

# iSAS interim Planning Committee

4<sup>th</sup> Meeting, 18-20 March 2003

Intercontinental Stephen F. Austin Hotel  
Austin, Texas, U.S.A.

## interim Planning Committee - iPC

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Jamie Austin	Institute for Geophysics, University of Texas at Austin, USA
Andrew Fisher	Department of Earth Sciences, University of California, Santa Cruz, USA
Kathryn Gillis	School of Earth and Ocean Sciences, University of Victoria, Canada
Peter Herzig	Institut für Mineralogie, Technische Universität Bergakademie, Freiberg, Germany
Benoît Ildefonse <sup>a</sup>	Laboratoire de Tectonophysique, ISTEEM, Université Montpellier II, France
Hisao Ito	Geological Survey of Japan
Kenji Kato	Institute of Geosciences, Shizuoka University, Japan
Jock Keene*	School of Geosciences, University of Sydney, Australia
Jeroen Kenter	Faculty of Earth Sciences, Vrije Universiteit, The Netherlands
Hajimu Kinoshita (Co-chair)	Japan Marine Science and Technology Center (JAMSTEC), Japan
Chris MacLeod	Department of Earth Sciences, Cardiff University, United Kingdom
Larry Mayer	Center for Coastal and Ocean Mapping, University of New Hampshire, USA
Ted Moore (Co-chair)	Department of Geological Sciences, University of Michigan, USA
Delia Oppo	Woods Hole Oceanographic Institution, USA
Philippe Pezard*	Laboratoire de Tectonophysique, ISTEEM, Université Montpellier II, France
Kiyoshi Suyehiro <sup>b</sup>	Japan Marine Science and Technology Center (JAMSTEC), Japan
Ryuji Tada*	Department of Earth and Planetary Science, University of Tokyo, Japan
Yoshiyuki Tatsumi	Japan Marine Science and Technology Center (JAMSTEC), Japan
Zuyi Zhou	Department of Marine Geology and Geophysics, Tongji University, China

<sup>a</sup>Alternate for Philippe Pezard.

<sup>b</sup>Alternate for Ryuji Tada.

\*Unable to attend.

## Liaisons

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Tim Byrne (iISSEP)	Department of Geology and Geophysics, University of Connecticut, USA
Gilbert Camoin (iESSEP)	CEREGE-CNRS, France
Harry Doust (iILP)	Faculty of Earth Sciences, Vrije Universiteit, The Netherlands
André Droxler (iSSP)	Department of Earth Science, Rice University, USA
Barry J. Katz (iPPSP)	ChevronTexaco, Energy, Research and Technology Company, USA
Hitoshi Mikada (iISSEP)	Japan Marine Science and Technology Center (JAMSTEC), Japan
Kathryn Moran (iTAP)	Graduate School of Oceanography, University of Rhode Island, USA
Richard W. Murray (iSciMP)	Department of Earth Sciences, Boston University, USA

## Guests

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Jamie Allan	National Science Foundation (NSF), USA
Keir Becker (SCICOM)	Rosenstiel School of Marine & Atmospheric Science, University of Miami, USA
Sherman Bloomer (SCICOM)	Department of Geosciences, Oregon State University, USA
Steve Bohlen	Joint Oceanographic Institutions, Inc. (JOI), USA
George Claypool (PPSP)	Private consultant, Lakewood, Colorado, USA
Paul Dauphin	National Science Foundation (NSF), USA
Steven D'Hondt (SCICOM)	Graduate School of Oceanography, University of Rhode Island, USA
John Farrell	Joint Oceanographic Institutions, Inc. (JOI), USA
David Goldberg	Lamont-Doherty Earth Observatory, Columbia University, USA
Sean Gulick	Institute for Geophysics, University of Texas at Austin, USA
Ulrich Harms (ICDP)	GeoForschungsZentrum Potsdam, Germany
Teruaki Ishii (SCICOM)	Ocean Research Institute, University of Tokyo, Japan
Yoshihisa Kawamura (CDEX)	Japan Marine Science and Technology Center (JAMSTEC), Japan
Alan C. Mix (Leg 202)	College of Oceanic & Atmospheric Sciences, Oregon State University, USA
Sylvia Nordfjord	Institute for Geophysics, University of Texas at Austin, USA
Nicklas G. Pias	Joint Oceanographic Institutions, Inc. (JOI), USA

Warren Prell (SCICOM)	Department of Geological Sciences, Brown University, USA
Frank Rack	Joint Oceanographic Institutions, Inc. (JOI), USA
David Rea (SCICOM)	Department of Geological Sciences, University of Michigan, USA
Joanne Reuss	Department of Geological Sciences, University of Michigan, USA
William Sager (SCICOM)	Department of Oceanography, Texas A&M University, USA
Izumi Sakamoto	International Working Group Support Office (IWGSO), USA
Paul Stoffa	Institute for Geophysics, University of Texas at Austin, USA
Anne M. Trehu (Leg 204)	College of Oceanic & Atmospheric Sciences, Oregon State University, USA
Elsbeth Urquhart (JOIDES)	Rosenstiel School of Marine & Atmospheric Science, University of Miami, USA
Yasuo Yamada (OD21)	Japan Marine Science and Technology Center (JAMSTEC), Japan

**iSAS Office**

Nobuhisa Eguchi	Japan Marine Science and Technology Center (JAMSTEC), Japan
Jeffrey Schuffert	Japan Marine Science and Technology Center (JAMSTEC), Japan
Minoru Yamakawa	Japan Marine Science and Technology Center (JAMSTEC), Japan



**iSAS interim Planning Committee**

**4<sup>th</sup> Meeting, 18-20 March 2003**

**Intercontinental Stephen F. Austin Hotel  
Austin, Texas, U.S.A.**

**DRAFT EXECUTIVE SUMMARY (v2.0)**

**iPC Consensus 4-1:** The iPC approves the revised agenda for its fourth meeting on 18-20 March 2003 in Austin, Texas.

**iPC Motion 4-2:** The iPC approves the revised minutes from its third meeting on 27-29 August 2003 in Ghent, Belgium.

*Mayer moved, Fisher seconded; 16 in favor.*

**iPC Consensus 4-3:** The iPC gives its approval for the iSSEPs and their iSAS service panel liaisons to identify proposals that could benefit from advice by particular service panels. The iSSEPs co-chairs must request the iSAS Office to seek permission from the proponents to distribute such proposals to the appropriate service panel for comment.

**iPC Consensus 4-4:** The iSSEPs should decide when a proposal is ready to be forwarded to the iPC.

**iPC Consensus 4-5:** The iSSEPs may hold one additional meeting this year in early August. This meeting should be conducted electronically and focus on new external reviews and related response letters from proponents. The iSAS Office should confirm in advance the external reviewers for all proposals that could potentially be sent out for external review following the May 2003 iSSEPs meeting.

**iPC Motion 4-6:** The iPC appoints Kyoko Okino as a co-chair of the interim Site Survey Panel (iSSP).

*Suyehiro moved, Mayer seconded; 16 in favor.*

**iPC Motion 4-7:** The iPC receives the iSSP data bank working group report and forwards it to IODP, and we thank the iSSP for completing the report on time.

*Fisher moved, Mayer seconded; 15 in favor, 1 absent (Herzig).*

**iPC Consensus 4-8:** The iPC approves the request for a subset of the iSSP matrix working group to attend the June 2003 iPPSP meeting.

**iPC Motion 4-9:** The iPC approves the sample and data policy received from iSciMP and forwards it to IODP.

*Suyehiro moved, Austin seconded; 16 in favor.*

**iPC Consensus 4-10:** The iPC approves iSciMP Recommendation 02-2-2 to establish an *ad hoc* database working group.

**iPC Consensus 4-11:** The iPC receives iSciMP Recommendation 02-2-3 on establishing the IODP Operations Committee (OPCOM).

**iPC Consensus 4-12:** The iPC receives iSciMP Recommendation 02-2-1 on establishing a database operator in IODP, Recommendation 02-2-4 on standardizing the diameter of drill pipe used on IODP platforms, Recommendation 02-2-5 on development of the JAMSTEC anti-contamination drilling and sampling tool, and Recommendation 02-2-6 on formalizing the link between iSciMP and the iSSEPs, and we forward these recommendations to IODP.

**iPC Motion 4-13:** The iPC accepts iTAP Recommendation 03-1 on conducting a study of pipe diameter capabilities on the non-riser vessel.

*Mayer moved, Gillis seconded; 16 in favor.*

**iPC Motion 4-14:** The iPC accepts iTAP Recommendation 03-2 on developing a hole-problem risk mitigation plan.

*Gillis moved, Ildefonse seconded; 16 in favor.*

**iPC Motion 4-15:** The iPC accepts iTAP Recommendation 03-3 on asking ODP to evaluate the termination of each borehole drilled by the program, as part of its ongoing legacy documentation. The iTAP will define the scope of this evaluation and would like to review the results at its next meeting in July 2003.

*Herzig moved, Gillis seconded; 13 in favor, 3 abstained (Austin, Ito, Kato).*

**iPC Motion 4-16:** The iPC groups the following full proposal according to the main scientific themes of the IODP Initial Science Plan and assesses its readiness for future ranking.

**Environmental Change, Processes, and Effects**

610-Full2	West Florida Margin	not ready for ranking
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*Kenter moved, Oppo seconded; 15 in favor, 1 absent (MacLeod).*

**iPC Motion 4-17:** The iPC supports the concept that robust international participation is crucial to the long-term success of IODP. The iPC further recognizes the potential scientific contributions of scientists from countries and/or consortia seeking membership in IODP and therefore supports their involvement at the Science Planning Committee level, at least as observers, until such time as their funding commitment to IODP is assured.

*Austin moved, Kenter seconded; 15 in favor, 1 absent (MacLeod).*

**iPC Motion 4-18:** The iPC accepts the revised Section 4 of the IODP OPCOM mandate, on participants counting toward consensus and quorum, as proposed by the OPCOM working group.

*Suyehiro moved, Kenter seconded; 13 in favor, 1 opposed (Gillis), 2 abstained (Mayer, Oppo).*

**iPC Consensus 4-19:** The iPC accepts the revised Sections 1, 2, 3, 5, and 6 of the IODP OPCOM mandate proposed by the OPCOM working group.

**iPC Motion 4-20:** The iPC accepts iTAP Recommendation 03-4 and establishes an IODP working group that will develop a project-based management planning system. The group will include members from iTAP, iILP, iPPSP, iSSEPs, iPC or SPC, the OPCOM working group, CDEX, and industry project managers. The system should be developed by June 2003.

*Gillis moved, Austin seconded; 15 in favor, 1 abstained (Kinoshita).*

**iPC Motion 4-21:** The iPC accepts iTAP Recommendation 03-5 and establishes a project scoping group to begin the scoping process for existing complex drilling projects, as an interim measure. The scoping process includes project description, risk analyses, and project planning. Membership will include representatives from proponent groups and implementing organizations, an industry project management adviser, a risk identification specialist, and a well engineer. The members should be identified by June 2003.

*Gillis moved, Fisher seconded; 14 in favor, 2 abstained (Ito, Kato).*

**iPC Motion 4-22:** The iPC recommends that the Science Planning Committee should have a chair and vice-chair who serve a total term of four years, with the chair replaced by the vice-chair and a new vice-chair appointed every two years.

*Herzig moved, Mayer seconded; 13 in favor, 3 abstained (Ito, Kato, Tatsumi).*

**iPC Consensus 4-23:** We sincerely thank Jamie Austin, Nancy Hard, and Kathy Ellins for their superb efforts in organizing and hosting this fourth meeting of the iSAS interim Planning Committee in Austin, Texas.

# **iSAS interim Planning Committee**

**4<sup>th</sup> Meeting, 18-20 March 2003**

**Intercontinental Stephen F. Austin Hotel  
Austin, Texas, U.S.A.**

**DRAFT MINUTES (v2.0)**

**Tuesday**

**18 March 2003**

**8:30-17:00**

## **1. Introduction**

### **a. Welcome and meeting logistics**

The iPC co-chairs, Ted Moore and Hajimu Kinoshita, opened the meeting at 08:30 and the participants introduced themselves. Host Jamie Austin explained the meeting logistics and introduced Paul Stoffa, who proceeded to give a brief report on the establishment and purpose of the IODP Management International, Inc (IMI), as included under Item 8a.

### **b. Approve meeting agenda**

Kinoshita proposed to modify the agenda by including in Item 3a a brief report from the Center for Deep Earth Exploration (CDEX) and adding Item 8d for a more-detailed description of CDEX activities. Moore announced that the iPC would convene in an executive session this first evening to hear an advance briefing from the OPCOM working group and the iTAP co-chair. He then called for approval of the revised agenda.

<b>iPC Consensus 4-1:</b> The iPC approves the revised agenda for its fourth meeting on 18-20 March 2003 in Austin, Texas.
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### **c. Approve minutes from previous meeting**

Moore asked for comments on the draft minutes from the previous meeting. Austin noted that the first paragraph of Section 10b should say that Fisher and MacLeod volunteered to work on the Guide to IODP and not Fisher and Kenter. With no further comments, Moore called for approval of the revised minutes.

<b>iPC Motion 4-2:</b> The iPC approves the revised minutes from its third meeting on 27-29 August 2003 in Ghent, Belgium.
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*Mayer moved, Fisher seconded; 16 in favor.*

## **2. International Working Group (IWG) Report**

Moore reported on the proceedings of the IWG meeting in late January 2003. He informed the IWG about the progress of the OPCOM working group. He explained that the IWG accepted the draft sample and data policy from iSciMP, pending approval of the final version by the iPC. They also accepted the plan for retaining the current iSAS panel co-chairs beyond September 2003. The IWG accepted a proposal for the new Science Planning Committee (SPC) to have a chair and vice-chair, and they gave permission for the iPC to hold its last meeting in conjunction with the first meeting of the SPC. Moore emphasized the quickening pace of the planning process and the urgency to move through the proposal list as soon as possible, and he mentioned that the iPC co-chairs' newsletter had already presented many of these points. Moore also noted that the newsletter had incorrectly stated that the IWG had accepted ECORD as the consortium that will provide mission-specific platform capability in IODP. It should have said instead that the lead agencies recognized that the IODP core capabilities would not provide for shallow-water and Arctic drilling and that they had

endorsed ECORD's designation of its MSP implementing organization for potential IODP drilling.

Austin asked when the committee would discuss the issue of naming the SPC co-chairs. Moore preferred doing it during the discussion of the iSAS to SAS transition (Item 11).

### **3. Reports on IODP Planning Efforts**

#### **3a. Japan**

Yasuo Yamada outlined the IODP related budget in Japan, showing the original \$59M in FY2002 and \$68M in FY2003, plus an \$87.5M supplement in FY2002. He explained that the large supplementary budget had enabled the schedule for construction and delivery of the *Chikyu* to shift forward by approximately one year, such that the ship could begin international operations as early as October 2006, and this meant that the pace of science planning must also accelerate. Yamada showed a few updated images from the ship construction and said that work on the lab stack had nearly finished. He reported that the ship would conduct a test of the dynamic positioning system off Shikoku in early spring, then move to Nagasaki in July for completing the final phase of construction by the end of 2004. Other notable planning events in Japan included the recently completed seismic survey for the riser vessel training cruises, the nearly completed construction of the Marine Core Research Center at Kochi University, scheduled to open in late May 2003, and the publishing of the Japan IODP science plan that highlights research areas of particular national advantage and experience. Yamada also announced that activities of the Japan Earth Drilling Science Consortium would start in April 2003, and MEXT plans to create a new management position for IODP and send a liaison to NSF.

Yoshi Kawamura described CDEX as a new department created at JAMSTEC for platform operations, science operations and engineering site surveys for the riser drilling ship, with many new employees coming from industry. He showed an organizational structure with five divisions for administration, operations, science services, site surveying, and health, safety, and environmental concerns. Kawamura said that he would provide more details about CDEX the next day (see Item 8d).

Hisao Ito reported that the Japan Earth Drilling Science Consortium now has more than forty institutional members, over twenty personal members, and six associate members. He showed the new consortium logo and explained that it represents drilling in the ocean and on land. The consortium officially established its IODP section in February 2003 and will later establish a continental drilling section. Ito outlined the role and tasks of the consortium with regard to participation in IODP management and science planning and domestic research development. They also hope to collaborate with other East Asian countries such as China, Korea, and Taiwan.

Moore asked about the source of funding for the consortium. Kato said that most of the funding comes from the annual membership fee of about \$1000. Kinoshita added that the consortium has a small management office supported by MEXT and run by Takeo Tanaka. Moore also asked about the tenure of the new position at MEXT. Yamada replied that, unlike now, the duties of the position would pertain exclusively to IODP.

#### **3b. U.S.A.**

Jamie Allan reported on NSF activities. He noted that the complexity of IODP required a higher level of planning and support, and he said that NSF would take guidance on science support, education, and outreach from the report published last year by USSAC after the Conference on U.S. Participation in IODP (CUSP). Allan announced two new employment

opportunities at NSF, one for a program director to replace the retiring Paul Dauphin and another for an associate program director to replace Brad Clement, preferably someone with seismological knowledge or experience. Allan then described a new three-phase plan in the U.S. for 1) identifying a system integration contractor (SIC), 2) acquiring an acceptable drilling vessel for use by mid 2004, and 3) acquiring and modifying a vessel to meet IODP needs in FY2005 or FY2006. He expected the release of the RFP for the first phase very soon, possibly today, and explained that NSF and the SIC would work together on the third phase. Allan emphasized that although the third phase would happen one year later than previously planned, NSF remained committed to conducting non-riser drilling as early as possible in IODP.

Gillis asked about the role of the SIC. Allan replied that the SIC would manage all aspects of the program related to the non-riser drilling ship. Suyehiro asked about the definition of an acceptable vessel. Allan defined acceptable as able to meet the identified science needs. Austin noted that the CDC had defined the optimal rather than acceptable qualities for the non-riser ship. Moore said that the planning schedule would have to move forward to prepare a science plan for Phase 2. Macleod asked if NSF would identify the Phase 2 vessel before the planned decommissioning of the *JOIDES Resolution* at the end of September 2003. D'Hondt asked if the Phase 2 vessel would differ from the Phase 3 vessel. Dauphin replied that NSF hoped to decide on the Phase 2 vessel by August. He described it as an open bidding process, probably with a short drilling hiatus between phases. Allan added that they could not predict the outcome of the open bidding process.

Warren Prell, the USSAC Chair, outlined the goals of U.S. participation in IODP from the community standpoint. He noted that the final CUSP report went to NSF in November 2002 and contained nineteen specific recommendations on program development, activities before, during, and after drilling, publication of results, and education and outreach. In addition, USSAC has examined the protocols for staffing, rotation of U.S. panel members, long-term planning initiatives, education, borehole observatories, and the restructuring of USSAC activities. Prell then cited the USSSP-sponsored planning workshops held last year for the NantroSEIZE, deep biosphere, and Costa Rica drilling projects, and those scheduled for this year on the Monterey Bay borehole test facility, tectonic-climate links in Alaska and the NE Pacific, ocean observatories, Indian Ocean fans, the GeoSCAN initiative for general site survey requirements and proposal preparation, and community education and outreach. He mentioned that several U.S. scientists would receive USSSP travel support for attending the JEODI-sponsored Arctic seismic survey workshop in Copenhagen and the IUGG meeting in Sapporo, Japan. Prell also identified a series of IODP-related site augmentation proposals, either accepted or under review by USSAC, on the sub-Arctic Pacific, the Nankai Trough, and Hess Deep.

Suyehiro remarked that some of the site surveys for IODP would require international cooperation, but no good mechanism exists for doing this. Prell said it would take good communication. He also explained that USSSP can only fund small site augmentation surveys and not the broader surveys needed for complete planning. Droxler asked whether scientists from other countries could participate in the U.S. workshops. Prell said yes, but they would have to get support from their national programs. Fisher saw the fast response required for some projects as a challenge for the new program. Mayer also recognized the broader need of having a coherent plan for large-scale site surveys. Moore suggested that the national managers of IODP planning efforts would have to publicize the workshops that they sponsor

and keep them open to international participants to promote needed cooperation on site surveys.

### **3c. Europe**

Jeroen Kenter reported that ECORD now officially represented the European consortium for IODP. He presented a diagram of the ECORD structure showing the ECORD Council, the European Management Agency (EMA), the European Science Operator (ESO), and the European Science Operations Committee (ESOC). Kenter distributed a report from Chris Franklin, the chair of the ECORD interim Council (EiC) and the representative of ECORD at the IWG. He emphasized that ECORD aims to provide co-mingled funds equivalent to two participation units for the first four years of IODP and additional funds for MSP operations in 2004. He added that ECORD had begun investigating the possibility of drilling on the Lomonosov Ridge as early as possible in IODP and had thus started developing an infrastructure for managing and operating MSPs. Kenter then announced the appointment of a consortium, led by the British Geological Survey, as the interim ESO and said that ECORD hoped to select the EMA from a group of three applicants by the end of April 2003. He also hoped that ECORD could complete a contract by early summer 2003 for making a commitment to IODP membership in 2004.

Austin asked about the reference in the ECORD report to NSF support for the Arctic project. Moran replied that the U.S. proponents had submitted a proposal to NSF for additional support. Suyehiro expressed concern about how to integrate the Arctic project fully into IODP in 2004 and about the involvement of the IMI after its establishment next week. Kenter said that he could not comment any further on that matter until the EMA had established a contract for IODP. Dauphin reminded everyone that the IWG had agreed to allow the ranking of the MSP proposals as an exception to the IODP principles. MacLeod expressed the eagerness of ECORD to identify an official liaison or chief scientists for the Arctic project, and he wondered who held that responsibility. Moore recalled that the iPC had recommended nominees for co-chiefs at its previous meeting in Ghent, and the ESO should pick from that list. MacLeod then asked if the iPC had prioritized the list or if the ESO could just select any two names from it. The committee confirmed that they had not prioritized the list.

### **3d. Canada**

Kathy Gillis reported that Canadian scientists had learned the previous week that no current government programs would support their proposals for membership and scientific participation in IODP. This means that Canada will not join IODP at the beginning and probably not for at least the first few years. She added that Canadian representatives can still participate for the remainder of iSAS and they hope to keep informed about developments after IODP begins.

Moore suggested that Canadian scientists should emphasize to their government the missed opportunity to participate in the Arctic project anticipated for 2004.

### **3e. China**

Zuyi Zhou gave an update on developments in China. He described the new Chinese prime minister, who just took office the day before, as a former geologist. Zhou hoped that that would mean good news for Chinese earth scientists. He noted that the science ministers had recently promised, though not definitely decided yet, to double the support for Chinese participation in IODP, and Chinese scientists have discussed plans to integrate various marine research programs under one ministry. They also discussed IODP science goals at workshops in Shanghai and Beijing last year and have drafted a national science plan for participation in

IODP. The China-ODP Science Committee plans to translate and publish the IODP Initial Science Plan, and they also want to organize a special issue of the Chinese journal *Progress in Earth Science* devoted to ODP results. Selected topics would include technology developments, ocean lithosphere, deep biosphere, and sub-seafloor fluids and observations, and Zhou invited the iPC co-chairs to contribute. He also announced that the 4<sup>th</sup> national symposium on scientific ocean drilling would take place in Beijing in October 2003.

Fisher suggested using the previous contributions to the ODP *Achievements and Opportunities* legacy document in the special journal issue. Zhou said that he might prefer to include translated versions of the reports from some of the JOIDES program planning groups, for example on the deep biosphere and architecture of ocean lithosphere.

#### **4. iSAS Office Report**

Minoru Yamakawa presented the schedule of upcoming iSAS meetings. He categorized the status of the 93 active drilling proposals, indicating that about two-thirds had already undergone revision and review in iSAS, and so far about one-fifth had reached the iPC. Yamakawa also presented a map showing the global distribution of proposed drilling sites.

#### **5. iSAS Panel Reports**

##### **5a. interim Science Steering and Evaluation Panels (iSSEPs)**

Gilbert Camoin reported on the third iSSEPs meeting in November 2002. They reviewed sixteen proposals, including four new preliminary proposals addressing IMAGES objectives and five proposals relating to the complex drilling projects (CDPs) on the Costa Rica margin and Nankai Trough seismogenic zones. They also reviewed an addendum requesting to develop another existing proposal into a CDP. Camoin briefly summarized the iSSEPs review and recommendation for each proposal, noting that one proposal went for external review and had now come forward to the iPC.

Camoin presented an iSSEPs working group report on the possible need for new program planning groups (PPGs) to stimulate proposal development on certain topics. The group identified four scientific themes of the IODP Initial Science Plan (ISP) with relatively few proposals in the system: formation of oceanic crust, deep biosphere, continental margins to sedimentary basins, and external forcing of rapid climate change. In addition to the possibility of creating new PPGs to fill those gaps, the working group recommended increasing collaboration with other research programs, perhaps through specially prepared documents. They also suggested that the SSEPs membership should include representatives from those programs.

Austin wondered about the need for another PPG on the deep biosphere and whether a dedicated microbiology proposal could succeed on its own merits. D'Hondt recalled that SCICOM had recommended just having microbiologists as members of the various advisory panels. He touted the success of Leg 204 as a dedicated deep biosphere project and clarified that they had targeted previously drilled holes because of the limits of shipboard staffing space and not from any shortcoming of the scientific goals. Murray noted that iSciMP has developed a keen interest in deep biosphere studies through the efforts of its members. Kato added that the advancement of microbiological objectives requires a broad exchange of knowledge. Kinoshita asked for more insight on the SCICOM consensus regarding PPGs. Becker explained that SCICOM recommends that IODP exhibit caution in creating PPGs.

After a lunch break, Tim Byrne presented an iSSEPs working group report on complex drilling projects (CDPs). The working group defined a CDP as having an overarching scientific goal and a pathway involving a series of interlinked components, with each

component achievable in a reasonably short period of time and the overall goal unachievable as merely a series of stand-alone projects. They recommended that a CDP should begin with a single pre-proposal giving an overview of the whole project and describing the minimum goals and operational constraints of each component. The SSEPs would then decide whether to request the development of a CDP package that would include a full umbrella proposal and an additional full proposal for each individual component. Eventually the iSSEPs would judge the readiness of the CDP package for external review and for forwarding to the iPC. Once the iPC accepted a CDP, they would create a detailed planning group that would last for the lifetime of the project, and any subsequent components submitted as full proposals would go immediately for external review, together with the umbrella proposal.

Austin suggested expanding the page limits for CDP proposals and asked why the iSSEPs did not want to allow pre-proposals for the later components. Byrne said mostly just to expedite the process. Mayer thought that perhaps proponents should submit a pre-proposal for any components not originally included in the umbrella proposal. Suyehiro suggested that proponents might want to submit a pre-proposal for every phase. MacLeod wondered about the possibility of new proponents getting involved in the middle of a CDP. Byrne recognized the possibility of advising proponents who submit new proposals to join an existing CDP group. Moore said that proponents have some right of ownership of their proposals, and he noted the potential problem of finding qualified reviewers for proposals with a large number of proponents. Austin worried about committing to too many CDPs early in the program and asked whether every riser proposal would constitute a CDP proposal. Gulick wondered if a proposal could require more than one platform and operator and still not qualify as a CDP. Moore answered that riser drilling or a need for multiple platforms would not necessarily equate to a CDP, and he believed that the time limit of the program required a certain amount of front loading. Fisher added that the program would have to evaluate whatever proposals get submitted. Moran asked if the iSSEPs considered technical issues in classifying a proposal as a CDP. Byrne replied that the working group had not identified any technical criteria for CDPs.

Hitoshi Mikada reported that a third working group had begun considering ways to improve the iSSEPs structure, the proposal review process, and the proposal requirements. The group concluded so far that the SSEPs should continue providing advice to the SPC through review comments and grouping, they should have a set of well-defined criteria for evaluating proposals, and those criteria should remain transparent to proponents at all stages. Mikada expected that the discussion of those topics would continue at the next iSSEPs meeting in Niigata. In the meantime, several volunteers from the iSSEPs would review the latest draft of the Guide to IODP.

Moore emphasized the importance of having as many good proposals as possible for the iPC or SPC to review next September. He called it critical to start planning now for the first riser project but acknowledged the difficulty of not yet having the proposals at an advanced enough stage of development. Moore explored whether the CDP proposals that get externally reviewed after the next iSSEPs meeting could reach the iPC in September. Mikada said that it would require a different mechanism from the existing review process. Byrne asked about the possibility of expediting the external review process between meetings or whether external reviewers could attend the iSSEPs meeting. Austin suggested that the iPC could assist in identifying external reviewers, but the external reviewers would not remain anonymous if they attended iSSEPs meetings. Moore proposed getting a commitment from the external reviewers before the next iSSEPs meeting so that the proposals could go out for review

immediately following the meeting. Austin suggested that the external reviewers would need to receive appropriate program information as background for the review.

Later in the meeting, the committee returned to the issue of how to improve the proposal review process. Fisher asserted that the advisory structure should try harder to discourage uncompetitive proposals at an early stage of development and review. Moore thought that the iPC could discourage proposals better than the iSSEPs, and he speculated that the relatively low number of currently mature proposals might reflect a lack of awareness by proponents about the timing of the first scheduling exercise. Oppo noted that proposals could lack maturity for different reasons, and she suggested reconsidering the practice of automatically forwarding proposals to the next level after external review. Prell questioned why the iPC had engaged at all in discussing the basic science of proposals instead of just letting the iSSEPs do it. He also believed that a proposal should remain active as long as the proponents want to work on it. Ildefonse remarked that the iSSEPs get frustrated at seeing proposals repeatedly with only incremental improvements. Austin wondered who would evaluate the technical concerns that can sometimes limit the scheduling of a proposal. Mayer suggested that the iSSEPs could identify those issues and put proponents together with the appropriate service panel, but first they would have to screen the science because not all proposals should undergo a technical review.

After discussing the issue further over lunch, Moore called for a consensus on having the iSSEPs co-chairs and service panel liaisons identify proposals that could benefit from service panel input. He proposed that the iSSEPs would have to request the iSAS Office to solicit permission from those proponents to distribute their proposal to the appropriate service panel.

**iPC Consensus 4-3:** The iPC gives its approval for the iSSEPs and their iSAS service panel liaisons to identify proposals that could benefit from advice by particular service panels. The iSSEPs co-chairs must request the iSAS Office to seek permission from the proponents to distribute such proposals to the appropriate service panel for comment.

On behalf of the iSSEPs co-chairs, Camoin recommended that the iSSEPs should have complete authority to decide when a proposal could go forward to the iPC, meaning that externally reviewed proposals would not automatically go forward as they do now. Prell suggested specifying that aspect in the recommendation, but Moore said that it did not matter. Austin strongly favored the idea that proposals should not automatically go forward to the iPC after external review. Mayer added that proposals could sometimes benefit greatly from the comments provided by external reviewers.

**iPC Consensus 4-4:** The iSSEPs should decide when a proposal is ready to be forwarded to the iPC.

Camoin then proposed a scheme for accelerating the external review process after the May 2003 iSSEPs meeting, ostensibly to maximize the number of proposals ready for ranking in September 2003. He suggested confirming the external reviewers before the next iSSEPs meeting so that the proposals could go out for review immediately thereafter. The iSSEPs would then have an additional meeting by email this summer to evaluate the reviews and decide whether to forward the proposals to the iPC in September. After discussing the optimal timing of events and other operational issues, the committee approved the recommendation.

**iPC Consensus 4-5:** The iSSEPs may hold one additional meeting this year in early August. This meeting should be conducted electronically and focus on new external reviews and related response letters from proponents. The iSAS Office should confirm in advance the

external reviewers for all proposals that could potentially be sent out for external review following the May 2003 iSSEPs meeting.

#### **5b. interim Site Survey Panel (iSSP)**

André Droxler outlined the background of the nominee for the vacant iSSP co-chair position and offered the full endorsement of the panel. Suyehiro described the nominee as the most eligible and appropriate scientist in Japan for such a position. Moore called for a motion to appoint the nominee.

**iPC Motion 4-6:** The iPC appoints Kyoko Okino as a co-chair of the interim Site Survey Panel (iSSP).

*Suyehiro moved, Mayer seconded; 16 in favor.*

Droxler reported that the iSSP reviewed seven full proposals and nine pre-proposals at its third meeting in February 2003. He outlined the iSSP readiness classification scheme, noting that it has evolved slightly with each meeting, and gave an example of the standard message that proponents would receive with their reviews. He then presented the iSSP consensus on Proposals 533, 519, and 564, the three top-ranked MSP proposals. Proponents present in the room included Austin, Camoin, and Moran. Droxler explained that the site-survey data bank has not received any data yet for Proposal 610, the only proposal up for review at this iPC meeting, so the panel could not judge its readiness.

Mayer asked about the distinction between iSSP and iPPSP. Droxler explained that the two panels have different concerns, though with some convergence because they look at the same data. Katz emphasized that iPPSP needs help from iSSP to ensure that they receive a complete data package. Mayer expressed concern about iSSP not having the expertise to address safety issues. Moore noted that the iSSP mandate does not specify anything about safety, though it does mention data gaps, and that could imply safety concerns. He then questioned the appropriateness of classifying the readiness of certain Arctic sites based on safety concerns. After a brief discussion, the committee recognized a scientific basis for the safety concerns.

Droxler presented a report from the iSSP data bank working group and reviewed the timeline of data bank discussions since February 2002. The report states the primary mission of the IODP data bank as to receive, catalog, and store data necessary for the science and safety of all drilling activities and to maintain a system for effectively disseminating those data to panel members and project participants. It also recommends providing broad access to the data to encourage community involvement, while recognizing the need to protect the proprietary nature of many expected data sets. The report includes recommendations on data submission requirements, allowable data formats, communicating with IODP panels and proponents, and data bank facilities, hardware, software, and personnel. Droxler suggested that the working group could help to shape, edit, or review the RFP for the IODP data bank.

Doust noted that the iILP had discussed an idea of creating a meta-database for identifying the availability of existing seismic data within industry. Fisher wanted to ensure that proponents of proposals that could soon come up for scheduling have clear information on upcoming deadlines for submitting seismic data. With no further comments, Moore suggested that the committee should accept the working group report and forward it to IODP.

**iPC Motion 4-7:** The iPC receives the iSSP data bank working group report and forwards it to IODP, and we thank the iSSP for completing the report on time.

*Fisher moved, Mayer seconded; 15 in favor, 1 absent (Herzig).*

Droxler reported that iSSP and iPPSP had established a joint working group to develop a new integrated matrix for site survey and safety data. The group envisions the matrix as a web-based tool that will provide a more automated and comprehensive way of informing proponents what types of data they need to characterize a drill hole in terms of science and safety. Droxler requested approval for several members of iSSP to attend the next iPPSP meeting so that the working group could continue its efforts.

MacLeod asked if the matrix plan would differentiate between data supplied by proponents and operators. Katz clarified that the matrix would show all requirements. Moore asked for a consensus approving the request for several members of the iSSP working group to attend the June iPPSP meeting.

<b>iPC Consensus 4-8:</b> The iPC approves the request for a subset of the iSSP matrix working group to attend the June 2003 iPPSP meeting.
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### **5c. interim Pollution Prevention and Safety Panel (iPPSP)**

Barry Katz reported on the second iPPSP meeting in December 2002. The panel educated itself on currently available coring and sampling tools and discussed MSP capabilities and interactions. They identified a need to define the minimum measurements for safety monitoring on MSPs, and they concluded that each MSP project should have a technical liaison with the iPPSP. Specific MSP safety issues include different requirements for different platforms, national and international regulations, shallow-water operations, non-oilfield coring techniques, safety monitoring during drilling, the split between onshore and offshore science activities, standard core sizes, and the use of wire-line BOPs.

Katz summarized the recommendations from the iPPSP previews of Proposals 519 and 533 and noted that the panel planned to conduct a final review of those projects at their next meeting. They also discussed Proposal 564, although the proponents could not get a complete safety package together in time for a normal preview. In addition, the iPPSP reviewed the draft safety guidelines for riser drilling. They recognized a shift of responsibility from proponents to the operator for many issues, and they wondered whether that shift poses a conflict of interests because the operator ultimately has responsibility for safety. The panel also realized that its expertise and membership would have to expand to handle all of the issues raised in the new guidelines, and they saw a need for a common safety manual for all three types of drilling operations.

Katz noted that the iPPSP has identified several unexamined issues pertaining to site survey requirements, such as scale-up issues associated with multiple platforms, as well as the standards and specifications for onshore and offshore data handling and processing. They recognized that the type of site-survey data required depends on the risk category of a proposal, and MSP projects pose more of a concern than the relatively few riser projects. Katz previewed the agenda for the next iPPSP meeting, showing items on abandonment procedures, reef drilling, a review of Leg 204, a final review of Proposal 533 and possibly 519, the first reviews of Proposal 564 and the PROMESS project, and the matrix working group. He expressed concern about the limited time left before the anticipated start of IODP operations, and he worried about not having the necessary data packages ready by December 2003, when the first previews should ideally occur for the first riser and non-riser drilling projects.

Doust remarked that industry typically plans backward in time from a drilling date. Katz understood and hoped to find a way to quicken the pace of planning for the first round of projects without compromising safety. Austin suggested that iPPSP should define the

boundary between proponent and operator responsibilities and make recommendations on the best drilling approach. Katz worried that the panel might not possess enough expertise to address all issues related to all types of projects, particularly for MSP proposals. Kato emphasized that certain types of proposal, such as for reef or hydrothermal drilling, might require a longer-term assessment. Moore noted that the operators would have responsibility for the shallow gas surveys required for some MSP projects. Doust agreed that iPPSP might have less control over MSP projects than over riser and non-riser operations. Claypool added that hydrocarbon monitoring serves safety and science concerns.

#### **5d. interim Scientific Measurements Panel (iSciMP)**

Rick Murray summarized the process that iSciMP followed in developing a sample and data distribution policy. They started with the policy used by ODP, stripped off the implementation portions, and focused exclusively on policy issues. He noted that the draft policy had not changed much since the iPC last reviewed it, except for the sections on the moratorium and the carry-over of obligations from ODP.

Moore stated that the iPC had asked for this policy and must now vote on it. Farrell noted that the sampling policy makes reference to a publications policy and asked how the panel planned to address that issue. Murray said that iSciMP did not want to address that issue before the program made certain decisions on how to handle publications. Fisher commented on distributing samples for educational purposes. He also recalled that sample recipients formerly had to submit publications, but he would not want to penalize someone if they made a good faith effort to do so. Murray said that the panel tried to provide that flexibility by allowing for submission of progress reports. Dauphin asked if the iPC planned to address the publications policy. Piasias suggested that the executive authority would ultimately request a publications policy from the science planning committee. Moore replied that the iPC had enough other matters to address. Moran suggested that the committee could review the policy again once the program had defined better the obligations incurred by participants. Moore then called for final approval of the sample and data policy.

**iPC Motion 4-9:** The iPC approves the sample and data policy received from iSciMP and forwards it to IODP.

*Suyehiro moved, Austin seconded; 16 in favor.*

Murray presented the six recommendations from the past iSciMP meeting in December 2002. See the appendix for the background summary provided with each recommendation.

iSciMP Recommendation 02-2-1: iSciMP recommends that there be a *database operator* who shall function as the distribution and collection point for all data collected as part of IODP. The database operator will coordinate and facilitate efforts with the science operators of the riser drilling program, the non-riser program, and the mission specific platforms to establish the common database and user interface and for the uploading of all IODP data. iSciMP encourages this database operator to build on the efforts of the previous drilling program and to seriously consider efforts currently underway in support of IODP.

The committee made no comments on the above recommendation and later decided to forward it to IODP (see iPC Consensus 4-12 below).

iSciMP Recommendation 02-2-2: iSciMP recommends that an *ad hoc* database working group be immediately established to provide oversight and assure database consistency across all IODP.

The committee had already approved this recommendation by email vote in early January 2002 and thus offered no further comments here. The following consensus reflects that earlier approval to expedite the establishment of the working group.

**iPC Consensus 4-10:** The iPC approves iSciMP Recommendation 02-2-2 to establish an *ad hoc* database working group.

iSciMP Recommendation 02-2-3: iSciMP recommends that the Science Advisory Structure includes an Operations Committee (OPCOM). We recommend that each panel should have one panel chair as a voting member on OPCOM. The CMO and each implementing organization should have liaison representation on OPCOM and collectively would have a single vote.

A single vote for the IODP management and operator team would ensure that the operations groups work together as a unified IODP operations entity. Voting representation by panels will ensure that science priorities (PC) are retained; scientific objectives (SSEPs) are defended; readiness and issues related to scientific measurements (SCIMP), technical issues related to platform needs (TAP), the site survey requirements related to drilling operations (SSP), and special needs regarding safety and the environment (PPSP) are assured.

Becker noted that the JOIDES OPCOM made all of its decisions by consensus rather than voting. Piasias suggested that management should not get to vote on the advice that it would receive. Moore decided to table this recommendation until after the report of the OPCOM working group. The committee later acknowledged its receipt.

**iPC Consensus 4-11:** The iPC receives iSciMP Recommendation 02-2-3 on establishing the IODP Operations Committee (OPCOM).

iSciMP Recommendation 02-2-4: iSciMP notes that standardization of drillpipe diameter across platforms has the potential to bring benefits to IODP. iSciMP recommends continued investigation of standardization of drillpipe across all IODP platforms. iSciMP recognizes that platforms may on occasion need to use alternate drilling systems, but such choice must meet the scientific objectives.

Kinoshita noted that the recommendation did not specify a particular diameter of drillpipe but only that the program should standardize it. Piasias worried that such standardization could hinder the achievement of certain science objectives. Moran mentioned that iTAP had also discussed this issue and she would present their recommendation shortly. The committee later decided to forward this recommendation to IODP (see iPC Consensus 4-12 below).

iSciMP Recommendation 02-2-5: iSciMP applauds JAMSTEC's effort to address anti-contamination drilling and sampling and encourages their continued development and communication with the iSAS on these matters.

Kato emphasized the importance of such a tool for microbiology and geochemistry, if it works successfully. MacLeod asked about the inertness of the gel. Murray replied that iSciMP had asked the same question and looked forward to the results of further tests. The committee later decided to forward this recommendation to IODP (see iPC Consensus 4-12 below).

iSciMP Recommendation 02-2-6: iSciMP recommends that the link with iSSEPs be formalized by the following:

- (a) Two iSciMP liaisons with iSSEPs will interact closely with the iSSEPs proposal watchdogs throughout the life of a proposal and/or project.
- (b) The iSciMP liaisons together with the watchdogs should identify upcoming technical issues, transmit relevant information to the proponents, or identify technical panel members that proponents may contact for technical issues.
- (c) That the iSSEPs watchdogs remain the interface between proponents and iSciMP.
- (d) That the proposal *Cover Sheet* should be modified to include a section where proponents identify the critical and non-standard measurements and technical needs required to achieve the proposed scientific objectives
- (e) iSAS policy regarding conflict of interest will be closely adhered to.

Moore said that the issue of service panels reviewing proposals would come up again in the iTAP and iILP reports. Mikada thought that the iSciMP recommendation implied that they wanted to review all proposals. Austin suggested that the program should acknowledge and take action on those issues that might lie beyond the control of proponents. Mayer preferred doing it on a case-by-case basis. Fisher worried about giving more scrutiny to some proposals than others. He preferred having a formal process for deciding whether a proposal gets a technical review, and he did not want to have technical advice taken into account during scientific reviews. Murray explained that the panel did not want to add another layer of review. Austin stated that the previous program had always considered technical issues but not until very late in the review process. He also cautioned against having proponents get input from different panels and different directions. Kato stressed the importance of maintaining consistency throughout the review process. The committee later decided to forward this recommendation to IODP after discussing it in the context of similar recommendations from iTAP and iILP.

**iPC Consensus 4-12:** The iPC receives iSciMP Recommendation 02-2-1 on establishing a database operator in IODP, Recommendation 02-2-4 on standardizing the diameter of drill pipe used on IODP platforms, Recommendation 02-2-5 on development of the JAMSTEC anti-contamination drilling and sampling tool, and Recommendation 02-2-6 on formalizing the link between iSciMP and the iSSEPs, and we forward these recommendations to IODP.

Murray briefly reviewed several other consensus and action items from the previous iSciMP meeting and noted that they had made progress in establishing a working group for microbiology. Austin expressed concern about needing approval from the national programs for attendance at working group meetings. Moore stated that iSciMP had acted in response to a previous request from the iPC. Murray previewed the agenda for the next iSciMP meeting and noted that the expected location had changed from Nagasaki to Rhode Island.

The committee adjourned for the afternoon at 17:10 and reconvened in an executive session at 19:00.

**Wednesday**

**19 March 2003**

**8:30-17:00**

### **5e. interim Technology Advice Panel (iTAP)**

Kate Moran reported on the second iTAP meeting in February 2003. The panel discussed establishing liaisons with the iSSEPs, iSciMP, and iILP. They decided to wait until their next meeting to make a recommendation for completing the iTAP membership and meanwhile

planned to advertise for new members in the newsletter of the Society of Petroleum Engineers. Other topics discussed by iTAP included the MBARI observatory proposal, technological needs derived from the IODP Initial Science Plan, establishment of standards for core diameter, pipe diameter, and logging, hole stability, an operational legacy for future planning, and a scheme for developing a project management process. In addition, proponents from two complex drilling projects attended the iTAP meeting and received advice on their proposals.

Moran summarized the pros and cons of setting a standard pipe diameter for IODP drilling operations. She highlighted the greater number of advantages than disadvantages, stressed the importance for standardizing logging, sampling, and specialty tools, noted the common use of 6 5/8" drill pipe in industry, and mentioned that the *Chikyu* could handle that size. Moran then presented an iTAP recommendation on evaluating the benefits of outfitting the non-riser vessel to handle 6 5/8" drill pipe.

**iTAP Recommendation 03-1:** iTAP recommends that the Ocean Drilling Program, through its prime contractor, subcontract an evaluation of the technical, operational, and scientific benefits (*e.g.*, core quality, core volume, tool deployment) and costs of outfitting the JR-replacement to be able to handle up to 6-5/8" drillpipe. iTAP will provide a recommended work statement to ODP.

Austin suggested that iTAP should recommend persons who could do such a study. He also asked about drilling ocean crust and using slim-line tools. Moran replied that bit size and thus hole diameter would remain the same. Kenter asked about the key disadvantages of using larger diameter pipe. Moran identified pipe strength as an issue but not a big one. Austin asked about weight. Moran acknowledged that the added weight also posed another minor issue. Kenter asked about shallow drilling. Moran answered that not all platforms could handle the weight, not even for 5 1/2" pipe. Allan noted that the ship could not store as much of the larger diameter pipe onboard. The committee then voted to accept the recommendation.

**iPC Motion 4-13:** The iPC accepts iTAP Recommendation 03-1 on conducting a study of pipe diameter capabilities on the non-riser vessel.

*Mayer moved, Gillis seconded; 16 in favor.*

Moran presented an iTAP recommendation on developing plans for mitigating the risks associated with unstable borehole conditions for every IODP project.

**iTAP Recommendation 03-2:** iTAP recommends that a hole problem risk mitigation plan be developed for every scheduled program. The plan should include near-real-time analyses during the drilling program that uses real-time drilling parameters. These parameters should also be captured into the IODP database to be used to improve future drilling plans.

Katz believed that such a plan would require mud circulation and therefore riser drilling. Moran replied that ways exist to manage non-riser holes for temperature and stability if planned in advance. Austin asked for a more precise definition of a hole-problem risk mitigation plan. Moran explained the terminology and the committee voted to accept the recommendation.

**iPC Motion 4-14:** The iPC accepts iTAP Recommendation 03-2 on developing a hole-problem risk mitigation plan.

*Gillis moved, Ildefonse seconded; 16 in favor.*

Moran clarified that the following iTAP recommendation referred to documenting the reasons for terminating particular boreholes. She noted that the idea stemmed from the iTAP review of the two riser drilling proposals and an interest in defining the operational limits of non-riser drilling. Moran believed that it would require only a modest effort to extract and organize the relevant information from the various ODP drilling reports.

**iTAP Recommendation 03-3:** iTAP recommends that the Ocean Drilling Program incorporate an evaluation of the termination of each borehole as part of the ongoing legacy documentation of the ODP. iTAP will define the scope of this evaluation so that the information can be used to prepare for the technical challenges in IODP.

Austin could not recall ever seeing a comparison of target depths versus actual achievements. He supposed that ODP did not reach many objectives merely because of the time limits imposed on a typical leg. Kinoshita suggested that such a study would only need to look at the deepest hole in each region. Farrell mentioned the RFP for deep drilling in ODP. Austin added that IODP should ensure making the fullest possible use of the available technology. Prell asked if that would amount to a compromise against the science driven philosophy. Mayer thought it should comprise a line item for each hole in IODP. Austin wanted to set a timeline for completing the study. Bohlen believed it would not involve a lot of work and recommended asking TAMU. Prell proposed that iTAP itself should do the study. The committee voted to accept the recommendation and added a timeline for completing the study.

**iPC Motion 4-15:** The iPC accepts iTAP Recommendation 03-3 on asking ODP to evaluate the termination of each borehole drilled by the program, as part of its ongoing legacy documentation. The iTAP will define the scope of this evaluation and would like to review the results at its next meeting in July 2003.

*Herzig moved, Gillis seconded; 13 in favor, 3 abstained (Austin, Ito, Kato).*

Moran reported that iTAP had reviewed and discussed an industry model for project-based management planning, as introduced by a guest from British Petroleum. The panel recognized the necessity of developing a customized approach for the IODP structure, and Moran presented the following recommendation.

**iTAP Recommendation 03-4:** iTAP recommends the formation of an IODP working group that will develop a project-based management planning system. The system will be similar to those used by the petroleum exploration industry. It will conform to the management structure of IODP and consider the need for efficient passage of proposals from proposed project scientific review to execution and completion of the drilling project. This Project Management Working Group would be charged with developing the project management system by June 2003. Proposed working group membership: iTAP, iILP, iSCIMP, industry project manager(s), iSSEPs, iPC and/or Science Planning Committee, OPCOM working group representative.

Doust strongly favored the idea and wanted to discuss the possibility of industry contribution. Moore expressed concern about the size of the group. He preferred keeping it small so that it could proceed quickly. Gillis thought that the operators should have representatives. Moore acknowledged that CDEX had already done some of the scoping work and suggested replacing iSciMP with CDEX. He also nominated Doust for chair of the working group, Austin as a regular member from the iPC, Moran from iTAP, and Kawamura from CDEX. Kenter suggested having a co-chair from Japan. Kato nominated Ito for co-chair. Macleod

nominated Pezard as a member. Katz volunteered to join the group if it would work principally by email. Austin noted that the iPC needed to complete the report before the next IWG meeting in June. Moore deferred further discussion of this topic until after the OPCOM working group report (see Item 10 below on Detailed Planning Groups).

Moran then presented the final iTAP recommendation on forming a detailed planning group for complex drilling projects.

iTAP Recommendation 03-5: iTAP recommends the formation of a Detailed Planning Group (or a Project Scoping Group) to begin the scoping process for complex drilling programs that are currently planned to address seismogenic zone objectives, as an interim measure. The scoping process includes project description (based on the existing proposals in the system), risk analyses, preliminary cost estimates, and project planning. Proposed membership: proponent representative(s), CDEX representative, project management advisor, risk identification specialist, well engineer.

The committee discussed the proposed membership of the planning group. Austin considered well engineering as a responsibility of the operator. Kawamura confirmed that CDEX would employ well designers. Kenter worried about duplicating the expertise already provided by the operator and the cost of involvement for the other participants. Moore agreed but thought that the effort had to begin immediately and could not wait for a definite answer on whether the required specialists would come from inside or outside the program. Austin suggested that the planning group could instruct IODP management on the kinds of employees and expertise needed. MacLeod expected that the program might have to tender outside contracts for MSP projects.

Austin asserted that non-riser drilling would always precede riser drilling, and each riser project would involve unique concerns. He wondered how to do the initial scoping without first identifying the exact drilling sites. Moore noted that the riser ship could drill in non-riser mode, and therefore non-riser drilling constituted a valid part of the scoping process. Moran believed that the scoping could proceed by considering the target depths and scientific objectives. Moore recognized that someone would have to take charge to ensure that the necessary work gets done, and he suggested that CDEX could lead the effort. Moran thought that the industry representatives might disagree with that idea. Austin nominated Moran as group leader. Moran recommended John Thoroughgood as group leader and said that he could host a meeting in Houston. Kato wanted to defer any decisions until after the OPCOM working group report. Becker stated that if this group served only for the interim period then it would not affect OPCOM planning. Mayer agreed with the idea of hearing the OPCOM report before deciding. (For further discussion see Item 10 below on Detailed Planning Groups.)

Moran finished by reporting that iTAP and iSciMP had formed a small, joint subcommittee to review logging technologies and their application to IODP. They plan to identify options for make recommendations to the iPC. Moran also outlined that iTAP had advised proponents at the last meeting to select sites based on science objectives, refrain from identifying platforms, provide access of proposals to the DPG, and develop technical and operational options based on their science objectives.

#### **5f. interim Industry Liaison Panel (iILP)**

Harry Doust reported on the first iILP meeting in February 2003. He listed the panel membership and noted the dominance of representatives from the energy industry. He then

reviewed the iILP mandate, including proposed additions and amendments, and presented a preliminary set of goals identified by the panel. Those goals included achieving five highly ranked industry-linked proposals within the first five years of IODP, keeping a short list of relevant active proposals and offering advice to the proponents, having certain proponents come to iILP for advice, maintaining an active list of industry science objectives, achieving increased industry support for IODP and placement of industry representatives on iSAS panels, and having at least one industry representative selected as a co-chief scientist within the first seven years of IODP. Doust explained that the panel perceived the low acceptance rate and the typical five-year period between submitting a proposal and executing the project as barriers to industry participants, and they saw a need for providing effective support to industry proponents to streamline the evaluation procedure. They also recognized, however, that the better access and availability of high quality seismic data in industry and a potential strategy of focusing on ancillary projects could help to promote the involvement of industry participants.

Doust said that the iILP expects to provide advice to other iSAS panels as appropriate or requested, particularly on locating seismic and well data. He noted that industry also has valuable experience in complex operational planning and risk assessment. Doust added that the iILP plans to investigate the interest in selectively repackaging ODP legacy data for industry and the possibilities for joint training schemes with industry. They also plan to work on raising the profile of IODP in industry, identifying industry staff to serve on IODP panels, developing a plan for engaging with other industries, and interacting with iTAP and other groups on project planning. Doust reported that the iILP had reviewed the abstracts of all ninety-three active drilling proposals. They identified eleven proposals of direct interest to industry, nine that could benefit from industry data or experience, ten that could perhaps incorporate industry objectives, and ten others of general interest only. Doust then reviewed the time frame of the various activities planned by iILP over the next year or more and announced that they would meet next in Barcelona in mid September 2003.

Herzig asked if the lack of involvement on iILP by the mining and insurance industries reflected a lack of interest or a lack of contacts. Doust saw it as a lack of contacts, and he wanted to dispel anyone from perceiving the panel as merely a pressure group from the energy industry. Fisher appreciated the many avenues for industry involvement, but he worried about finding an appropriately fair and neutral way of advising proponents. He suggested that the iILP could send its list of industry-related proposals to the iSSEPs and let them advise proponents about contacting the iILP. Kinoshita agreed that the iILP should work through the iSSEPs. Suyehiro supposed that the list would evolve and that the door should remain open for proponents to contact the panel. Camoin noted that iSSEPs had already encouraged proponents through their last reviews to contact iTAP and iILP. Austin suggested getting permission from proponents to let the iILP see their proposal. Moore commended the iILP for their enthusiastic approach to the subject. He hoped to enact some procedure for giving them full access to the drilling proposals and noted that the iSAS Office must have permission from the proponents to distribute proposals to other panels.

## **6. Reports from Other Scientific Programs**

### **6a. International Continental Scientific Drilling Program (ICDP)**

Ulrich Harms reviewed the plans for the next twelve months in ICDP. He outlined the goals of the Unzen Drilling Project in Japan that began just a few weeks ago and should last for about two years, and he reported that the Hawaii Scientific Drilling Project would begin a new phase to drill deeper than in 1999 and possibly reach the former ocean floor beneath

Mauna Kea. Harms mentioned that the Chicxulub Drilling Project had generated interest in drilling other impact structures in Chesapeake Bay, near Sudbury, Ontario and the Mjolnir crater in the Barents Sea, and he characterized the planning for the Lake Bosumtwi and Lake Malawi Drilling Projects in Africa as on schedule. Harms described the goals of the SAFOD Pilot Hole and showed results from the associated monitoring project. He reported on the success of the Corinth Rift Geodynamic Laboratory in coring through an active fault zone, and he mentioned the development of other projects to drill active faults in South African mines and the Chelungpu Fault in Taiwan, as well as the seismogenic zone in the Japanese Ultra Deep Drilling Experiments (JUDGE). Harms listed several recent and upcoming ICDP workshops and emphasized that ICDP has a growing membership and a broad scope of drilling projects worldwide. He also referred to the significant achievements to date in IODP-ICDP relations and suggested improving the coordination of meeting dates and defining the pathways for exchanging equipment, tools, and data management.

Kato noted that the Japan Earth Drilling Science Consortium would include ICDP. Kenter confirmed that ECORD and JEODI felt very satisfied with their cooperation with ICDP. Moore asked if the dates for the next iPC meeting in September would conflict with the ICDP schedule. Harms said no. Moore then thanked Harms for his report and encouraged further cooperation between IODP and ICDP.

#### **6b. Other programs**

The agenda book contained general background information on several other international research programs in marine geosciences, such as IMAGES, InterMargins, and InterRidge, but no representatives from those programs could attend the meeting.

### **7. Presentation and Evaluation of Proposals**

#### **7a. Review of evaluation procedure**

The committee did not discuss or amend its established procedure for evaluating proposals.

#### **7b. Environmental Change, Processes, and Effects**

610-Full2 West Florida Margin

Jeroen Kenter presented the scientific goals and objectives of Proposal 610-Full2. After discussing its scientific merits, evaluating the response of the proponents to the external reviews, and noting the lack of supporting data submitted to the site-survey data bank, the committee categorized this proposal as not ready for ranking.

**iPC Motion 4-16:** The iPC groups the following full proposal according to the main scientific themes of the IODP Initial Science Plan and assesses its readiness for future ranking.

**Environmental Change, Processes, and Effects**

610-Full2 West Florida Margin not ready for ranking

*Kenter moved, Oppo seconded, 15 in favor, 1 absent (MacLeod).*

#### **7c. Status of previously reviewed proposals**

- 477-Full2 Okhotsk/Bering Plio-Pleistocene
- 545-Full2 Juan de Fuca Flank Hydrogeology
- 549-Full3 Arabian Sea OMZ
- 551-Full Hess Deep
- 553-Full Cascadia Margin Hydrates

Mayer reported that the proponents of Proposal 477-Full2 intend to submit a revised proposal for the upcoming deadline. Herzig reported that the proponents of Proposal 545-Full2 plan to submit an update at the next deadline addressing the previous iPC review and adding new proponents. Moore announced that the proponents of Proposal 549-Full3 had already submitted a revised proposal to the iSAS Office ahead of the deadline. Tatsumi reported that the proponents of Proposal 551-Full still had to wait for additional site-survey data and therefore would not submit anything new for the next deadline. Fisher noted that he had contacted the proponents of Proposal 553-Full but received no response (*N.B.*, the iSAS Office received the revised Proposal 553-Full2 at the deadline).

## **8. IODP Management and Advisory Structures**

### **8a. IODP Management International, Inc. (IMI)**

As noted under Item 1a, Paul Stoffa reported at the outset of the meeting on the establishment of IMI. He identified the twelve founding members of the corporation and noted ten others who definitely intend to join. He also showed the draft agenda for the initial IMI meeting scheduled for the following week, where they must adopt the by-laws and approve the membership and the board of governors. Stoffa explained that the IMI board would have seventeen voting governors plus a non-voting president, with five to seven members comprising an executive committee, and each membership contribution of \$5.0 million would yield one seat on the board. He added that regular members and board members must abide by the same conflict-of-interest rules. Stoffa then outlined the types of activities that would require full board approval, and he mentioned certain indemnification provisions of the by-laws.

When the committee returned to the issue of IMI later in the meeting, Moore noted that the lead agencies would each have five seats on the board of governors and the number of other members would depend on the funding contributions. He also explained that the board could establish other standing committees in addition to its own executive committee. Kenter affirmed the strong intent of ECORD to join IODP and emphasized that they would not have a representative at the first IMI meeting because of poor timing, not a lack of interest. He also noted that the current IMI membership consists only of institutions, whereas the members from Europe might likely consist of funding agencies. Moore said that the IMI by-laws allow either possibility and that anyone could join the corporation for \$5000. Dauphin clarified that an organization must also belong to an IODP member entity to join IMI. Bohlen added that the by-laws articulate the role of members.

Becker asked if IODP would establish the SAS panel membership using the same formula that defined the JOIDES panel membership in ODP. Dauphin said probably yes. Austin wanted to encourage having observers at SAS meetings from prospective members who might not manage to join IODP from the beginning. Gillis also stressed the importance of enabling prospective members to stay informed, and she wanted to clarify the possible nature of observer status. Becker noted that the associate members of ODP have formal observer status in JOIDES. Dauphin replied that such matters would remain undefined until IODP begins. Austin proposed the following motion to encourage participation at the science advisory level.

**iPC Motion 4-17:** The iPC supports the concept that robust international participation is crucial to the long-term success of IODP. The iPC further recognizes the potential scientific contributions of scientists from countries and/or consortia seeking membership in IODP and therefore supports their involvement at the Science Planning Committee level, at least as observers, until such time as their funding commitment to IODP is assured.

*Austin moved, Kenter seconded; 15 in favor, 1 absent (MacLeod).*

### **8b. Executive authority**

Moore defined the executive authority as the policy making body that represents the SAS to IMI. He explained that IMI would establish the executive authority, and its membership would consist of senior scientists from IODP member nations. Kato asked if the board of governors and the executive committee would have the same members. Moore said perhaps, but perhaps not. Suyehiro noted that according to the IODP management principles the executive authority would approve the annual program plan before its submission to IMI and the lead agencies.

### **8c. OPCOM working group report**

Keir Becker delivered the report of the OPCOM working group, noting that the group did not have a chair and had elected him as secretary. The working group defined the paramount goal of OPCOM as achieving the IODP science objectives to the greatest extent possible in operational terms. The group assumed that IODP would follow a similar overall planning process as ODP, but they believed that OPCOM would play a more critical role because of the complexities of operating multiple platforms. Moreover, those complexities would require longer-term operational and fiscal planning, subject to annual change. The working group also viewed the new OPCOM as a bridge between science planning and operator implementation that would require representatives from the advisory structure and management.

Becker outlined a general long-term schedule for the planning process for riser drilling, from initial scheduling four years in advance through modification of current drilling plans as a result of recent drilling. He then presented a simplified flow chart of science advice in IODP, showing the position of OPCOM with respect to the CMO, the operators, the executive authority, and the rest of the SAS. Becker explained that compared to ODP, the OPCOM in IODP would focus on complex, multi-platform operations; it would represent an independent committee rather than a subcommittee of the SPC; it would interact more strongly with the operators and CMO early in the scheduling process; and the service panels would report directly to the SPC instead of through OPCOM. He then presented the proposed mandate for the IODP OPCOM. The version presented here reflects the changes agreed upon by the committee in the following discussion.

#### **Proposed Mandate for IODP OPCOM**

**1. General Purpose:** The Operations Committee (OPCOM) is an independent committee within the Science Advisory Structure whose general purpose is to recommend the most logistically and fiscally effective means to achieve IODP scientific objectives as defined in the long-range IODP science plan and prioritized by the Science Planning Committee (SPC). OPCOM reports to SPC and, through SPC, to the SAS Executive Authority.

**2. Mandate:** OPCOM is responsible for recommending the optimal means to implement IODP drilling projects that are highly ranked and prioritized by SPC. Following IODP project management principles, OPCOM should consider, in addition to SPC prioritizations, (a) capabilities of IODP drilling platforms, (b) budgetary and logistical constraints, and (c) advice from SAS service panels on safety, environmental, and technological factors. Following the

annual SPC prioritization and ranking of proposed IODP drilling programs, OPCOM will specifically recommend options for the schedules of IODP drilling platforms for the appropriate year(s) (as defined by the annual IODP program plan) and will also project a longer-term schedule for future drilling operations. In addition, OPCOM must monitor progress toward achieving the longer-term drilling schedule and therefore is also responsible for recommending any modifications to both the short- and long-term drilling schedules that may be necessary as developments occur or constraints arise after SPC has prioritized relevant IODP science projects.

**3. Consensus and Quorum:** The Operations Committee will reach all decisions by consensus. In defining consensus, a quorum shall be required consisting of 2/3 of the scientific participants and 2/3 of the management representatives as defined in Section 4.

**4. Participants Counting Toward Consensus and Quorum:** The Operations Committee will be chaired by a knowledgeable scientist who is non-conflicted in both scientific and operational matters and is appointed by the SAS executive authority. Participants from SAS shall include the SPC chair and as many additional representatives from the SPC as there are implementing organizations (IOs). Participants from IODP management shall include one designated representative from each IO and one designated representative from the central management organization (CMO). The terms of the chair and representatives from SPC should extend no longer than three years, and rotations should be staggered.

**5. Liaisons, Observers, and Guests:** Each Lead Agency is expected to nominate one liaison to OPCOM. Lead Agencies, the CMO, and IOs may send additional observers as needed. A chair of each of the SSEPs, SciMP, PPSP, SSP, TAP and ILP will serve as liaisons to OPCOM. When necessary to provide additional expertise, guests may be invited at the discretion of the chair. Approximately one year before the end of the chair's term, the next chair should be identified and he or she should attend that year's meetings as a guest.

**6. Meetings:** OPCOM shall meet at least twice per year. One of the OPCOM meetings will be coordinated with the annual SPC ranking exercise, in order to construct the appropriate year's schedules of the IODP drilling platforms. The other meeting will be held about half a year apart, to recommend adjustments to the drilling schedules if needed. If drilling schedules or modifications recommended by OPCOM are not approved by SPC and/or the SAS executive authority, then additional OPCOM meetings may be required to recommend alternative schedules.

Gillis inquired when OPCOM would enter the planning process. Becker answered not until after the SPC ranking. Austin asked whether OPCOM could conceivably approve a project without any of the scientists agreeing. Becker replied no because OPCOM would decide all matters by consensus. Prell noticed an inconsistency between the text and diagram in terms of the independence of OPCOM and having it report to the SPC. Becker replied that all SAS panels would report to the SPC. Austin sensed concern about the potential for direct exchanges between OPCOM and the executive authority. Becker noted that his diagram did not show a direct link between OPCOM and the CMO. Mayer regarded the position of OPCOM as a philosophical issue in terms of its response to the science program, and he disliked the current model showing an equal balance between scientists and managers. Murray remarked that the iSciMP model shows the participants dominated by the SAS and central management, with IO representatives as merely liaisons.

Gillis wondered if Section 2 of the mandate should include advice from iSAS panels if they had already provided input during the review and scoping process. Austin suggested that the mandate should refer specifically to project management. Fisher asked if OPCOM would

respond to budgetary issues that might require changing the schedule. Becker said yes, but only in terms of recommending changes and not deciding on them. Mayer clarified that OPCOM would always report through the SPC, though might have a liaison to the project management team.

In regard to Section 3, Austin suggested setting a specific quorum for each category of participants. Moore proposed having a 3/4 quorum of each of the scientific and management representatives. Kato recommended 2/3 as a better ratio for small numbers.

Kato questioned whether Section 4 should specify that the executive authority would select the chair before knowing the functions of the executive authority. Droxler asked about the meaning of having a neutral chair. Becker replied that the OPCOM chair should not serve as a proponent of an active proposal. Fisher proposed that it should say non-conflicted instead of neutral, or even specify not a proponent of a proposal. Kenter noted that the mandate did not allow for European membership on OPCOM if they would not have lead agency status, except through the IO. Becker agreed that the membership criteria could relate to the number of IOs instead of lead agencies. Fisher noted the lack of an explicit mechanism for identifying alternate members in case of absence or conflict of interest for the scientific members.

The committee debated the issue of whether the operators should count toward the consensus. Becker noted the concern that central management might not satisfactorily represent the operators. Moran said that having only one representative would help to integrate the management. Austin noted that the management principles already give a lot of power to the CMO. Suyehiro preferred giving equal weight to all concerned parties. Mayer had greater concerns about ensuring that scientific objectives would always steer the program. He added that deciding by consensus meant that the outcome could depend on the easiest path for a particular operator. Fisher noted that the platform operators would ultimately have the final say onboard, but perhaps it could work effectively to give them a voice in the consensus. Dauphin asked what would happen if the operator disagreed. Becker responded that the committee would not reach a consensus in that case and would have to refer the issue back to the SPC for a final decision. Gillis thought that the project management scheme would resolve such disagreements before they reached OPCOM. Austin explained that the advanced scoping would happen later in the project management scheme. Mayer noted that OPCOM would decide on the platforms and operational plan, and he suggested that OPCOM should establish the project management team. Doust cautioned that if the operators contribute to the OPCOM consensus it could jeopardize the project management review process. Moore believed that the project specific evaluations would provide strong recommendations to the CMO.

Gillis remarked that the science members of OPCOM would have a high workload, and she expressed concern about the possibly disruptive influence of MSP operators who might have only a very short-term involvement for a single project. Kenter agreed with the current model and assured everyone that ECORD would take a long-term view. MacLeod noted that ECORD would have a say as long as it maintained an intention to schedule legs. Gillis stated that IODP could have other MSP operators besides ECORD. Fisher echoed the concern that the operators would not necessarily take as long term of a view as volunteers from the scientific community, and he remained uncertain how to balance the competing concern of whether having operator input at OPCOM weakens the strength of the CMO. Gillis suggested deferring the vote until learning more about how project management would work. Moore preferred calling for a vote now, while recognizing some dissenting opinions about OPCOM

membership and that SPC might revisit this issue.

**iPC Motion 4-18:** The iPC accepts the revised Section 4 of the IODP OPCOM mandate, on participants counting toward consensus and quorum, as proposed by the OPCOM working group.

*Suyehiro moved, Kenter seconded; 13 in favor, 1 opposed (Gillis), 2 abstained (Mayer, Oppo).*

With only minor additional comments about the exact wording of Sections 5 and 6, the committee approved the rest of the OPCOM mandate by consensus.

**iPC Consensus 4-19:** The iPC accepts the revised Sections 1, 2, 3, 5, and 6 of the IODP OPCOM mandate proposed by the OPCOM working group.

#### **8d. Center for Deep Earth Exploration (CDEX) report**

Yoshihisa Kawamura reviewed the structure and detailed functions of CDEX. He described the projected staffing levels, emphasizing the industry experience of several current employees, and the general responsibilities of the various groups for operations, site surveys, science services, and HSE. Kawamura then outlined the required preparation period for riser drilling, encompassing the three phases of seismic site surveying to define target depths (17 months), engineering site surveying to define geohazards for safety operations (13 months), and detailed planning and operation preparations (22 months). He explained that the overall preparation period for an ordinary project would require 35 months but would rise to 50 months with more extensive initial site surveying. Kawamura presented a detailed operational timetable and identified the important milestones as the ranking of proposals and probably three safety reviews.

Moore wondered if CDEX would accept the idea of rotating technical staff among the different operators and platforms in IODP. Kawamura could not exclude the possibility. Farrell noted that some of the described tasks involved science costs. He asked if CDEX could reconcile what they had already done in terms of hiring and expenses with what the IMI would eventually allow. Kawamura said that they would have to wait and see what the IMI would allow. Gillis asked if the time estimates included the time needed for the initial non-riser phase of drilling. Kawamura said no. Katz added that riser drilling did not require preliminary non-riser drilling from a safety or operational standpoint but you might want it for scientific reasons. Kenter wondered how to speed up the process. Moore noted that the scoping process could start before the ranking. Herzig asked if CDEX planned to do logging. Kawamura said that they would contract the logging.

The meeting adjourned for the day at 15:30 and an *ad hoc* working group on IODP project management convened shortly thereafter.

**Thursday**

**20 March 2003**

**8:30-12:30**

#### **9. Guide to IODP**

##### **a. Scientific goals, organization, and structure**

##### **b. Science Advisory Structure (SAS)**

##### **c. Science planning process**

##### **d. Proposal submission and evaluation**

Jamie Austin outlined the overall status of the Guide to IODP, described it as still under development, and stressed the importance of having the guidelines available for proponents submitting proposals. He thus aimed to have a workable draft ready to approve at the last iPC meeting so that it could pass on to the SPC and get posted to the public by 1 October 2003.

Austin noted that it would probably take somewhat longer to produce a printed version, if desirable, because it would require a source of funding.

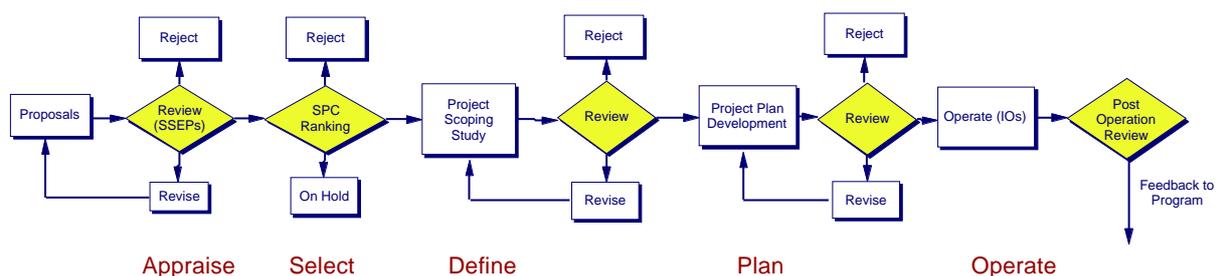
### e. Complex Drilling Projects (CDPs)

Kiyoshi Suyehiro outlined the draft guidelines for developing, mentoring, and evaluating CDP proposals, establishing related detailed planning groups, and scheduling and managing the required drilling time. He also referred to the working group report presented earlier by the iSSEPs co-chairs on a recommended structure and review procedure for CDP proposals.

Austin cautioned that the program could not commit to more than a few CDPs without locking up the platform capability from the beginning. He added that evaluating the later-stage proposals of a CDP might depend on results from the initial stages. Suyehiro worried about it taking too long that way to develop the later-stage proposals. Austin suggested that project management would provide a way to assess the later stages. Katz conceded that early results could produce slight changes in the plans for later stages, but that should not pose such a great challenge once the project had entered the system. He also supposed that a project could succeed operationally but not scientifically. Austin doubted very much that the community would regard an operation as a success if the science had failed. Gulick asked whether a late-stage proposal that depended on results from an earlier stage would always return to the SSEPs for evaluation. Moore said yes, but if the proponents have to wait for results before submitting the next proposal then it might not qualify as a CDP.

### 10. Detailed Planning Groups for Riser Drilling

Becker presented a report from an *ad hoc* working group on IODP project management that convened after the full committee had adjourned the previous day. The working group recognized the added challenge and complexity of using multiple platforms in IODP. They concluded that IODP project management should follow well-established industry practice on a project-by-project basis, customized to IODP needs. Furthermore, they recommended a five-stage process that would include 1) a scientific appraisal by the SSEPs, 2) ranking and selecting the project by the iPC, 3) defining the project by the project management team, 4) developing the project plan by the project management team, and 5) operating or conducting the project by the contractors (see flow chart below). Depending on the nature of a project, each stage might require an independent review and risk assessment before moving on to the next stage.



Austin expressed concern about whether most IODP scientists would understand the associated terminology. Mayer characterized the terms as simple and clear enough. Moore wanted to include a statement about defining the project management team. Becker replied that the working group would do that. Moran wondered about changing the word review. Doust considered review as an appropriate term. Moore suggested adding the word system. Moran said that every project would follow the same system, but not at the same rate. Katz commented that the working group had not specified who would have the responsibility for making decisions at each stage. Prell questioned where the service panels fit into the flow

path. Kato inquired if the project management team could contact other advisory panels. Murray asked if the scientific appraisal should come from the SAS and not just the SSEPs. Austin noted that the committee had already decided that the service panels would funnel advice through the SSEPs. He also suggested that the working group should report to the SPC.

With reference to the earlier presentation and discussion of the iTAP report (see Item 5e above), the committee voted to establish a working group on project management.

**iPC Motion 4-20:** The iPC accepts iTAP Recommendation 03-4 and establishes an IODP working group that will develop a project-based management planning system. The group will include members from iTAP, iILP, iPPSP, iSSEPs, iPC or SPC, the OPCOM working group, CDEX, and industry project managers. The system should be developed by June 2003.

*Gillis moved, Austin seconded; 15 in favor, 1 abstained (Kinoshita).*

Mayer thought that the flow chart did not differ radically from how ODP had operated. Moore said that it did not specify how OPCOM would fit in the flow path and provide feedback to the SAS. Becker responded that the SAS probably would not need feedback from OPCOM for simpler projects. Gillis wondered who would coordinate and conduct the project management scoping and asked, for example, about the reporting path for the Arctic planning group. Moore replied that the Arctic DPG had reported to SCICOM. Mayer added that proponents and operators would conduct the project scoping. Doust defined project scoping as a means to assure efficient and safe operations for meeting the science objectives. Austin stated that it also implied making a go or no go assessment at each stage of planning and review. Mayer viewed that as a prime reason for having technical and operator involvement at an early stage. Katz added that risk analysis in industry refers to the probability of achieving the goals and thus would involve science.

Moran viewed the scoping process as a generic first step in terms of riser drilling, and she suggested establishing the group as a subcommittee of iTAP. Moore disagreed and said that the group should report to the iPC and not iTAP. Austin prompted that the iPC would need to rank CDP proposals before the end of iSAS. Moore replied that the iPC had not received permission to do so. Gillis suggested that the group should have an observer or watchdog from the iPC. Kato asked if the scoping group would report to the SPC and whether it would involve proponents. He also noted that the group would need expertise on non-riser drilling for making the recommended cost estimates. Moore responded that only proponents could provide much of the information, and he suggested removing cost estimates from the charge. Austin wanted to include the flow chart with the instructions to the group and define a timeline. He also worried that proponents might get the wrong message that they have approval for their project. Moore agreed that the iPC should make it clear to the proponents that this represents an exploratory effort.

With reference again to the earlier presentation and discussion of the iTAP report (see Item 5e above), the committee voted to establish a project scoping group.

**iPC Motion 4-21:** The iPC accepts iTAP Recommendation 03-5 and establishes a project scoping group to begin the scoping process for existing complex drilling projects, as an interim measure. The scoping process includes project description, risk analyses, and project planning. Membership will include representatives from proponent groups and implementing organizations, an industry project management adviser, a risk identification specialist, and a well engineer. The members should be identified by June 2003.

*Gillis moved, Fisher seconded; 14 in favor, 2 abstained (Ito, Kato).*

### **11. iSAS to SAS Transition**

The iPC discussed several models for the terms of service of the chair and vice-chair of the Science Planning Committee. Moore explained the simplest model of having the vice-chair replace the chair and appointing a new vice-chair every two years, and he noted the normal three-year term of regular committee members. The committee then debated the merits of the various models and decided in favor of the simplest one. Moore asked whether this simple model would also apply to the first chair and vice-chair of the SPC. The committee agreed that it should apply from the beginning and passed the following motion.

**iPC Motion 4-22:** The iPC recommends that the Science Planning Committee should have a chair and vice-chair who serve a total term of four years, with the chair replaced by the vice-chair and a new vice-chair appointed every two years.

*Herzig moved, Mayer seconded; 13 in favor, 3 abstained (Ito, Kato, Tatsumi).*

Gillis asked about the role of the chair versus the vice-chair. Moore replied that the SAS Office would communicate with the chair and the chair would communicate with the vice-chair, plus the vice-chair would serve as an alternate chair in case of a conflict of interest or absence. Kato asked who would select the chairs. Dauphin explained that the lead agencies had asked IMI to develop a scheme for selecting the chairs. Prell noted that USSAC would nominate candidates for the chairs to IMI. Moore regarded the executive authority as the proper body to select the SPC chairs.

### **12. Other Business**

Kato distributed a brief document outlining his views on patent rights and microbiological sampling in IODP. The committee members noted that they would need more time to review the document before discussing it. Kato encouraged them to submit their comments to him at their earliest convenience.

The committee then extended its appreciation to the host and local organizers of the meeting.

**iPC Consensus 4-23:** We sincerely thank Jamie Austin, Nancy Hard, and Kathy Ellins for their superb efforts in organizing and hosting this fourth meeting of the iSAS interim Planning Committee in Austin, Texas.

### **13. Review of Motions and Consensus Items**

The committee reviewed the entire slate of draft motions and consensus items and suggested minor changes to the wording of a few.

### **14. Future Meetings**

#### **14a. Liaisons to other panels and programs**

The committee agreed upon liaisons for the final round of iSAS panel meetings as follows: iSSEPs - Moore and Tatsumi; iSSP - Austin; iSciMP and iTAP - Ito, Kinoshita, and Moore; iPPSP - Kinoshita and Moore; iILP - Pezard.

**14b. 5<sup>th</sup> iPC Meeting, September 2003, Japan**

**14c. 1<sup>st</sup> Meeting of IODP Planning Committee**

Yamada presented a plan for the September 2003 meeting of the iPC and SPC in Sapporo, Japan coupled with a visit to see the riser vessel *Chikyu* under construction in Nagasaki. The committee discussed the amount of time needed for the meetings and decided to allow four days combined. Some participants expressed concern about splitting the meeting between Sapporo and Nagasaki. Yamada agreed to review the plan and present a final schedule later.

The meeting adjourned at 12:30.

**iSAS interim Scientific Measurements Panel**  
**Recommendations from 3<sup>rd</sup> Meeting, 12-14 December 2002**

**iSciMP Recommendation 02-2-1:** iSciMP recommends that there be a *database operator* who shall function as the distribution and collection point for all data collected as part of IODP. The database operator will coordinate and facilitate efforts with the science operators of the riser drilling program, the non-riser program, and the mission specific platforms to establish the common database and user interface and for the uploading of all IODP data. iSciMP encourages this database operator to build on the efforts of the previous drilling program and to seriously consider efforts currently underway in support of IODP.

Background: iSciMP recognizes the significance of data management and the role it will play in the future success of IODP. In order to truly function as an integrated program, there should be one common user interface and one comprehensive database, maintained at a central location and mirrored at appropriate nodes, where the user community is able to access, visualize, and download IODP data and information.

**iSciMP Recommendation 02-2-2:** iSciMP recommends that an *ad hoc* database working group be immediately established to provide oversight and assure database consistency across all IODP.

Background: The opportunity to build and expand on the database efforts of the previous program is now. A comprehensive IODP database must be functioning and ready to receive data at the beginning of the first IODP drilling project. The working group will also identify areas where improvements in the previous database should be addressed, such as observations based on scientific interpretation, and identify additional data types (downhole logging, seismic profiles, digital visual core description, etc.) to be integrated into the comprehensive database.

Constitution and Implementation: We anticipate the working group will comprise 8-10 individuals, with diverse background and international representation (US-Japan-JEODI), gathering for 1-2 day meeting. Dave Divins, iSciMP member, will chair and organize it, along with strong input from other interested iSciMP members (e.g., S. Saito). We anticipate the constituency will include up to several iSciMP members--either as formal members or as observers--but will not be limited to persons with ODP or Janus experience. They will meet in April or March and have a full report draft available in advance of iSciMP's July meeting, so iSciMP can sign off on the final report at that meeting itself.

Progress Report: Early May, Boulder, CO, USA. 1-2 day meeting. Kuramoto (CDEX), Takahashi (Central Comp. Services), Diepenbroek (Bremen), Graham (BGS), Arnold (Sweden), Moran (URI), Courser (BAE) are likely participants, along with panelists Divins and Saito.

**iSciMP Recommendation 02-2-3:** iSciMP recommends that the Science Advisory Structure includes an Operations Committee (OPCOM). We recommend that each panel should have one panel chair as a voting member on OPCOM. The CMO and each implementing organization should have liaison representation on OPCOM and collectively would have a single vote.

A single vote for the IODP management and operator team would ensure that the operations groups work together as a unified IODP operations entity. Voting representation by panels will ensure that science priorities (PC) are retained; scientific objectives (SSEPs) are defended; readiness and issues related to scientific measurements (SCIMP), technical issues related to platform needs (TAP), the site survey requirements related to drilling operations (SSP), and special needs regarding safety and the environment (PPSP) are assured.

Background: The operations committee (OPCOM) has the mandate to identify the appropriate platform for drilling projects, schedule each of the platforms, and make recommendations on major expenditures (e.g., ACORKS) on IODP projects. As such, this committee must ensure that the operations/management entities deliver the science recommended by the scientific advisory structure. This can best be achieved by strong input from the science and technical panels within the framework of a clear demarcation between advice and contractual responsibilities. Once the advice from the SAS is provided to the CMO, the CMO is responsible for contractually implementing the scientific and technical recommendations that include, most importantly, operational decisions based on the best possible science plans.

A major difference between IODP and ODP is multiple platform operations as compared with a single operator in ODP. It is important for IODP to adopt management instruments within the SAS and in the CMO that ensures the IODP is managed as a single entity instead of three separate platform operators.

**iSciMP Recommendation 02-2-4:** iSciMP notes that standardization of drillpipe diameter across platforms has the potential to bring benefits to IODP. iSciMP recommends continued investigation of standardization of drillpipe across all IODP platforms. iSciMP recognizes that platforms may on occasion need to use alternate drilling systems, but such choice must meet the scientific objectives.

Background: This important issue was raised at a number of different junctures at the meeting. It impacts multiple features of the new program, all operators, and all platforms. String weight, borehole size, coring size, sample size for different needs (microbiology, sedimentology and structure), logging, downhole tools, and other parameters will be affected. More input from iTAP and continued input from iSciMP in early 2003 is needed.

**iSciMP Recommendation 02-2-5:** iSciMP applauds JAMSTEC's effort to address anti-contamination drilling and sampling and encourages their continued development and communication with the iSAS on these matters.

Background: As microbiological research in IODP will be prominent, much research is addressing improved methods of obtaining non-contaminated samples. This recommendation is based on an interesting presentation by Mr. Wada (JAMSTEC), which intrigued the iSciMP to the point where further information is likely to be of interest. This subject will also be discussed at iTAP, and JAMSTEC (and perhaps other interested parties) will provide additional feedback at iSciMP's next meeting. This is also going to be discussed at the Microbiology Working Group meeting.

**iSciMP Recommendation 02-2-6:** iSciMP recommends that the link with iSSEPs be formalized by the following:

- (a) Two iSciMP liaisons with iSSEPs will interact closely with the iSSEPs proposal watchdogs throughout the life of a proposal and/or project.
- (b) The iSciMP liaisons together with the watchdogs should identify upcoming technical issues, transmit relevant information to the proponents, or identify technical panel members that proponents may contact for technical issues.
- (c) That the iSSEPs watchdogs remain the interface between proponents and iSciMP.
- (d) That the proposal *Cover Sheet* should be modified to include a section where proponents identify the critical and non-standard measurements and technical needs required to achieve the proposed scientific objectives
- (e) iSAS policy regarding conflict of interest will be closely adhered to.

Background: iSciMP notes that a formalization of the link with iSSEPs and the access to information of proposals in the system to provide technical advice when required and/or requested would be desirable in the future. It is recognized that the new IODP program will long-term projects with multiple platforms. Some level of involvement of iSciMP in the proposal review process and duration of projects is required to deal with upcoming issues. These include consistency of measurements across platforms and through time, identification of required developments at early stages of proposals or projects, and dealing with unforeseen problems (e.g., microbiology patents, safety of new technologies, sample handling, and others). The iSciMP recommendation intends to establish appropriate mechanisms of interaction of iSciMP with iSSEPs and proponents, retaining the technical nature of iSciMP.

## iSAS interim Technology Advice Panel

### Recommendations from 2<sup>nd</sup> Meeting, 21-22 February 2003

**iTAP Recommendation 03-1:** iTAP recommends that the Ocean Drilling Program, through its prime contractor, subcontract an evaluation of the technical, operational, and scientific benefits (*e.g.*, core quality, core volume, tool deployment) and costs of outfitting the JR-replacement to be able to handle up to 6-5/8” drillpipe. iTAP will provide a recommended work statement to ODP.

**iTAP Recommendation 03-2:** iTAP recommends that a hole problem risk mitigation plan be developed for every scheduled program. The plan should include near-real-time analyses during the drilling program that uses real-time drilling parameters. These parameters should also be captured into the IODP database to be used to improve future drilling plans.

**iTAP Recommendation 03-3:** iTAP recommends that the Ocean Drilling Program incorporate an evaluation of the termination of each borehole as part of the ongoing legacy documentation of the ODP. iTAP will define the scope of this evaluation so that the information can be used to prepare for the technical challenges in IODP.

**iTAP Recommendation 03-4:** iTAP recommends the formation of an IODP Working Group that will develop a project-based management planning system. The system will be similar to those used by the petroleum exploration industry. It will conform to the management structure of IODP and consider the need for efficient passage of proposals from proposed project scientific review to execution and completion of the drilling project. This Project Management Working Group would be charged with developing the project management system by June 2003. Proposed working group membership: iTAP, iILP, iSCIMP, industry project manager(s), iSSEPs, iPC and/or Science Planning Committee, OPCOM working group representative.

**iTAP Recommendation 03-5:** iTAP recommends the formation of a Detailed Planning Group (or a Project Scoping Group) to begin the scoping process for complex drilling programs that are currently planned to address seismogenic zone objectives, as an interim measure. The scoping process includes project description (based on the existing proposals in the system), risk analyses, preliminary cost estimates, and project planning. Proposed membership: proponent representative(s), CDEX representative, project management advisor, risk identification specialist, well engineer.

## OPCOM Working Group Recommendation

### Proposed Mandate for IODP OPCOM

**1. General Purpose:** The Operations Committee (OPCOM) is an independent committee within the Science Advisory Structure whose general purpose is to recommend the most logistically and fiscally effective means to achieve IODP scientific objectives as defined in the long-range IODP science plan and prioritized by the Science Planning Committee (SPC). OPCOM reports to SPC and, through SPC, to the SAS executive authority.

**2. Mandate:** OPCOM is responsible for recommending the optimal means to implement IODP drilling projects that are highly ranked and prioritized by SPC. Following IODP project management principles, OPCOM should consider, in addition to SPC prioritizations, (a) capabilities of IODP drilling platforms, (b) budgetary and logistical constraints, and (c) advice from SAS service panels on safety, environmental, and technological factors. Following the annual SPC prioritization and ranking of proposed IODP drilling programs, OPCOM will specifically recommend options for the schedules of IODP drilling platforms for the appropriate year(s) (as defined by the annual IODP program plan) and will also project a longer-term schedule for future drilling operations. In addition, OPCOM must monitor progress toward achieving the longer-term drilling schedule and therefore is also responsible for recommending any modifications to both the short- and long-term drilling schedules that may be necessary as developments occur or constraints arise after SPC has prioritized relevant IODP science projects.

**3. Consensus and Quorum:** The Operations Committee will reach all decisions by consensus. In defining consensus, a quorum shall be required consisting of 2/3 of the scientific participants and 2/3 of the management representatives as defined in Section 4.

**4. Participants Counting Toward Consensus and Quorum:** The Operations Committee will be chaired by a knowledgeable scientist who is non-conflicted in both scientific and operational matters and is appointed by the SAS executive authority. Participants from SAS shall include the SPC chair and as many additional representatives from the SPC as there are implementing organizations (IOs). Participants from IODP management shall include one designated representative from each IO and one designated representative from the central management organization (CMO). The terms of the chair and representatives from SPC should extend no longer than three years, and rotations should be staggered.

**5. Liaisons, Observers, and Guests:** Each Lead Agency is expected to nominate one liaison to OPCOM. Lead Agencies, the CMO, and IOs may send additional observers as needed. A chair of each of the SSEPs, SciMP, PPSP, SSP, TAP and ILP will serve as liaisons to OPCOM. When necessary to provide additional expertise, guests may be invited at the discretion of the chair. Approximately one year before the end of the chair's term, the next chair should be identified and he or she should attend that year's meetings as a guest.

**6. Meetings:** OPCOM shall meet at least twice per year. One of the OPCOM meetings will be coordinated with the annual SPC ranking exercise, in order to construct the appropriate year's schedules of the IODP drilling platforms. The other meeting will be held about half a year apart, to recommend adjustments to the drilling schedules if needed. If drilling schedules or modifications recommended by OPCOM are not approved by SPC and/or the SAS executive authority, then additional OPCOM meetings may be required to recommend alternative schedules.