regard most summaries generated by the scientific party as acceptable for press releases. Bekins questioned whether the SPC represented the proper venue for discussing this issue. Lovell noted that the recommendation included important issues such as crediting the whole science party and the IODP in press releases. Coffin supposed that the Education and Outreach Task Force would appreciate receiving advice from the SPC. He proposed accepting the modified recommendation and forwarding it to the IODP-MI.

**SPC Consensus 0503-8:** The SPC accepts SciMP Recommendation 0502-2 on disseminating scientific results during expeditions and moratoria and forwards it to the Science Policy and Planning Oversight Committee (SPPOC), the IODP-MI, and the implementing organizations.

Lovell presented SciMP Recommendation 0502-3 on real-time data transmission from downhole tools.

SciMP Recommendation 0502-3: SciMP recommends that all IOs investigate a means for real-time transmission of data to/from downhole tools as part of the platform's complement (ie, not "logging contractor"). Coupled to this recommendation is the modernizing of downhole tools to take advantage of this capability.

Coffin believed that the Scientific Technology Panel (STP) and the IOs could interact directly on this matter and the SPC did not need to act on it.

Lovell presented SciMP Recommendations 0502-4 on continuing the paleontology working group and 0502-5 on micropaleontology reference centers.

SciMP Recommendation 0502-04: In light of actions given to the paleontology specialist on SciMP, SciMP recommends the continuation of the Paleontology Working Group. The working group members should include the SciMP paleo specialist, at least one micropaleontological reference center curator, and other invited experts on an as needed basis. The working group would meet electronically and, if required, representatives will meet with SciMP/STP. This working group includes external members and should exist until the STP meeting at the end of 2006 in the first instance.

SciMP Recommendation 0502-05: SciMP recommends that the micropaleontology reference centers (MRCs) be continued in IODP. The MRC collections and curators represent an important resource to IODP for the production of micropaleontologic training and public education materials, for maintaining quality control of paleontologic and biostratigraphic data within IODP, as a liaison to the broader micropaleontologic community, and for insuring an archival legacy of IODP micropaleontologic recovery. MRCs should continue in IODP with

full access to samples, data, print or electronic sets of Expedition Reports and Expedition Science Summaries.

Coffin proposed accepting the fourth recommendation and receiving the fifth as information. The committee offered no further comments.

**SPC Consensus 0503-9:** The SPC accepts SciMP Recommendation 0502-4 on continuing the Paleontology Working Group until the end of calendar year 2006.

Lovell presented SciMP Recommendations 0502-6, 0502-7, and 0502-8 on shipboard equipment for microbiology, cathodoluminescence, and microwave digestion, respectively.

SciMP Recommendation 0502-06: SciMP recognizes that separate gases (N<sub>2</sub>; CO<sub>2</sub>-H<sub>2</sub> mix) and glove boxes will be available on all platforms, where necessary, as they will be required for microbiology and pore water analyses and sample preparation. SciMP recommends that the microbiological glove box should be compatible with use of UV radiation as a sterilization agent.

SciMP Recommendation 0502-07: SciMP recommends that cathodoluminescence capabilities be made available as part of the microscopy capabilities on both the riser and non-riser platforms.

SciMP Recommendation 0502-08: SciMP recommends the inclusion of microwave digestion capabilities on both the riser and non-riser platforms to facilitate complete dissolution of rocks and sediments, as well as increased sample throughput, for bulk sample geochemical measurements.

Coffin saw no need for SPC action on these three recommendations and concluded that the STP could communicate directly with the IODP-MI and the IOs. The committee agreed.

Lovell presented SciMP Recommendation 0502-9 on technician training.

SciMP Recommendation 0502-09: In response to community input from ODP experience, SciMP recommends that all IODP technical staff should have improved experience and training, such that the technical staff are skilled enough to understand how to judge data quality and the problems associated with obtaining data that are of the highest quality. IODP technical staff should undergo appropriate training such that they are competent in areas such as maintenance, trouble-shooting, software, and deviation from prescribed procedures should a given situation require it. SciMP anticipates that the Review Task Force will be able to provide feedback to SciMP on the success of this recommendation, to effectively close the loop.

Pearce believed that the scientific party holds the responsibility for ensuring good quality data. Baldauf claimed that the IOs have responsibility for ensuring the continuity of data and that the USIO had already started taking steps to improve technician training. He added, however, that training often suffers with budget cuts. Evans anticipated fewer difficulties for MSP expeditions because most of the analytical work occurs at the Bremen core repository. Kuramoto noted that the Kochi core center duplicates the shipboard laboratories of the *Chikyu* and provides an excellent opportunity for technician training. Coffin saw no need for SPC action, and the committee offered no further comments.

Lovell presented SciMP Recommendation 0502-10 on shipboard analytical balances.

SciMP Recommendation 0502-10: SciMP recommends that facilities for accurate weighing on a moving ship be made available on the riser and non-riser platforms. Such facilities will greatly increase the quality of geochemical data generated on these platforms, enhancing their usability in scientific publications.

Coffin again suggested receiving this recommendation and forwarding it to the IOs.

**SPC Consensus 0503-10:** The SPC receives SciMP Recommendations 0502-3 on investigating real-time data transmission between downhole tools and drilling platforms; 0502-5 on continuing the Micropaleontology Reference Centers in the IODP; 0502-6, 0502-7, 0502-8, and 0502-10 on various shipboard instruments and equipment; and 0502-9 on technician training. The committee forwards these seven recommendations to the IODP-MI and implementing organizations.

#### **6.4. Environmental Protection and Safety Panel (EPSP)**

Barry Katz reported on the December 2004 EPSP meeting in Chiba, Japan. He stated that panel had reviewed and approved all proposed drilling scheduled through January 2006 and expected to review Proposal 564-Full New Jersey Shallow Shelf again in June 2005. Katz summarized the EPSP reviews of the scheduled proposals, cited the need to start seeing plans for other rising drilling projects besides NanTroSEIZE, and wondered if the program needed a policy on drilling into active vent communities such as on the Cascadia margin. He reviewed several general EPSP issues on shallow hazard surveys and drilling into overpressured zones and noted that a working group had completed a draft policy on shallow hazard surveys and site selection. Katz mentioned the continuing discussion on the draft guidelines for reef drilling and explained that the panel still had some concerns about the policies and procedures for ensuring effective hydrocarbon monitoring when conducting logging-while-drilling (LWD) without prior coring. Katz also expressed discomfort with the modified EPSP terms of reference indicating that the panel members might rotate after only three years.

Baldauf agreed on the extreme importance of maintaining continuity among the EPSP membership. Coffin asked whether the study group on shallow hazard policies should report to the EPSP or the IODP-MI. Katz thought that they could work through the IODP-MI. Baldauf saw greater efficiency in having the EPSP involved at first. Coffin asked if the EPSP saw a need for having more-detailed health, safety, and environment (HSE) guidelines than those already approved by the SPPOC. Katz confirmed the need for general overarching principles and recognized the value of having more thorough guidelines. Baldauf suggested that the Operations Task Force should consider those issues during scheduling. Coffin asked if the Operations Task Force would appreciate more detailed guidelines from the SAS. Janecek said that the Operations Task Force would always welcome advice, but the lead agencies recommended keeping the HSE statement general. Allan affirmed that the lead agencies advised keeping the statement general to minimize the risk and liability on the IODP-MI as opposed to the platform operators.

Kuramoto remarked that riser and non-riser operations required different approaches, and JAMSTEC had begun developing its own policies for minimizing environmental impact. Evans agreed that the program should handle each project on a case-by-case basis. Katz suggested still identifying the conditions that would clearly lie out of bounds. Doust suggested that the IODP-MI should ask each IO to provide detailed policy statements. Coffin favored having an ability to inform proponents at an early stage about environmental limits. Kenter worried about excluding certain areas by definition without regard to the scale of impact. Bekins noted that cold seeps flow much more slowly than hydrothermal vents and the

megafauna return more slowly after a disturbance, resulting in potentially greater impacts. Yamamoto cited the difficulty of making a policy when data on the subject remain scarce and opinions vary even among deep-sea biologists on the sensitivity of communities. Duncan proposed conducting assessments of the impacts and contributing data to the issue. Baldauf characterized the issue as much broader than pertaining just to chemosynthetic communities, and he explained that any assessment would require submersible dives before and after drilling. Kitazato urged communicating better with the deep-sea biology community as they continue accumulating census data.

### **6.5. Industry Liaison Panel (ILP)**

Harry Doust reported on the February 2005 ILP meeting in Shanghai, China. He stated that the panel generally supported the change to the new Industry-IODP Science Program Planning Group (IS-PPG), but they recommended a clear statement of the respective roles of the PPG and the IODP-MI in terms of industry liaison activities, and they proposed several changes to the IS-PPG terms of reference. Doust reviewed the proposed concept for a seismic and borehole metadatabase, identified the active IODP proposals that would likely generate interest within industry, and presented several ideas for facilitating industry proposals. He proposed establishing small interest groups related to the main research themes of the IODP Initial Science Plan and mentioned several other initiatives related to ILP discussions in Europe and to Proposal 589-Full3 Gulf of Mexico Overpressures.

Doust presented ILP Consensus 0502-2 on the planned change to the IS-PPG and ILP Recommendation 0502-3 on suggesting minor changes to the draft terms of reference of the PPG.

ILP Consensus 0502-2: The ILP is happy with the proposed change of ILP to IS-PPG, with a revised mandate to define priority industry research in the IODP context and facilitate industry-parented proposals. It would like to express its appreciation for the support it has received from SPPOC and SPC with respect to the panel's activities, and its satisfaction with the increased flexibility that the new construction confers.

ILP Recommendation 0502-3: The ILP recommends minor changes to the draft mandate to reflect the integrative impact that industry can provide, and emphasises (i) the need for clear definitions of the future IS-PPG and IODP-MI roles with respect to industry liaison, and (ii) the need for continuity of membership in the transition from ILP to IS-PPG.

Becker thought that the changes to the draft mandate reflected strictly the hydrocarbon industry. Doust said only in terms of sharing high-quality data for continental margins. Coffin proposed accepting the recommendation, and the committee raised no objections.

**SPC Consensus 0503-11:** The SPC accepts ILP Recommendation 0502-3 on revising the terms of reference for the new Industry-IODP Science Program Planning Group and forwards it to the Science Policy and Planning Oversight Committee (SPPOC).

Doust presented ILP Consensus 0502-4 and Recommendation 0502-5 on the seismic and borehole metadatabase concept.

ILP Consensus 0502-4: ILP has developed a concept for an ideal seismic and well metadatabase for use in IODP. This has the objective to (i) show locations of industrial, academic and governmental data that might be available to scientists developing proposals for IODP expeditions, and (ii) indicate the procedures that scientists should follow in order to request such data. ILP recognizes that many such databases already exist, but note that most of those available to the public are local and incomplete.

ILP Recommendation 0502-5: ILP considers it essential that a reliable and comprehensive meta-database such as that presented should be incorporated into existing IODP databases (and those in development) urgently, and submits the concept to SPC for consideration.

The committee offered no comments and accepted the recommendation by consensus.

**SPC Consensus 0503-12:** The SPC accepts ILP Recommendation 0502-5 on developing a comprehensive meta-database focusing on seismic and borehole data within industry, academic, and governmental sectors and forwards this recommendation to the IODP-MI.

Doust presented ILP Consensus 0502-6 and Recommendation 0502-7 on adopting a definition of industry-parented proposals for use by the IS-PPG. He also presented ILP Recommendation 0502-8 on adopting a process for identifying and facilitating industry-parented proposals.

ILP Consensus 0502-6: ILP recommends the following definition for industry-parented proposals: “Industry-parented proposals in IODP address research proposals related to the Initial Science Plan (ISP) that are of importance to and are initiated by industry scientists, usually in cooperation with academic scientists working in the same or similar fields. Industry-parented proposals will address scientific issues, not those that could provide explicit and direct business benefit to industrial organizations.”

ILP Recommendation 0502-07: ILP recommends that SPC adopt this definition for use by the IS-PPG.

ILP Recommendation 0502-08: ILP recommends that the process designed by the panel for the identification and facilitation of industry-parented proposals be adopted by SPC and forwarded to the IS-PPG for implementation. The proposal includes provision for the establishment of three small groups of industry and academic specialists (corresponding more or less to the thematic divisions of the ISP), the task of which would be to identify possible research objectives of mutual interest via targeted workshops, etc. IS-PPG would facilitate such proposals and endeavour to place them in a broad, integrative and geographic context.

Ildefonse asked to clarify the difference between industry-parented versus industry-related proposals. Katz saw no need for such a definition because proposals just need to fit the IODP Initial Science Plan. Doust viewed it primarily as a benefit for colleagues in Japan. It confirmed that it would definitely help to distinguish proposals as not for the benefit of business. Coffin did not sense a consensus among the committee. He proposed receiving the recommendations and forwarding them to the Industry-IODP Science Program Planning Group (IS-PPG) for further consideration.

**SPC Consensus 0503-13:** The SPC receives ILP Recommendations 0502-7 and 0502-8 on defining, identifying, and facilitating industry-parented proposals and forwards these recommendations to the new Industry-IODP Science Program Planning Group.

Doust presented ILP Consensus 0502-9 on concerns over recent developments with respect to its role, and he provided a letter from the panel to the SPC explaining those concerns.

ILP Consensus 0502-9: ILP wishes to express its deep concern over some recent developments with respect to its role. Accordingly, it requests SPC to accept a letter summarizing these concerns.

Coffin agreed to distribute the letter as appropriate.

## **7. IODP SAS**

### **7.1. SPPOC SAS report**

#### **7.2. Terms of Reference**

The committee deferred these two related issues until Thursday morning. Coffin summarized the background and history of the SAS review and explained the specific changes to the SAS as provisionally approved by the SPPOC (see SPPOC Motions 0412-6 and 0502-1). He also explained the plans and timetable for implementing the changes and called for final comments on the SAS terms of reference by mid April.

Bekins wondered how the SPC would squeeze the task of assessment into its agenda. Coffin responded that the SPPOC vice-chair had suggested that the SPC should meet three times per year.

#### **7.3 PANCH report**

Harry Doust reported briefly on the panel chairs (PANCH) meeting held immediately prior to the SPC meeting. He reviewed the forthcoming changes to the SAS and referred to the need to document conflicts of interest for the SPPOC. Doust stated that the panel chairs also discussed tightening the rules on accepting ancillary project letters (APLs) and touched on several other issues such as completing executive summaries and minutes in a timely fashion.

Ildefonse asserted that APLs should allow enough flexibility for accepting late developing ideas.

## **8. Geographic distribution of IODP, ODP, and DSDP cores**

Mike Coffin reviewed SPPOC Consensus 0412-3 on core distribution and noted that it charged the SPC with defining the boundaries of the distribution scheme by the June 2005 SPPOC meeting. He proposed forming a working group to define the boundaries. Quinn, Pearce, Kawahata, and Zhou volunteered. Ito suggested that the working group should provide a scientific rationale for the boundaries. Janecek recommended viewing the boundaries as flexible guidelines and not definitive boundaries.

On Thursday afternoon, Quinn presented the results of the working group. He cited the main objectives that cores from the same expedition should go to the same repository and the distribution scheme should retain an element of flexibility. Quinn explained that the group sought to modify the proposed IODP geographic model such that the Kochi Core Center would receive cores from the western Pacific subduction zones (including the Aleutian Trench), from any reference sites seaward of the trench, and from the Bering and Okhotsk Seas.

Filippelli noted that the latitudinal boundary running through the Southern Ocean would bisect any drilling transects across the Antarctic Circumpolar Current. Nomura questioned why the proposed scheme included the entire Antarctic region within the Pacific basin sector. He suggested dividing the Southern Ocean into longitudinal rather than latitudinal sectors. Pearce responded that the group considered those issues but preferred keeping the simple latitudinal boundary and maintaining some flexibility in deciding the appropriate repository on a case-by-case basis. Kawahata added that the Southern Ocean boundary corresponds roughly to the plate boundary. Ildefonse agreed that the committee did not need to redefine all of the boundaries but mostly just settle the boundary in the western Pacific. Janecek explained that any substantial redrawing of the boundaries would necessitate a complete reanalysis of the cost estimates, and he emphasized again that the boundaries would represent flexible guidelines.

Coffin proposed that the SPC could advise on the appropriate repository for proposals forwarded to the Operations Task Force. He asked Quinn to draft a recommendation. Quinn

returned later with a draft recommendation. Brumsack advised stating the general principle first in the recommendation and deleting the specific reference to geographic areas. The committee eventually agreed on a reorganized recommendation specifying the slight geographical change to the western Pacific boundary.

**SPC Consensus 0503-14:** The SPC recommends that the IODP adopt the geographic-based core distribution model for IODP, ODP, and DSDP cores as presented by the IODP-MI at the December 2004 SPPOC meeting (see SPPOC Consensus 0412-3 and SPC Consensus 0406-24), except that the western Pacific boundary should extend along the Aleutian trench instead of along the eastern coast of Kamchatka. The committee further recommends an additional fundamental guideline of storing cores from the same expedition(s) in the same repository. Given that scientific and logistical concerns may occasionally justify deviating from this model, the SPC will provide guidance as appropriate on preferred repositories when forwarding proposals for the Operations Task Force to consider in developing drilling schedule scenarios.

**Tuesday**

**15 March 2005**

**09:00-17:30**

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

Mike Coffin explained the procedure for reviewing and ranking proposals. He noted that the SPC should focus on science, whereas the Operations Task Force would later consider operational and logistical matters. Coffin asked the watchdogs to write review letters describing the scientific concerns of the committee and to submit them to the science coordinators by Thursday morning. Pearce asked if the committee would prioritize the APLs the same way as the full proposals. Coffin replied no, the committee just had to decide whether or not to forward each one to the Operations Task Force.

The committee reviewed the ten full proposals and four APLs in the order shown below, as organized on the agenda according to the three main themes of the IODP Initial Science Plan. For each proposal, the lead watchdog presented the scientific objectives and the committee discussed the objectives in detail. Conflicted proponents who did not participate in the entire proceedings included SPC member Ildefonse, SSEP co-chairs Camoin and Underwood, and meeting host Barriga. SPC member Bekins did not participate in the discussion of one ancillary project letter (666-APL) because she served as a proponent on the related, though already scheduled proposal (621-Full).

<b>Proposal</b>	<b>Short title</b>	<b>Watchdogs</b>	<b>Conflicts</b>
<b><i>Deep Biosphere and Subseafloor Ocean</i></b>			
505-Full5	Mariana Convergent Margin	Bekins/Pearce/Becker	None
547-Full4	Oceanic Subsurface Biosphere	Yamamoto/Kitazato/Brumsack	None
555-Full3	Cretan Margin	Duncan/Ito	None
557-Full2	Storegga Slide Gas Hydrates	Miller/Zhou/Ito	None
584-Full2	TAG II Hydrothermal	Kawahata/Bekins	Barriga
651-APL	Irminger Basin Microbiology	Brumsack/Yamamoto	None
666-APL	SCIMPI Tool Development	Becker/Ito	Bekins



### ***Environmental Change, Processes, and Effects***

552-Full3	Bengal Fan	Kenter/Kawahata/Quinn	None
581-Full2	Late Pleistocene Coralgal Banks	Quinn/Kenter/Kitazato	Camoin
595-Full3	Indus Fan and Murray Ridge	Miller/Filippelli/Tokunaga	None
626-Full2	Pacific Equatorial Age Transect	Filippelli/Brumsack/Nomura	None
664-APL	Gulf of Mexico Source to Sink	Zhou/Tokunaga	None

### ***Solid Earth Cycles and Geodynamics***

603C-Full	NanTroSEIZE Plate Interface	Ito/Duncan	Underwood
668-APL	Oceanic Core Complex Seismics	Duncan/Pearce	Ildefonse

## **10. Clarify status of proposals residing with the Operations Task Force**

Becker, Kenter, and Miller left the room as conflicted proponents. Camoin, Underwood, and Barriga remained out and Ildefonse returned to the room. The committee briefly discussed what should happen next with each of the wholly or partly unscheduled proposals residing with the Operations Task Force. They accepted the general principle that all proposals previously recognized as among the highest priority Group I should remain with the Operations Task Force until further notice. Two partly unscheduled Group I proposals elicited further discussion. For later evaluating whether or not to schedule the remaining parts of Proposals 553-Full2 Cascadia Margin Hydrates and 589-Full3 Gulf of Mexico Overpressures, the committee decided to request progress reports on the results of the corresponding scheduled expeditions. The committee also accepted the general principle that any unscheduled proposals previously recognized as among the lower priority Group II should not remain with the Operations Task Force, and they applied this principle to the unscheduled Irminger Basin sites of Proposal 572-Full3 North Atlantic Paleoclimate Records. Furthermore, the committee recommended submitting a new proposal that would combine the objectives for those sites with the closely related Proposal 651-APL and take into account the results of the two scheduled expeditions.

**SPC Consensus 0503-15:** The SPC recommends that all fully or partially unscheduled proposals forwarded previously to the Operations Task Force as part of the highest priority Group I should remain for now with the Operations Task Force for them to consider in developing drilling schedule scenarios for FY2006 and beyond. This group includes Proposals 477-Full4 Okhotsk/Bering Plio-Pleistocene, 482-Full3 Wilkes Land Margin, 519-Full2 South Pacific Sea Level, 545-Full3 Juan de Fuca Flank Hydrogeology, 553-Full2 Cascadia Margin Hydrates, 564-Full New Jersey Shallow Shelf, 589-Full3 Gulf of Mexico Overpressures, 600-Full Canterbury Basin, 603A-Full2 NanTroSEIZE Phase 1, 603B-Full2 NanTroSEIZE Phase 2, and 621-Full Monterey Bay Observatory. To evaluate further the status of the unscheduled portions of Proposal 553-Full2 and 589-Full3, the SPC requests progress reports on Expeditions 308 Gulf of Mexico Hydrogeology and 311 Cascadia Margin Gas Hydrates at the October 2005 SPC meeting.

**SPC Consensus 0503-16:** The SPC recommends combining the objectives of the unscheduled Irminger Basin sites of Proposal 572-Full3 North Atlantic Paleoclimate with those of Proposal 651-APL Irminger Basin Microbiology in a new proposal that should also consider the initial results of Expeditions 303 North Atlantic Paleoclimate I and 306 North Atlantic Paleoclimate II.

On Thursday morning Dan Evans reported on the status of Proposal 650-APL Tahiti Reef Imaging. He described the project as technically feasible but involving a risky re-entry system, and he explained that it awaited a decision by the Dutch funding agency for the additional ship time and consumables. Evans noted that this project would take an estimated nine days,

whereas the definition of an APL specifies a maximum of two to three days of ship time, and he awaited comments from the proponents on how to reduce the plan. Evans also raised the general question of who pays for an APL if it requires an extra budget, particularly for MSP operations.

The committee asked about the timing of the decision by the Dutch funding agency. Evans replied that they should decide by late March 2005. Although the committee recognized the scientific value of the project, they had difficulty accepting the much longer time estimate than originally indicated in the proposal, and they worried that it might detract from the time and science of the main expedition to fit within the budget. Evans anticipated that it would likely cut into the main expedition in some way. The committee also recognized the difficulty of adding an APL at such a late date to the already approved program plan but concluded that the SPC could still make a statement supporting the science as long as it would not negatively impact the primary scheduled expedition.

**SPC Consensus 0503-17:** The SPC recognizes Proposal 650-APL Tahiti Reef Imaging as a potentially excellent and exciting added value to the impending IODP Expedition 310 Tahiti Sea Level. The committee remains supportive of and recommends conducting the proposed ancillary project, as long as it does not impact the highly ranked science of the scheduled drilling expedition.

Coffin raised the issue of developing a contingency plan in case of problems with the borehole on Expeditions 309 and 313 Superfast Spreading Crust II and III. Baldauf described the current borehole conditions as excellent but wondered about the scientific priorities in the event of a catastrophic failure with substantial drilling time remaining. Ildefonse added that the borehole reached 700 m deep, with casing into basement at over 200 mbsf. The committee recommended offsetting and starting a new hole if the current hole failed.

**SPC Consensus 0503-18:** In the event of catastrophic hole failure on Expeditions 309 Superfast Spreading Crust II or 313 Superfast Spreading Crust III, the SPC recommends offsetting and starting a new hole with the same scientific objectives. (*Note: Superfast Spreading Crust III subsequently rescheduled as Expedition 312.*)

#### ***Contingency plan for Expedition 308 Gulf of Mexico Hydrogeology***

The committee discussed various contingency plans to prepare for the possibility of not gaining the necessary clearances for drilling at two scheduled sites in lease blocks on Expedition 308 Gulf of Mexico Hydrogeology. Baldauf explained that the original plan called for penetrating the Blue Sand horizon and installing CORKs, but safety and budgetary concerns postponed those objectives. Now he inquired about the relative scientific importance of the two scheduled high-pressure sites that might not receive clearance. Baldauf clarified the two levels of contingency, first whether the further reduced version would still contain enough science to conduct it at all, and if so what else could fill out the time slot.

The committee expressed serious concerns about the possibility of accomplishing far less science than originally proposed and ranked, and whether that warranted reconsidering the expedition. They also expressed disappointment and frustration that restrictions imposed by industry could severely limit the scientific achievements of the scheduled expedition, particularly for a project with such strong links to industry. The committee did not favor dropping the project entirely because they believed that even the reduced expedition could still address worthwhile objectives, particularly if possible to drill at least one of the two overpressured sites. They discussed the option of splitting the expedition into two pieces, assuming eventual receipt of full clearance, but learned that the plans for demobilizing the vessel would likely interfere with that idea and require shortening some other part of the

remaining scientific schedule by one or two weeks. The committee eventually settled on recommending a range of options for making best use of the available time in the event of not gaining full clearance at all sites.

**SPC Motion 0503-19:** In the event that the USIO does not receive permission to drill at sites URSA-1B or URSA-2C (approximately 7.5 and 4.2 operational days, respectively) on Expedition 308 Gulf of Mexico Hydrogeology, the SPC recommends the contingency plans of either drilling alternate sites in the Brazos Trinity or Ursa Basins, expanding the geotechnical studies at the permitted sites, expanding the logging program, conducting Proposal 664-APL Gulf of Mexico Source-to-Sink (see SPC Consensus 0503-23), or some combination of these options.

Note that it is not viable to reschedule the corresponding days to the end of the current operating phase because the USIO plans to begin demobilizing the vessel during the final Balboa-Galveston transit and would thus have to compensate for the lost working days by cutting an additional 7-14 days of science from the operating schedule.

*Bekins moved, Filippelli seconded; 15 in favor, 1 opposed (Kitazato), 2 non-voting (Ildefonse, Zhou), 1 absent (Byrne).*

**Wednesday**

**16 March 2005**

**09:00-17:30**

## **11. Global ranking of proposals**

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

The committee agreed without debate to rank nine of the ten full proposals on the agenda, and they clarified the intent of limiting the ranking of Proposal 581-Full2 Late Pleistocene Coralgall Banks to only the Southern Bank sites, as reflected by the refocusing of objectives in 581-PRL3. The committee considered a recent message from the proponents of Proposal 557-Full2 Storegga Slide Gas Hydrates explaining their plans to update that proposal in the near future. The committee debated whether the planned update would require a revised full proposal or just an addendum and agreed that either way the SPC would have to rank it again. They also recognized that a delay in ranking would not hurt this particular proposal given the expected hiatus in drilling operations with the non-riser vessel; hence, the committee decided to exclude Proposal 557-Full2 from ranking this time.

**SPC Consensus 0503-20:** The SPC excludes Proposal 557-Full2 Storegga Slide Gas Hydrates from the current pool of proposals for global scientific ranking because of recent correspondence from the proponents indicating their intent to update the proposal in the near future with new data, new drilling sites, and refocused scientific objectives.

### **11.2. Balloting by SPC members**

Each of the sixteen SPC members present and eligible to vote assigned the numerical rankings of one through nine to the nine proposals in the global ranking pool. The members submitted their rankings on signed ballots. Those ineligible to vote included Ildefonse, Zhou, and the absent Byrne.

### 11.3. Tabulate results

Eguchi and Schuffert collected the ballots and tabulated the following results for the nine proposals ranked by the committee.

Rank	Proposal #	Short Title	Mean	Stdv
1	603C-Full	NanTroSEIZE Plate Interface	1.38	0.81
2	595-Full3	Indus Fan and Murray Ridge	3.06	1.12
3	626-Full2	Pacific Equatorial Age Transect	3.19	2.07
4	552-Full3	Bengal Fan	5.44	2.50
5	547-Full4	Oceanic Subsurface Biosphere	5.88	2.22
5	584-Full2	TAG II Hydrothermal	5.88	2.16
7	505-Full5	Mariana Convergent Margin	6.38	2.16
7	581-Full2	Late Pleistocene Coralgall Banks	6.38	1.54
9	555-Full3	Cretan Margin	7.44	1.09

### 11.4. Select group of proposals to forward to the Operations Task Force

Several committee members identified the top three proposals as distinct from the rest. Quinn suggested giving the Operations Task Force some flexibility by identifying tiers of differing priority as done for the last two rankings. Janecek advised against forwarding any proposals that the SPC might not want to see scheduled yet. Kenter presumed that the Operations Task Force would need some flexibility to develop different scenarios, and he asserted that the SPC should think about that now. Becker wondered whether the Operations Task Force would come back to the SPC if they needed more options. Janecek replied that he would probably present the schedule for FY2007 and a conceptual schedule for FY2008 at the next SPC meeting. He also wondered how long a proposal could stay with the Operations Task Force without going stale. Pearce cited the importance of knowing the proposals available for determining the long-term ship track. Allan recommended considering the ship track and the need to minimize transit times.

Coffin remarked that two of the top three proposals required more site-survey data before drilling. He worried about the potential lack of mandated SAS evaluation of proposals forwarded too soon to the Operations Task Force and the ensuing difficulties in scientifically assessing the outcomes of the resulting expeditions compared to the original proposals. Becker noted that the SAS could still have a chance to assess the prospectus versus the proposals. Miller proposed forwarding the top three proposals and said that the SPC could still review any addenda submitted with new site-survey data. Searle thought it seemed as if the SAS would lose influence if an expedition gets scheduled without site-survey data. Becker trusted the Operations Task Force, including its members from the SPC, to make sensible scheduling decisions. Coffin recommended that the SSP chair should serve on the Operations Task Force. Searle suggested that the SSP vice-chair could also do the job.

Coffin sought a volunteer to draft a recommendation on forwarding the top three proposals. Bekins still wondered what would happen to proposals regarded as not ready from a data standpoint. Coffin thought that it did not make sense to forward a project that would not have site-survey data ready for several years. Janecek suggested that the SPC might consider CDP proposals differently. Coffin supposed that the SPC could request that the Operations Task Force proceed with scoping Proposal 603C-Full even if the committee did not forward it. Bekins raised the issue of how to compare proposals forwarded at different times to the Operations Task Force. Coffin responded that all of the proposals still residing with the Operations Task Force went forward in the first tier, and only one had moved up from the second tier in successive rankings. Janecek conceded that the Operations Task Force needed a

large pool of proposals but not too large because the IOs could only scope a limited number in advance. Evans thought that although the Operations Task Force might have enough flexibility for the non-riser vessel, they did not have very much for MSPs. Coffin sensed a consensus among the committee and asked Quinn to draft a recommendation for forwarding the top three proposals to the Operations Task Force. Quinn presented a draft recommendation following a recess for lunch, and the committee approved it by consensus.

**SPC Consensus 0503-21:** The SPC forwards the top three of nine ranked proposals, 603C-Full NanTroSEIZE Plate Interface, 595-Full3 Indus Fan and Murray Ridge, and 626-Full2 Pacific Equatorial Age Transect, for the Operations Task Force to consider in developing drilling schedule scenarios for FY2007 and beyond.

The committee then discussed what to do with each of the four APLs reviewed at this meeting, all of which the SSEP co-chairs had forwarded directly to the SPC without a full SSEP review because they related operationally to scheduled expeditions. Bekins, Ildefonse, Kenter, Camoin, Underwood, and Searle left the room because of conflicts of interest. Coffin noted that the USIO had no chance to evaluate the time estimates for the two latest APLs. He outlined several other concerns and questioned the fairness to other proponents of considering these late-arriving APLs that did not undergo a full review by the SSEP or other panels. Brumsack suggested that perhaps enough time remained for the SSEP to review all of the APLs. Coffin inferred that to mean that the SPC should not forward the APLs to the Operations Task Force, but he preferred discussing each APL individually before deciding. Janecek urged caution in sending anything else to the Operations Task Force because something would have to get removed from the very tight schedule to make room for it. Pearce suggested the possibility of scheduling an APL if Expedition 308 would not receive full clearance.

#### ***651-APL Irminger Basin Microbiology***

Miller recommended forwarding Proposal 651-APL to the Operations Task Force if even a slight chance existed for scheduling the Irminger Basin sites, otherwise it should not go forward. Baldauf stated that it would require an ice support vessel to schedule it during the available time window. Coffin therefore sought a consensus to return this APL to the SSEP for a full review, and the committee agreed.

**SPC Consensus 0503-22:** The SPC returns Proposal 651-APL Irminger Basin Microbiology to the Science Steering and Evaluation Panel (SSEP) for full nurturing and evaluation because the IODP cannot schedule the project during the available time window without an ice support vessel (see also SPC Consensus 0503-16).

#### ***664-APL Gulf of Mexico Source to Sink***

Several committee members described Proposal 664-APL as presenting an interesting target of opportunity that would require very little drilling time, but they did not want to detract from the science of any scheduled expeditions and thus preferred considering it only as a contingency plan pending the availability of time. Many members recognized the proposed project as new science unrelated to the objectives of the already scheduled Proposal 589-Full3 Gulf of Mexico Overpressures (Expedition 308) and therefore strongly favored sending it back to the SSEP for a complete review. Others noted that the SSEP already had a chance to comment and passed it on. The committee worried about compromising the advisory structure and whether proponents had started increasingly using APLs as a means to avoid the normal review process, given that two proposal deadlines had passed since Proposal 589-Full3 first went forward to the Operations Task Force. Other participants suggested that the timing of this APL reflected the normal industry way of operating, and they cautioned against sending a

negative message, whereas one SPC member countered that the program could not necessarily operate in the industry way.

The committee hence debated how to reconcile the desire for maintaining operational flexibility against the principle that all proposals should receive fair, proper, and consistent scientific reviews. Ultimately they favored returning Proposal 664-APL to the SSEP for a thorough and expedited review before deciding whether to forward it to the Operations Task Force. Baldauf conceded that enough time might remain to get feedback from the SSEP, but he warned that despite offering increased operational flexibility, this APL would involve similar clearance problems as the other sites on Expedition 308. Other participants stressed the need for setting priorities of what to replace or how to fill the contingency time, probably with input from the proponents of the scheduled expedition. The committee considered a draft recommendation after a short coffee break and with only minor comments agreed on the following statement.

**SPC Consensus 0503-23:** The SPC recognizes that Proposal 664-APL Gulf of Mexico Source-to-Sink involves interesting science but requires additional evaluation within the science advisory structure. The committee therefore requests the Science Steering and Evaluation Panel (SSEP) to provide a written evaluation of Proposal 664-APL by 1 April 2005. The SPC will then decide whether to forward Proposal 664-APL to the Operations Task Force as a contingency option for Expedition 308 Gulf of Mexico Hydrogeology (see SPC Motion 0503-19).

The SPC considered the following motion by e-mail in early April 2005, but the motion did not receive the required affirmative vote of at least two-thirds of all members present and eligible to vote; hence, Proposal 664-APL did not go forward to the Operations Task Force.

SPC Motion 0504-X: After considering the requested special review of Proposal 664-APL Gulf of Mexico Source-to-Sink provided by the Science Steering and Evaluation Panel (SSEP) in response to SPC Consensus 0503-23, the SPC forwards this ancillary project letter to the Operations Task Force as a contingency option for Expedition 308 Gulf of Mexico Hydrogeology (see also SPC Motion 0503-19).

*Becker moved, Kenter seconded; 5 in favor (Becker, Duncan, Filippelli, Kenter, Quinn), 10 opposed, 1 abstained (Bekins), 2 non-voting (Ildefonse, Zhou), 1 absent (Byrne).*

#### **666-APL SCIMPI Tool Development**

Several committee members expressed excitement about the prospects of the SCIMPI tool but regarded it as premature to put it onboard right now given the lack of a clear development plan. Other participants recalled that the ODP third-party tools policy provided a definite path to follow in developing such tools and would not have allowed shipboard use at this point. They also understood that the new draft IODP third party-tools policy would call for testing a tool on land before sending it to sea. The committee thus decided not to forward this APL to the Operations Task Force but still wanted to encourage the proponents to pursue developing the tool. They debated whether to recommend submitting a regular proposal or just a revised APL and concluded that in addition to the need for presenting a clear development plan, it required revising at least the parts that focused on Expedition 312. The committee also discussed briefly how to handle engineering proposals within the SAS and noted that the SSEP may now forward such proposals to the STP and the EDP when necessary.

**SPC Consensus 0503-24:** The SPC decides not to forward Proposal 666-APL SCIMPI Tool Development to the Operations Task Force because of significant concerns about the feasibility of developing and adapting the proposed new tool in the short time remaining before the start of Expedition 312 Monterey Borehole Observatory in October 2005. The committee nonetheless encourages the proponents to submit an expanded proposal on the SCIMPI concept and development plan as soon as possible. (*Note: Expedition 312 Monterey Borehole Observatory subsequently cancelled.*)

### ***668-APL Oceanic Core Complex Seismics***

The committee characterized Proposal 668-APL as comprised of two separate components involving vertical seismic profiling (VSP) and ocean bottom seismometers (OBS). Several SPC members viewed the proposed science as already approved for the previous expeditions and suggested forwarding the APL to the Operations Task Force as a contingency for the current schedule. Other members regarded only the VSP part as already approved science and suggested returning the APL to the SSEP for a thorough review, and one member argued that even the VSP component represented new science because the results of the expedition had negated the original justification of identifying the structure of the crust–mantle boundary. The committee also questioned whether the proposed VSP experiments would likely provide a good image of the deep target with the available source tool, and one member wanted to ensure that the tool would not likely fail again on the repeated try. Another member noted that the expedition did obtain a successful VSP profile down to 800 meters with the existing air gun.

Although the committee recognized the value of the OBS experiments, they did not regard the *JOIDES Resolution* as an appropriate vessel for conducting such a survey and thus agreed to consider only the VSP component as a possible contingency, provided that it would likely yield a good enough image, and they decided to seek further input from the SSEP and the SSP before deciding whether to forward the APL to the Operations Task Force. The committee considered a draft recommendation after a short coffee break and with only minor comments agreed on the following statement.

**SPC Consensus 0503-25:** The SPC recognizes the importance of Proposal 668-APL Oceanic Core Complex Seismics for obtaining VSP and sonic logging data at IODP Site U1309, as originally proposed for Expeditions 304 and 305, to integrate with existing and possible future detailed seismic surveys of the region. The SPC believes, however, that a properly designed and executed OBS survey with appropriate platform and technology would best address the objectives of the proposed OBS experiments. The committee therefore requests the Science Steering and Evaluation Panel (SSEP) and the Site Survey Panel (SSP) to provide a written evaluation of Proposal 668-APL by 1 April 2005. The SSP should specifically comment on appropriate VSP source technology. The SPC will then decide whether to forward Proposal 668-APL to the Operations Task Force for potential scheduling on a contingency basis if time becomes available and if the USIO can provide the recommended VSP source.

The SPC considered the following motion by e-mail in early April 2005, but the motion did not receive the required affirmative vote of at least two-thirds of all members present and eligible to vote; hence, Proposal 668-APL did not go forward to the Operations Task Force.

**SPC Motion 0504-X:** After considering the requested special review of Proposal 668-APL Oceanic Core Complex Seismics provided by the Science Steering and Evaluation Panel (SSEP) and the Site Survey Panel (SSP) in response to SPC Consensus 0503-25, the SPC forwards the VSP and sonic logging components of this ancillary project letter to the Operations Task Force for potential scheduling.

*Duncan moved, Filippelli seconded; 10 in favor, 5 opposed (Ito, Kitazato, Miller, Nomura, Quinn), 1 abstained (Bekins), 2 non-voting (Ildefonse, Zhou), 1 absent (Byrne).*

### **11.5. Nominate co-chief scientists for proposals with the Operations Task Force**

The SPC members nominated several or more prospective candidates as potential co-chief scientists for each of the following fully or partially unscheduled proposals residing with the Operations Task Force: 477-Full4 Okhotsk/Bering Plio-Pleistocene, 482-Full3 Wilkes Land Margin, 519-Full2 South Pacific Sea Level, 545-Full3 Juan de Fuca Flank Hydrogeology, 553-Full2 Cascadia Margin Hydrates, 564-Full New Jersey Shallow Shelf, 589-Full3 Gulf of Mexico Overpressures, 595-Full3 Indus Fan and Murray Ridge, 600-Full Canterbury Basin, 603A-Full2 NanTroSEIZE Phase 1, 603B-Full2 NanTroSEIZE Phase 2, 603C-Full NanTroSEIZE Phase 3, and 626-Full2 Pacific Equatorial Age Transect. The IODP-MI science coordinators promised to solicit the program member offices for the CV of each candidate plus any additional nominations and forward the information to the appropriate IOs by early June 2005.

## **12. SPC working group reports**

### **12.1. Scientific assessment of expeditions**

Keir Becker outlined the framework of a working group report on conducting scientific assessments of IODP expeditions. The working group also included Brumsack, Duncan, and Soh, with input from Larsen. Becker identified the three main phases of assessment as pertaining to proposals, prospectuses, and expedition results. He described the current status of scientific assessment and noted that the SAS already handles the first stage very well but has no involvement in the second stage and only minimal involvement in the third stage. For single-expedition projects, the working group recommended that SPC watchdogs should review the draft prospectuses together with the IODP-MI vice president of science planning, the co-chief scientists should present an initial assessment of the scientific achievements with respect to the originally proposed objectives and priorities, and SPC watchdogs should lead the discussions of initial expedition results and provide written summaries for the minutes. Becker presented a similar scheme for longer-term assessment of dual-expedition projects and a slightly different scheme for CDPs. He cited several implications such as a longer-term role for the SPC watchdogs and close coordination with the IODP-MI vice-president of science planning and the SPPOC. Becker proposed modifying and accepting the working group report, forwarding it to the SPPOC working group, and implementing it as soon as possible.

Miller wondered how the third stage would work given that SPC members rotate on a three-year basis. Ildefonse likened it to changing watchdogs during a proposal evaluation through the SSEP and the SPC. Larsen noted that the proposed plan lacked a component of external review. Allan also stressed the need for a type of review independent of the co-chiefs and the IOs. Mevel liked the idea of involving external reviewers. Nomura wondered how to evaluate scientific achievements from a long-term perspective. Becker believed that the SPC working group needed to coordinate with the SPPOC working group to answer that question, Coffin proposed considering the working group report for approval after incorporating these comments. On Thursday morning Becker reiterated the concern about involving old watchdogs in long-term assessments and described the changes to the report. Bekins reminded about involving external reviewers. The committee accepted the modified working group report by consensus.

<p><b>SPC Consensus 0503-26:</b> The SPC accepts the modified report of its own working group for scientific assessment and forwards it to the Science Policy and Planning Oversight Committee (SPPOC) for consideration.</p>
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## **12.2. Program Planning Groups (PPGs) and Detailed Planning Groups (DPGs)**

Barbara Bekins presented a working group report on the general procedure for establishing PPGs and DPGs. The working group also included Ildefonse, Kawahata, Nomura, and Quinn. Bekins explained that the working group addressed the issues of who should form PPGs and DPGs, what to specify in their terms of reference, how to define and select the membership, and what products to expect. The working group recommended that the SSEP or the SPC could propose forming such groups, the SPC should approve them, and the terms of reference should specify the problem, the issues of concern, the required expertise of the members, the expected products, a timeline, the number of meetings, the reporting pathway, and any liaisons. The group also recommended that PPGs and DPGs should have no more than fifteen members, with two appointees from each lead agency country, one appointee from each of the other IODP members, and the remainder chosen to fulfill the necessary range of expertise. Finally, the working group recommended that PPGs and DPGs should deliver minutes within one month of meetings and a final written report addressing the mandated goals and subject to formal review and revision.

Katz wondered what kind of final report to expect given the mandate of the IS-PPG for example. Coffin noted that the ILP felt quite satisfied with the new PPG mandate. He suggested that their report could include ideas for developing into proposals.

**SPC Consensus 0503-27:** The SPC accepts the modified report of its own working group for program planning groups (PPGs) and detailed planning groups (DPGs) and forwards it to the Science Policy and Planning Oversight Committee (SPPOC) for consideration.

## **13. IODP proposal guidelines**

Coffin proposed forming a small group (Coffin, Becker, Camoin) to work over the next several months on unifying the proposal submission guidelines, data formatting guidelines, and MATRIX working group report.

**SPC Consensus 0503-28:** The SPC establishes a working group to advise the IODP-MI Sapporo office on unifying the proposal submission guidelines, data formatting guidelines, and the Matrix working group report. The group composed initially of Coffin, Becker, and SSEP Co-chair Camoin should report at the October 2005 SPC meeting.

## **14. Expedition reports**

### **14.1. Juan de Fuca Ridge Flank Hydrogeology (301)**

The committee initially deferred the Expedition 301 report by Keir Becker until the next day and subsequently postponed it until the next meeting as time ran out and Becker departed early.

### **14.2. Arctic Coring Expedition (302)**

Jan Backman reported on the preliminary results of Expedition 302. He said that despite the much worse than expected sea-ice cover, exceeding 90% multi-year ice, they succeeded in keeping station for 15 of 22 days at the ridge crest and drilled through a total of almost 500 m of sediment in five holes at four sites, with an average core recovery of 68%. Backman reported that they recovered middle Eocene biosiliceous ooze and elucidated an unexpected 15-45 million year hiatus not evident in the seismic profiles. He noted that the sediment had accumulated at much higher than expected rates of 1-2 cm/kyr, whereas a seismic velocity inversion at 200 mbsf explained the somewhat thinner than expected sedimentary cover. Backman added that siliceous microfossils indicated conditions of low salinity (10-20‰) during the Eocene epoch, and they recovered abundant spores of freshwater *Azolla* ferns from the middle Eocene interval.

Larsen suggested that the dropstones could have originated from driftwood instead of ice. Backman replied that they seemed too common throughout the sedimentary section to come from driftwood. Doust asked about the content of sedimentary organic carbon near the Paleocene–Eocene boundary. Backman said that it amounted to 3-4%.

**Thursday**

**17 March 2005**

**9:00-15:00**

## **15. Development of Annual Engineering Plans**

### **15.1. Generic Annual Engineering Plan Development**

Tom Janecek defined engineering developments as either engineering science support projects costing <\$100,000 per year and <\$500,000 total or engineering development projects costing >\$100,000 per year or >\$500,000 total, and he classified both categories as SOCs. He explained that the IOs and the IODP-MI formulate the engineering development plan based primarily on the priorities established by the SAS and then submit the plan to the SAS for evaluation. Janecek also cited the time pressure for including an engineering development plan as part of the FY2006 program plan.

Becker remarked that the SPC terms of reference currently under review by the SPPOC mention prioritizing plans from the EDP. Duncan identified the large issue of observatory science and interfacing with other programs. Janecek responded that the IODP-MI plans to establish an observatory task force in late FY2005 or early FY2006. Kitazato noted the need for engineering development to collect core samples from deep boreholes, particularly for microbiology. Yamamoto emphasized the importance of long-term observatories for studying ecosystems. Pearce also recognized the importance of biosphere sampling and wondered whether the IOs had begun pursuing such developments. Janecek cited that as a good example of the sort of questions that the IODP-MI wanted to hear.

### **15.2. FY2006 and FY2007 Engineering Plan Development**

Mike Coffin presented a list of technical challenges developed by the Technology Advice Panel (TAP) but thought it would not suffice for providing guidance for FY2006. He stated that the committee would appreciate seeing a list of potential engineering projects from the IOs. Janecek explained that the IOs would draft their plans in the next month or so, and he suggested that the SPC could then review and prioritize those plans. Coffin hoped that the EDP would hold its first meeting by no later than this September, but the SPC would still need to give advice sooner than that on the FY2006 plan. Janecek confirmed that he would need advice by early May on the plans provided by mid April. He expected only smaller targeted projects, with some vision toward the future, and added that it would help if the SPC could think about short- and long-term developments.

Dan Evans referred briefly to technical improvements in petrophysics and other areas but stated that the ESO had no plans for major engineering developments in FY2006.

Jack Baldauf remarked that the IOs could organize working groups to focus over the next several months on items identified by the SPC. He reported that the USIO plan for FY2006 involved tool maintenance, calibration, and legacy documentation; market surveys of cementing methods and systems, alternate casing hangers, and drill-in casing systems; and enhancements of casing string seals, the instrumented water sampler, an upgraded pressurized core sampler, and third-party collaboration. Baldauf mentioned other FY2006 developments on pulse telemetry, a standardized common BHA, a colleted delivery system, and the new scientific ocean drilling vessel (SODV) project.

Jun Fukotomi of CDEX reported on prioritized development areas in long-term monitoring, core recovery, and *in situ* measurements while coring. He recognized the need for intensive engineering efforts to achieve the IODP Initial Science Plan and identified the main

challenges of developing purpose-built systems on a two to five year timescale and conducting continuous, long-term observations under ultra-deep, high-temperature, high-pressure conditions. Fukutomi indicated that long-term monitoring must address the scientific requirements for studying the seismogenic zone, hydrogeology, and material recycling. He also cited the technical challenges of data management, instrumental reliability, and low power consumption. Fukutomi described a CDEX feasibility study for long-term monitoring of the seismogenic zone. He also described completed developments and feasibility studies for core recovery improvement, particularly the design of an anti-contamination core barrel, and called for new technologies for sampling unconsolidated sands and deep-sea delta deposits.

Duncan asked if CDEX received any input from the SAS in prioritizing its engineering projects. Fukutomi identified long-term monitoring as the most urgent need and indicated that CDEX would of course seek SAS input once they decided what they want to do.

Coffin returned to the TAP list of technical challenges. Becker noted that the list did not explicitly include biosphere sampling. Kitazato advised focusing on sample quantity in addition to quality. Quinn regarded the list as difficult to prioritize given that the SPC members have their own specialties. Kawahata wanted to gain a better sense of feasibility. Baldauf suggested focusing on scientific themes. Becker suggested considering the proposals residing with the Operations Task Force for the greatest urgency. Coffin stressed the importance of long-term monitoring and biosphere sampling for NanTroSEIZE. Katz identified overpressure zones for the Gulf of Mexico expedition as a top challenge. Tokunaga suggested looking at old PPG reports for ideas, especially in hydrogeology. Janecek wondered how the SAS planned to handle this process in general. Coffin expected that the EDP as well as the STP would examine proposals and identify the needed developments, then provide a list to the SPC for prioritizing. He proposed thinking further about the TAP list, PPG reports, long-term monitoring, biosphere sampling, and overpressured zones while waiting for input from the IOs by mid April.

The SPC received the CDEX and USIO engineering development proposals in late April 2005 and responded by email to specify their individual priorities. The following statement from early May 2005 summarizes the overall response.

**SPC Consensus 0505-1:** In response to an IODP-MI request, the SPC prioritizes the FY2006 engineering developments proposed by CDEX and the USIO in the following order: 1) long-term monitoring system, 2) pulsed telemetry module, and 3) common bottom-hole assembly. All three of the proposed engineering developments would contribute to the goals of the IODP Initial Science Plan, and all three deserve support at some point. The committee regards the long-term monitoring system as critical to the strategic success of NanTroSEIZE and other proposals requiring such installations, whereas the other two proposed developments represent incremental, though not insignificant, improvements of existing technology that would tactically benefit many expeditions. Given the levels of innovation, effort, and time involved in developing the long-term monitoring system, and the widely held opinion that NanTroSEIZE in particular and borehole observatories in general will comprise centerpieces of the first decade of the IODP, the SPC recommends commencing the engineering of this system as soon as possible.

## **16. Monterey Bay Observatory: MARS-IODP borehole management**

Mike Lovell presented SciMP Recommendation 0502-1 and its three sub-recommendations on establishing an observatories working group. He also presented a draft report resulting from SciMP Action Item 0502-9 on specifying the charge of the working group. Lovell recommended creating a new structure under the IODP-MI, with a governing component or

oversight committee and a technical component or IO facilitator. He cited several issues of short-term and long-term governance.

SciMP Recommendation 0502-1: IODP should establish an Observatory Working Group within SciMP/STP consisting of IODP SAS panel members (e.g. SciMP/STP and EDP). Outside parties will be included or consulted on a project-by-project basis as the need arises. This working group includes external members from the start and should exist until the end of 2006 in the first instance to cover the moratorium period resulting from the drilling of the IODP Monterey Bay Observatory boreholes.

Recent interest in the MARS-IODP collaboration suggests that borehole observatories will become an increasingly important complement to ocean drilling. This recommendation is in response to SPC Consensus 0410-28 and is linked to SciMP Action Item 0502-9

Recommendation (i): The Observatory Working Group will:

- a) Develop criteria for submission and evaluation of technical proposals for deploying, testing and retrieving instruments in IODP boreholes.
- b) Explore use of third-party tool policy as a model for observatory approval and implementation.
- c) Establish guidelines for observatory scheduling, including the period of deployment and prioritization of projects when competing requests exist.
- d) Establish guidelines for maintaining the integrity of boreholes before, during and after instrument deployment to ensure suitability for subsequent observatories.

Recommendation (ii): The Observatory Working Group should use Monterey Boreholes as a test-bed for developing and refining protocols for the use of IODP boreholes as observatories. This effort will include a joint task force consisting of representatives from IODP, MBARI/MARS and ORION, with a commitment to international representation.

Recommendation (iii): The Observatory Working Group should develop a policy for data management, including the rules and mechanisms for data dissemination. The policy should also address (a) long-term data storage, accessibility and compatibility of data and metadata and (b) establishment of an archive that tracks the specific instruments used and other experimental protocols employed at each observatory.

SciMP Action Item 0502-09: Because of the impending installation of the Monterey Boreholes, SciMP/STP will develop a draft document that addresses the charge for the Observatory Working Group. This draft report will be ready by March 7, 2005.

Becker applauded the SciMP for developing the document and advised coordinating their efforts with the IODP-MI task force. He wondered if it would satisfy the STP if the task force would take over this effort. Lovell supported the idea of creating a task force because it would require members from outside of the SAS. Janecek appreciated the idea of using the Monterey boreholes as a test case, and he welcomed input on staffing the task force. Duncan suggested looking among the STP members as a good starting point. Allan noted that the Monterey test site also represented an Ocean Observatories Initiative (OOI) site, and that organization regarded itself as the management body. Bekins referred to three elements of the Expedition 301 REVCOM recommendations on observatory issues and noted that the proposed working group focused only on the management aspect. She hoped that the task force would also address the aspects of engineering development and data archiving. Coffin proposed receiving the recommendation and report and forwarding them to the IODP-MI. Janecek hoped that the SPC could indicate its support for the IODP-MI taking over this function. Duncan suggested

that the SPC could also endorse the idea of using the Monterey boreholes as a test case. Coffin asked Duncan to draft a recommendation.

**SPC Consensus 0503-29:** The SPC receives SciMP Recommendation 0502-1 and applauds the underlying efforts to begin identifying policy and management guidelines on using IODP boreholes as seafloor observatories. The committee forwards this recommendation (and the related report from SciMP Action Item 0502-9) to the IODP-MI and its anticipated observatories task force, with the advice to consider the Monterey boreholes as a test case for developing protocols on using IODP boreholes as seafloor observatories.

### **17. Third-Party Tool policy**

Mike Lovell reported on the progress of developing a new third-party tools policy, noting SciMP Action Item 0502-4. He reviewed the old ODP guidelines and explained that the IODP needs a broader umbrella, with an enforcement role by the IODP-MI. Lovell identified the main issues of extending the policy to shipboard equipment and observatories, explicitly addressing funding, and deterring tool deployment in the development stage while encouraging development. He also mentioned that the panel had discussed several issues related to databases and data ownership. Lovell suggested implementing the old ODP policy immediately as a temporary measure while the SAS finished developing and approving the new policy.

Allan clarified that all data collected during an expedition belong to the science party. Bekins regarded having access to processed data as better than having access to just raw data. Coffin stated that the SPC would need to see the final draft policy before it goes to the SPPOC. Lovell proposed just making minor modifications of the old policy for temporary approval and use while the STP finishes the new policy. Baldauf remarked that the USIO had already used the old policy with slight modifications. Coffin proposed having an SPC working group modify the old policy. Becker preferred letting the STP working group do it.

**SPC Consensus 0503-30:** The SPC appreciates the work of the Scientific Measurements Panel (SciMP) to date on drafting a third-party tools policy and requests the STP to provide a temporary policy by 1 April 2005.

The SPC received the temporary third-party tools policy and passed the following motion by e-mail voting in early April 2005.

**SPC Motion 0504-1:** The SPC commends the Scientific Technology Panel (STP) for providing a temporary third-party tools policy in a timely response to SPC Consensus 0503-30. The committee accepts this temporary policy and forwards it to the Science Planning and Policy Oversight Committee (SPPOC) for consideration.

*Duncan moved, Filippelli seconded; 15 in favor, none opposed, 1 abstained (Miller), 2 non-voting (Kenter, Zhou), 1 absent (Byrne).*

### **18. Proposal confidentiality policy**

Coffin presented the draft proposal confidentiality policy as included in the agenda book. Eguchi noted that policy should refer to the contact proponent rather than the proposers. Ildefonse asked if it applied to deactivated proposals. Eguchi said yes.

**SPC Consensus 0503-31:** The SPC accepts the slightly modified proposal confidentiality policy and forwards it to the Science Policy and Planning Oversight Committee (SPPOC) for consideration.

## 19. ICDP report

Uli Harms reported briefly on various ICDP projects, including Unzen Volcano, Chelungpu fault, Lake Bosumtwi, the San Andreas Fault Zone Observatory at Depth (SAFOD), the Chinese Continental Scientific Drilling Project near Donghai, the Hawaii Scientific Drilling Project, the Iceland Deep Drilling Project, and the Lake Malawi Drilling Project. He mentioned other projects planned for Qinghai Lake in China, the Eger Rift in the Czech Republic, the Chesapeake Bay Impact Structure, and Lago Di Peten Itza in Guatemala. Harms noted the upcoming ICDP conference *Continental Scientific Drilling 2005: A Decade of Progress and Challenges for the Future* on 30 March to 1 April 2005 in Potsdam, Germany to review and synthesize the important findings of the past ten years of scientific continental drilling and to identify key scientific questions for addressing with future drilling. He listed the ICDP membership and identified Finland and South Africa as new members, and he mentioned the new joint IODP-ICDP journal. Harms also described the development of a new scientific drilling rig with a compact, modular design.

Coffin asked about the ICDP membership by Schlumberger and UNESCO. Harms explained that they contribute small amounts of funding. Pearce asked about links to the ICDP concerning drilling on the Cretan Margin. Harms replied that the ICDP had received a proposal but it never developed beyond the preliminary stage.

## 20. Other business

**SPC Consensus 0503-32:** The SPC thanks Ken Miller for his most recent contribution to scientific ocean drilling through his service on the SPC. Ken's diligence, high standards, professionalism, and dedication to all scientific drilling throughout his career serve as a model for all members of the science advisory structure.

**SPC Consensus 0503-33:** The SPC thanks Wonn Soh for his powerful work as a member of this committee since joining the first SPC meeting in Sapporo. As a marine geologist who studies sedimentary processes at active continental margins, he has made invaluable contributions to the committee and to the IODP in general through his passionate actions and comments, much like an earthquake-generated turbidity current may spread rapidly over a sedimentary basin. We are sorry that Wonn Soh leaves the SPC in the wake of a *tsunami*. However, we feel certain that he will stay active in the IODP community and continuously promote IODP science with his quake-like energy.

**SPC Consensus 0503-34:** The SPC expresses its extreme gratitude to Mike Coffin for his service as the first chairperson of the committee. All SPC members have warmly appreciated his respectful and deliberate style and his careful guidance through the initial phase of the IODP. Non-native English speakers would like to express sincere thanks to Mike for his ability to ensure that all members were fully integrated into the functioning of the committee.

**SPC Consensus 0503-35:** The SPC graciously thanks Fernando Barriga, supported by José Monteiro, for his superb efforts in hosting this meeting, and Celia Lee and Mafalda Cristavão for their able and hospitable hand in ensuring that everything, including transportation, accommodation, sustenance, meeting room relocation, and social events, went smoothly. Meeting participants truly appreciated the congenial port wine reception at the Instituto do Vinho do Porto, the festive social dinner with fado accompaniment at the Timpanas restaurant, and the fine spring weather in sunny Lisbon.

## **21. Future meetings**

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

The committee identified its liaisons to other SAS panels as follows:

SSEP Becker, Coffin, Quinn, Kawahata, MacLeod,

SSP Kenter, Mori,

EPSP Becker, Coffin, Kenter,

STP Duncan, Nomura, Brumsack,

EDP Becker, Coffin, Ildefonse.

### **21.2. Fifth and sixth SPC meetings**

#### **21.2.1. Week of 24-28 October 2005, Kyoto, Japan**

Jim Mori noted that he would host the next SPC meeting in Kyoto, Japan during the week of 24-28 October 2005. He promised to finalize the dates and arrangements very soon because the local tourist season starts to get busy around that time of year.

#### **21.2.2. March 2006, USA**

Terry Quinn volunteered to host the sixth SPC meeting in St. Petersburg Beach, Florida. He recommended the first week of March 2006 as the best time to avoid the spring break holiday season. Kitazato said that he could not attend during the first two weeks of March. Coffin asked about the last week of February. Searle regarded that as too close to the SSP meeting. The committee decided to hold the meeting during the week of 6-10 March 2006.

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

The committee did not have time to review the motions and consensus items, but Coffin promised to work with the science coordinators on completing the executive summary as soon as possible.