

**MEETING OF THE
JOIDES EXECUTIVE COMMITTEE
AT
THE ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCES
UNIVERSITY OF MIAMI
VIRGINIA KEY, MIAMI, FLORIDA, U. S. A.
JANUARY 13–14, 1999
M I N U T E S**

Executive Committee – EXCOM

Helmut Beiersdorf (Chair)	Bundesanstalt für Geowissenschaften und Rohstoffe, Hannover, Germany
James Briden	Environmental Change Unit, Oxford University, United Kingdom
Maria C. Comas	Universidad de Granada, European Science Foundation (ECOD)
Brent Dalrymple	College of Oceanic & Atmospheric Sciences, Oregon State University, USA
Robert Detrick	Woods Hole Oceanographic Institution, USA
David Feary	Australian Geological Survey Organisation, Australia–Canada–Chinese Taipei–Korea Consortium (PACRIM)
Chris Harrison	Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, USA
Margaret Leinen	Graduate School of Oceanography, University of Rhode Island, USA
John Mutter	Lamont-Doherty Earth Observatory, Columbia University, USA
Arthur Nowell	School of Oceanography, University of Washington, USA
John Orcutt	Scripps Institution of Oceanography, University of California, San Diego, USA
David Prior	College of Geosciences & Maritime Studies, Texas A&M University, USA
Barry Raleigh	School of Ocean and Earth Science and Technology, University of Hawaii, USA
Paul Stoffa	Institute for Geophysics, University of Texas at Austin, USA
Asahiko Taira	Ocean Research Institute, University of Tokyo, Japan

Associate Members

Catherine Mével	Université Pierre et Marie Curie, Paris, France
Wang Zhixiong	Marine High Technology Bureau, Beijing, China

EXCOM Liaisons

Jeff Fox	Science Operator (ODP-TAMU)
David Goldberg	Wireline Logging Services (ODP-LDEO)
William Hay	SCICOM Chair, JOIDES Office, GEOMAR, Kiel, Germany
Donald Heinrichs	U.S. National Science Foundation
Kate Moran	Joint Oceanographic Institutions, Inc.
James Watkins	Joint Oceanographic Institutions, Inc.

Guests and Observers

Takeo Agata	MONBUSHO, Japan
Katsufumi Akazawa	JAMSTEC, Japan
John Farrell	Joint Oceanographic Institutions, Inc.
Susan Humphris	Ex-Chairperson SCICOM Committee
Eiichi Kikawa	JAMSTEC, Japan
Jim Kinoshita	JAMSTEC, Japan
Kazuhiro Kitazawa	JAMSTEC, Japan
Masanori Kyo	JAMSTEC, Japan
Bruce Malfait	U.S. National Science Foundation
Dietrich Maronde	Deutsche Forschungsgemeinschaft, Bonn, Germany
Masakazu Murakami	Ocean and Earth Division, STA, Japan
Michael Purdy	U.S. National Science Foundation
Shinichi Takagawa	JAMSTEC, Japan
J. Takagi	JAMSTEC, Japan
Philippe Vidal	CNRS, Paris, France

JOIDES Office

Warner Brückmann	Science Coordinator
Jeff Schuffert	U.S. Liaison

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M O T I O N S

EXCOM Motion 99-1-1

EXCOM approves the revised Agenda for the January 1999 EXCOM Meeting.

Proposed by Taira, seconded by Stoffa; 14 in favor, 1 absent (Raleigh).

EXCOM Motion 99-1-2

EXCOM approves the revised version of the June 1998 EXCOM Meeting minutes.

Proposed by Briden, seconded by Prior; 14 in favor, 1 absent (Raleigh).

EXCOM Motion 99-1-3

EXCOM approves the amended Terms of Reference for the JOIDES Executive Committee as follows.

3. The membership of this committee is composed of one representative of each of the non-US countries or consortia who are Full Members with an active Memorandum of Understanding (MOU) with the National Science Foundation (NSF), and one representative from each of ten US institutions. The appointment of additional members will be determined by the JOI Board of Governors on the recommendation of the JOIDES Executive Committee. In the case of representatives of non-US country participants, the existence of a valid MOU with NSF is a prerequisite to membership. Membership of any member may be canceled by the Board of Governors on the recommendation of the JOIDES Executive Committee or in the event of a non-US country participant ceasing to have a valid MOU in existence.

Proposed by Detrick, seconded by Harrison; 15 in favor.

EXCOM Motion 99-1-4

To satisfy the requirements of EXCOM Motion 98-2-8, Items 2(a-c), each member that has reduced their contribution will submit a brief report to the chair of EXCOM explaining how they are meeting the requirements of 2(a-c). The report will be submitted by 1 March of every year, with the particulars verified by the JOIDES Office, and the member's status reviewed by EXCOM at the next meeting after 1 March.

Proposed by Dalrymple, seconded by Harrison; 15 in favor.

EXCOM Motion 99-1-5

EXCOM enthusiastically welcomes the prioritization of scientific and programmatic activities within ODP that has been prepared by SCICOM in response to EXCOM Motion 98-1-8. EXCOM recommends that this prioritization provide a framework and reference for all future budgetary decisions. EXCOM recognizes that priorities may change as the program proceeds and that modifications may be necessary.

Proposed by Orcutt, seconded by Feary, 15 in favor.

EXCOM Motion 99-1-6

EXCOM approves the integrated sampling and publication policy.

Proposed by Stoffa, seconded by Orcutt; 15 in favor

EXCOM Motion 99-1-7

EXCOM approves the undergraduate student trainee program.

Proposed by Leinen, seconded by Taira; 15 in favor.

EXCOM Motion 99-1-8

EXCOM approves the science plan for ODP Legs 189 to 193.

Proposed by Harrison, seconded by Stoffa; 15 in favor.

EXCOM Motion 99-1-9

EXCOM recognizes the benefits that have accrued to ODP from planning and operational input from industry scientists and engineers, through the Advisory Structure and through the subcontractors. We believe the benefits of industry partnerships are potentially even greater in the future. In particular, now is the time to develop true partnerships with industry and other research institutions from the beginnings of conceptual development of IODP. EXCOM commends the effort of JOI to develop such collaborations and requests that these efforts be continued, focusing on multinational companies and international consortia, and working with the Advisory Structure as appropriate. EXCOM further calls upon all JOIDES members to work to bring industry experts into intellectual and practical participation in the Scientific Drilling community in each country. EXCOM requests the Director of ODP at JOI and JOIDES members to develop full communication and coordination of these efforts. Development should be reported in the JOI report to each EXCOM meeting.

Proposed by Briden, seconded by Feary, 15 in favor.

EXCOM Motion 99-1-10

EXCOM congratulates our Japanese colleagues on the funding in their FY'99 draft budget for the construction of a new drillship with riser capability. This represents the successful culmination of nine years of effort by STA/JAMSTEC, in cooperation with MONBUSHO and ORI, and a potential investment of over \$500M (US) in the future of scientific ocean drilling. We commend Japan on the vision and leadership it has shown in pursuing the OD21 initiative, and we look forward to incorporating the unique new capabilities of this drillship into a post-2003 IODP.

Proposed by Detrick, seconded by Prior; 15 in favor.

EXCOM Motion 99-1-11

EXCOM approves the establishment of an IODP Planning Subcommittee (IPSC) as a subcommittee of SCICOM.

Proposed by Raleigh, seconded by Leinen; 14 in favor, 1 abstention (Feary).

EXCOM Motion 99-1-12

EXCOM approves the mandate of the IODP Planning Subcommittee (IPSC).

JOIDES IODP Planning Subcommittee Mandate

OVERALL GOAL: As requested by the IWG, JOIDES will establish an advisory group to respond to requests for advice on IODP planning.

The IODP Planning Subcommittee (IPSC) is a subcommittee of SCICOM responsible for defining the scientific, technical, operational, and budgetary requirements of the IODP for the new drilling program that will succeed ODP. The IPSC will report through SCICOM to EXCOM and the IWG. It will have the authority to recommend the formation of other working groups and seek advice from others as needed.

MANDATE:

1. Develop a strategy for detailed planning activities that will address scientific objectives, technical and operational issues, and the financial and management requirements for the new drilling program in a timely fashion.
2. Oversee the implementation and evolution of the strategy as the planning progresses.
3. Maintain close working relationships with SCICOM, and in particular with the SCICOM Chair, and meet with SCICOM as necessary to coordinate planning for IODP with ongoing activities.
4. Maintain a close working relationship with OD21 Japanese Advisory Committee.

MEMBERSHIP:

The IPSC will consist of up to seven members nominated by SCICOM and approved by EXCOM in consultation with IWG. It will include representatives from countries and consortia who have a commitment to scientific ocean drilling post-2003 through their membership on IWG, as well as a representative from industry. The term of service will be three years.

Proposed by Dalrymple, seconded by Harrison; 15 in favor.

EXCOM Motion 99-1-13

EXCOM approves the proposed structure of the search committee for the IPSC Chair.

IPSC Chair Selection Process

Search Committee will consist of:

EXCOM members:

Current Chair

Previous Chair

Two Members

(1.) Japan

(2.) nominated by US members of EXCOM

SCICOM members:

Current Chair

Previous Chair

Search Committee consults,

recruits appropriate candidates

evaluates candidates

makes a recommendation to EXCOM

EXCOM selects and approves chair by email or fax in consultation with IWG.

Proposed by Leinen, seconded by Briden; 15 in favor.

EXCOM Motion 99-1-14

EXCOM accepts the report of the ODP Technical and Operations workshop and thanks SCICOM, and Susan Humphris and Ken Tamaki the workshop co-chairs, for organizing this meeting. This workshop was extremely valuable and raised a number of important technical and operational issues related to deep water riser drilling. EXCOM recommends that the IPSC, as its initial highest priority, addresses these issues in the context of post-2003 scientific goals and operational considerations. In its discussions IPSC should take advantage of a clear willingness on the part of industry to share its technical knowledge. IPSC is asked to provide a preliminary report to EXCOM at its June 1999 Meeting.

Proposed by Detrick, seconded by Orcutt; 15 in favor.

EXCOM Motion 99-1-15

EXCOM thanks the personnel of the Woods Hole JOIDES Office for their outstanding stewardship of JOIDES activities during the past two years. Christina Chondrogianni and Shirley Waskilewicz ensured that the business of the many committees, panels, working groups and other planning groups went smoothly. They brought JOIDES information availability to new levels with website development and provided outstanding service to the growing JOIDES community. Kathy Ellins' thoughtful and enthusiastic service as liaison to EXCOM made our work easier and certainly more pleasant. We congratulate Susan Humphris for outstanding leadership in one of the most challenging times for ODP, and we thank her for her service to our community and to EXCOM.

Proposed by Leinen, seconded by Taira; 15 in favor.

1. Welcome and Introduction

1.1 Welcome

Helmut Beiersdorf welcomed all participants to the winter EXCOM meeting and thanked Chris Harrison for graciously hosting the meeting. He noted that we were meeting at a place very important to the history of ocean drilling, for it was from here that Cesare Emiliani submitted the Project LOCO (Long Cores) proposal that crystallized the rationale for recovering long sediment sequences from the ocean floor and ultimately led to the formation of JOIDES. RSMAS was one of the four founding members of JOIDES.

This meeting also deals with the ambitious goal of shaping a new drilling program. This will not be an easy job, but we have the experience of thirty years of DSDP and ODP behind us. One of the major tasks is to keep ODP and its successor strong and healthy.

EXCOM members, liaisons, and guests were introduced.

1.2 Meeting Logistics

Chris Harrison welcomed all EXCOM, ODP Council and IWG participants to the Rosenstiel School. Helmut Beiersdorf expressed thanks to Chris Harrison and Peter Swart for the interesting field trip in conjunction with the EXCOM meeting to see some of the geology of South Florida, the groundwater control facilities, and the Everglades.

1.3 Approval of Agenda

Helmut Beiersdorf noted that agenda Item 8.7 is already listed as Item 8.1.2; therefore Item 8.7 is deleted and Item 8.8 (update on drydock) is renumbered to 8.7. Also, for the purposes of clarifying the order of presentation, Item 10.4 was re-numbered as Item 10.0.

EXCOM Motion 99-1-1

EXCOM approves the revised Agenda for the January 1999 EXCOM Meeting.

Proposed by Taira, seconded by Stoffa; 14 in favor, 1 absent (Raleigh).

2 Minutes and Matters Arising

2.1 Approval of June 1999 EXCOM Minutes (TAB A)

John Orcutt noted that in Section 5.3, the word “formerly” should read “formally.” This correction was made.

EXCOM Motion 99-1-2

EXCOM approves the revised version of the June 1998 EXCOM Meeting minutes.
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Proposed by Briden, seconded by Prior; 14 in favor, 1 absent (Raleigh).

3. NSF/ODP Council Reports

3.1 NSF Management Report (TAB B)

Don Heinrichs reported that there was little to add to the report in the Agenda Book. The ODP status report to the NSF Board was well received. Heinrichs noted that not all ODP members have made their full contributions at this time.

3.2 ODP Council Report

Don Heinrichs reported that there has been no significant activity by the ODP Council since the last EXCOM meeting.

4. Country Reports (TAB C)

4.1 ECOD

Menchu Comas noted that the ECOD Scientific Secretariat has moved from Switzerland (ETH) to Sweden (U. Stockholm, Nils Holm). EMCO has not yet nominated a new chair.

Portugal has joined ECOD at 3% contribution level and Spain has increased its contribution from 4% to 5.5%. ECOD expects to be able to cover the full membership contribution.

All ECOD countries have expressed strong interest for post-2003 ocean drilling.

Don Heinrichs inquired why the individual contributions listed in the ECOD report add up to only 97.5% of a full membership contribution. Comas responded that the participation level for some ECOD countries remains uncertain; however, the present membership situation could move some ECOD countries to cover the difference (e.g., Switzerland may be willing to increase by >1%), or Ireland may join.

4.2 France

Catherine Mével reported that France has sent an official letter of interest to IWG and that France has joined IWG. She also noted that the French ODP office is moving to Nancy and that the MOU with NSF is in its final stage of signature.

4.3 Germany

Helmut Beiersdorf reported that the next German ODP Colloquium will be held 3–5 March in Bremerhaven. He also noted that the Rheinisch-Westfälische Technische Hochschule Aachen has signed a contract with the BRG at LDEO to provide logging services. He also reported that the German ODP looks healthy with more than twenty applicants for future legs. Germany will host the next SCICOM/OPCOM/PANCH meeting in Freiburg before the EUG 10 meeting in late March.

Dietrich Maronde of the Deutsche Forschungsgemeinschaft (DFG) reported that Germany has a new government and a new science minister (Edelgard Bulmahn). The new government has expressed willingness to increase the overall science research budget, in detail DFG and the Max Planck Society await an increase of as much as 5%. The expected increase will improve the chance of convincing the German government of the value of Phase 4 participation. Scientific funding has been adversely affected by a decrease in the number of students in engineering and natural science. However, ODP funding will remain nearly the same. There were 60 ODP-related projects in 1997/98, funded at a total cost of 4.92 million DM and in 1998/99 there are 59 projects totaling 4.88 million DM.

Helmut Beiersdorf noted that there are joint ICDP-ODP/IODP planning activities for an ocean-continent drilling transect in the eastern Mediterranean. The latter was established at a recent workshop in Chania, Crete with intent of incorporating a broad spectrum of scientists from Europe and abroad.

Bruce Malfait noted in this context that the International Continental Drilling Program (ICDP) and ODP are already involved in cooperative drilling efforts (i.e., Hawaii, Cape Roberts Project).

4.4 Japan

Asahika Taira noted that the FY`99 draft budget for OD21 includes substantial funds for design and construction of a new drill ship with well control. The budget plan will go forward for approval by Diet in March.

Masakazu Murakami noted that there are plans to develop closer relations between ocean and land scientific drilling in Japan.

Helmut Beiersdorf noted that Japan is involved in other cooperative projects such as JOI/JAMSTEC tool development.

4.5 Australia-Canada-Chinese Taipei-Korea (PACRIM Consortium)

David Feary noted that the Taipei report arrived late and will be available later. Canada and Australia strongly support continued involvement in ODP, but Korean participation remains uncertain for economic reasons. Efforts to bring New Zealand into the consortium have so far not succeeded. The consortium still has not found the last 1/12 required for full membership. Feary noted that PACRIM intends either to add a new member (e.g., New Zealand) or increase funding from existing members.

Helmut Beiersdorf inquired whether PACRIM is still committed to full membership? Feary replied that this is the case.

Regarding the future, PACRIM is waiting to see actual numbers before discussing commitment to the post-2003 program. The early estimates of operating costs look challenging, but industry involvement at the Houston meeting is encouraging. PACRIM urges that industry participation should also include science cooperation. In summary, the news from Japan conjures visions of opportunity, but PACRIM would also like to see alternative platforms (e.g., for shallow water and reef drilling) included as a more fundamental part of Phase 4 planning.

4.6 PRC (The People's Republic of China)

Zhixiong Wang expressed appreciation for the warm welcome to China by the ODP community. He outlined the structure of China ODP. China has more than 100 research institutions. The China ODP conference in Beijing 4–16 December 1998 was attended by more than 90 earth science scientists. The first issue of China's ODP newsletter (38 pages) has been released. The implementation plan for ODP includes participation on Leg 184, attendance at COMPLEX, and development of ODP training courses.

He noted that there is particular excitement about Leg 184 in the South China Sea, and extended an open invitation to visit China for the Hong Kong port call (Leg 184–185).

Helmut Beiersdorf complimented the Chinese community for a very encouraging report, especially concerning their interest in post-2003 planning.

Admiral Watkins commented that JOI is working closely with the U.S. State Department to gain permission to drill near the Spratley Islands during Leg 184.

4.7 UK

Jim Briden clarified Item 4 in the UK report: the UK ODP program plan will be devised through the British Geological Survey, whereas policy issues will be addressed by NERC. He informed EXCOM that the new chief executive of NERC has not yet been selected. The UK hopes to continue with IODP planning through collective European participation of scientific and industrial partners. Ad hoc groups endorsed by funding agencies would develop the future plan. Additional group members are needed and perhaps also formal secretariat support. The UK is moving to engage industry at the earliest stage, expecting to organize a meeting in early March, well before COMPLEX.

Discussion: Kate Moran inquired whether the UK is looking at European industry or just UK? Briden replied that the industrial contacts are to be European. Beiersdorf and Comas agreed that this is an important step. Beiersdorf noted that Germany has no significant oil industry of its own, but that hardware companies might become involved.

Briden noted that BP strongly supports the UK ODP membership and that it played an important role in the renewal of UK ODP participation.

4.8 USA

Don Heinrichs noted that the final federal budget continues to be delayed, so that the exact NSF budget is still not known; however, the general framework is known, and an 8% increase for ocean sciences is anticipated. Emphasis will be on global change, observation systems, and interdisciplinary science. The MARGINS program will have funds from multiple NSF programs, ties will strengthen between ODP and NSF's Earth System History program, and emphasis on the deep biosphere is being incorporated in NSF program plans under the heading of "Biocomplexity" studies.

Bruce Malfait commented that the budget increase will help toward the \$3M ship refit.

Kate Moran noted the success of the GSA "Hot Topics" meeting and the AGU "Town Meeting." She noted that a similar session is being planned for EUG 10 and encouraged other members to use this mechanism to involve their science communities in post-2003 planning.

5. Review of Membership Status

5.1 Amendment of the Terms of Reference

The Terms of Reference for the JOIDES Executive Committee included reference to specific countries, consortia, and U.S. institutions. To reflect changes resulting from different levels of membership approved at the last EXCOM meeting, and to accommodate changes within the U.S. membership in JOIDES, the Terms of Reference must be amended.

EXCOM Motion 99-1-3

EXCOM approves the amended Terms of Reference for the JOIDES Executive Committee as follows.

3. The membership of this committee is composed of one representative of each of the non-US countries or consortia who are Full Members with an active Memorandum of Understanding (MOU) with the National Science Foundation (NSF), and one representative from each of ten US institutions. The appointment of additional members will be determined by the JOI Board of Governors on the recommendation of the JOIDES Executive Committee. In the case of representatives of non-US country participants, the existence of a valid MOU with NSF is a prerequisite to membership. Membership of any member may be canceled by the Board of Governors on the recommendation of the JOIDES Executive Committee or in the event of a non-US country participant ceasing to have a valid MOU in existence.

Proposed by Detrick, seconded by Harrison; 15 in favor.

5.2 Establishment of an Annual Review

Helmut Beiersdorf noted that it is necessary to establish a framework for the annual review concerning member status and progress toward achieving full member status. He suggested that this be done through a small EXCOM subcommittee that would report back to EXCOM.

After further discussion it was suggested that the members in question be asked to submit a brief report to JOIDES office. JOIDES would then verify the report and forward it to the subcommittee. The discussions resulted in the following motion:

EXCOM Motion 99-1-4

To satisfy the requirements of EXCOM Motion 98-2-8, Items 2(a-c), each member that has reduced their contribution will submit a brief report to the chair of EXCOM explaining how they are meeting the requirements of 2(a-c). The report will be submitted by 1 March of every year, with the particulars verified by the JOIDES Office, and the member's status reviewed by EXCOM at the next meeting after 1 March.

Proposed by Dalrymple, seconded by Harrison; 15 in favor.

6. SCICOM Report (Tab D)

6.1 SCICOM Strategy for Prioritization of LRP Themes and Budgetary Decisions (TAB E)

Susan Humphris described how the prioritization strategy was developed. At their March meeting, SCICOM adopted a programmatic approach consisting of three activities:

1. Prioritization of scientific objectives and themes for Phase III by the Science Steering and Evaluation Panels (SSEPs), with input from the Program Planning Groups (PPGs).
2. Identification of services (e.g., shipboard, downhole, shore-based, database, etc.) required to accomplish LRP scientific themes by the Scientific Measurements Panel (SCIMP).
3. Compilation of a prioritized list of scientific objectives and themes for Phase III, and their accompanying technological development, as well as recommendations related to shipboard, downhole and database services by subcommittees of SCICOM.

All of this information was presented to SCICOM at the August 1998 meeting, and a prioritization strategy developed considering two major issues:

1. It must ensure that some specific objectives of the LRP are accomplished in the time remaining in ODP.
2. It must take into account the possible transition to a new program.

SCICOM decided to divide all the themes into two groups, indicating their overall scientific priority. This resulted in a mix of projects in both groups, some of which will accomplish the scientific objectives before the end of ODP, and others for which progress may be made, but which will not be completed until during the new drilling program.

GROUP I (in no particular order):

- Oceanographic and Climatic Variability on Milankovitch Time Scales (with emphasis on Arctic drilling)
- Decadal to Millennial-Scale Climate Variability
- Gas Hydrates
- Hydrogeology–Hydrothermal Systems
- Deep Biosphere
- Seismogenic Zone Preparatory Drilling and In Situ Monitoring
- Section of the Oceanic Crust
- Extreme Warm Climate
- ION Observatory Sites
- Large Igneous Provinces

GROUP II (in no particular order):

- Plutonic Sections of Oceanic Lithosphere
- Climate-Tectonic Links
- History and Effects of Sea Level
- Mass Balances at Subduction Zones

- Rifting Initiation and Extensional Margins

Each of these groups contains scientific projects which range in cost from that of a "standard" leg (as defined by ODP for budgeting purposes) to very expensive legs that involve high Special Operating Expenses (SOEs, e.g., extensive casing, logging-while-drilling, ice-support vessels, advanced CORKs). In defining a framework for budgetary decision-making, it is those projects that require resources considerably beyond those expected for a routine drilling, coring and logging leg that must be prioritized. Scheduling of legs with low SOEs can proceed through the current system of an annual ranking of scientific priority.

The details of the prioritization scheme are given in the report.

Bill Hay asked for a motion accepting Humphris report on prioritization.

EXCOM Motion 99-1-5

EXCOM enthusiastically welcomes the prioritization of scientific and programmatic activities within ODP that has been prepared by SCICOM in response to EXCOM Motion 98-1-8. EXCOM recommends that this prioritization provide a framework and reference for all future budgetary decisions. EXCOM recognizes that priorities may change as the program proceeds and that modifications may be necessary.

Proposed by Orcutt, seconded by Feary, 15 in favor.

6.2 Selected ODP Achievements for Leg 177 to Leg 181

Bill Hay reviewed the achievements of legs completed during the past year, as summarized below.

Leg 177 – Southern Ocean (Atlantic Sector) Paleoceanography

Leg 177 recovered >4 km of sediment at 6 sites forming a transect across the polar front. It discovered that extensive diatom mats were present in the Southern Ocean as well as in the equatorial Pacific. It documented major changes in locus of the polar front.

Leg 178 – West of Antarctic Peninsula

Leg 178 sampled shelf sediments at 4 sites. It obtained very high resolution Holocene records at two sites in Palmer Deep, and detailed stratigraphic records (with excellent paleomagnetic stratigraphy) from 3 drift sites on the continental rise. It discovered that glaciation of the Antarctic Peninsula is much older than anticipated.

Leg 179 – Indian Ocean

Leg 179 served to test the hammer drill. It also prepared a site on Ninetyeast Ridge for seismometer emplacement (ION - NERO 1107A) and experimented with measurement-while-coring (MWC).

Leg 180 – Woodlark Basin

Leg 180 recovered sediments from 9 sites across the down-flexed margin, the hanging and foot walls of an active 6 my old rift basin. The cores provided a high-resolution record of terrigenous, volcanogenic and pelagic sedimentation, vertical motion history, and basement petrology in the developing rift. Drilling penetrated a 111 m-thick normal fault zone with gouge, mylonite, and breccia. Samples taken on this leg deepened the known extent of the sub-seafloor biosphere to 842 m.

Leg 181 – Southwest Pacific Gateways

Leg 181 recovered >3.6 km of sediment from 7 sites forming a depth transect off Campbell Plateau and extending across the Subtropical Convergence and Subantarctic Front.

Hay noted that the major scientific discoveries resulting from the drilling legs typically do not appear in the literature until 4–5 years post cruise. The initial reports made shortly after the scientific party leaves the ship are mostly accounts of what was recovered and what the scientists expect to accomplish once the results of sophisticated measurements to be made in shore labs have been completed and analyzed.

He then summarized some of the reports on ODP-related science that have appeared in the last six months in *Science* and *Nature*. A number of the exciting new discoveries lie beyond the expectations of the LRP, and clearly ODP data and discoveries have a broad impact on geological and geophysical science as a whole.

From the enthusiastic discussion that ensued it was suggested that JOIDES should go to the ODP Council with a similar report on the broader impact of the results.

6.3 Approval of the Integrated Sampling and Publications Policy (TAB F)

Bill Hay presented the Integrated Sampling and Publications Policy for approval. The new policy consolidates, coordinates, and clarifies the earlier policies.

EXCOM Motion 99-1-6

EXCOM approves the integrated sampling and publication policy.
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Proposed by Stoffa, seconded by Orcutt; 15 in favor.

6.4 Approval of the Student Trainee Program (TAB G)

Bill Hay presented the Student Trainee Program for approval. The program will provide an opportunity for students to get shipboard experience without being graduate students. The duties and activities of the students on board would impart useful knowledge and would be recognized by a certificate issued at the end of the leg. Students could conduct a research project (e.g., senior thesis) in conjunction with a member of the shipboard party.

Jeff Fox noted that ODP certainly agrees in principle with the program, but cautioned that participation depends on space availability.

It was clarified that the program is intended to apply to undergraduate students only.

John Orcutt objected to the wording of the preamble; it was noted that this was included only for history of development of the program and is not part of the program description.

Menchu Comas noted that the limit of 2–3 students to be invited per year does not go very far in promoting ODP. Beiersdorf recalled that in the past taking undergraduate students aboard has been the exception rather than rule; this program formalizes the practice but will not apply to more than a few students per year.

Bob Detrick proposed that the name of the program be changed to “Undergraduate Student Trainee Program.” There was general agreement.

EXCOM Motion 99-1-7

EXCOM approves the undergraduate student trainee program.

Proposed by Leinen, seconded by Taira; 15 in favor.

7. FY 2000 (TAB H)

7.1 Approval of the Science Plan for Legs 189 to 193

Bill Hay presented the Science Plan for Legs 189 to 193, summarized as follows:

Leg 189 – Southern Gateways: Tasmanian Seaway

Leg 189 will drill five primary sites (with three alternates) in the Southern Ocean to document the paleoceanographic and paleoclimatic changes associated with the Paleogene marine rifting history and Neogene drifting history of this key southern area. The sites lie off western Tasmania (WT-01A), on the South Tasman Rise (STR-01A, WSTR-01A, WSTR-02A), and on the East Tasman Plateau (ETP-02A). The first four sites form a north-south transect that extends from north of the Subtropical Convergence nearly to the Polar Front. This transect will help to constrain glacial-interglacial changes in the Southern Ocean thermal field. The last site adds the possibility to monitor paleoceanographic changes near the confluence of the East Australia Current and the Subtropical Convergence. Four of the sites will also form an east-west transect and provide insight into the lessening influence of the South Tasman Rise as a barrier between Indian and Pacific Ocean microfossil assemblages.

Leg 190 – Nankai Trough

Leg 190 will be the first in a two-leg program focused at the Nankai Trough. The first leg will consist of drilling and coring at three primary sites to compare two parts of the Nankai Trough with different wedge tapers and structural geometries. This will be followed by a second leg of logging-while-drilling (LWD) at four sites, and the emplacement of CORKs at three of these sites. Downhole monitoring by instrument packages sealed with CORKs should provide a continuous long-term record of fluid pressure and temperature, and the option of subsequent fluid sampling and permeability determinations with a submersible. This plan is dependent on the development of a new generation of CORKs that will allow multiple horizons to be hydrologically isolated and monitored. SCICOM has stated that the scheduling of the second leg in the following year is contingent upon the successful development of the new CORKs. Other contingencies include: successful drilling and station-keeping in the current conditions encountered; evaluation by the JOIDES Advisory Structure (SSEPs, SCIMP and SCICOM) of the detailed scientific plans of the second leg; and identification of funds to reduce the cost to ODP of the whole Nankai program.

Leg 191 – Western Pacific Seismic Network (ION)

Leg 191 will drill a site in the Western Pacific (WP-2) that is located to provide a downhole seismometer installation in one of the high-priority areas identified by ION. In addition, it will also provide unique seismic observations on the seawater side of the Japan Trench. Installation of the broadband seismometer is expected to be carried out using the Japanese ROV *Kaiko*. Site WP-2A will be located at 42°N 160°E in a water depth of 5700 m. The sediment thickness is ~300 m and it is proposed to drill about 100 m into basement.

Leg 192 – PACMANUS Hydrothermal System

The Manus Basin in the Bismarck Sea north of Papua, New Guinea is a small, rapidly expanding (~10 cm/yr) back-arc basin set between opposed fossil and active subduction zones. The PACMANUS hydrothermal field lies near the crest (1655-1750 m water depth) of high-standing Pual Ridge, a 40 km-long neovolcanic ridge of dacite/rhyodacite with basal andesite. The hydrothermal field includes two focused, high-temperature “smoker” sites with Cu-Au-rich sulfide deposits, and a field of diffuse, lower temperature venting through intensely altered dacite, for which modeling indicates significant subsurface mineralization.

The drilling strategy for Leg 192 includes three holes at the PACMANUS discharge site and one at the foot of Pual Ridge where subsurface faulting is expected to create the most likely site for recharge of the hydrothermal system. Two of the discharge sites will provide a comparison of alteration, mineralization and fluid pathways beneath a zone of focused high temperature venting (Site PCM-3A) with that beneath a zone of diffuse venting (Site PCM-2A). The third hole in the discharge area (Site PCM-1A) will provide an unaltered "reference" volcanic section for comparison with the altered sections from the other two holes. Site PCM-4A will be located among the andesitic sheet flows flooring the valley southeast of PACMANUS and is placed to investigate the recharge zone as well as intersect an inferred low-angle extensional fault at 250 mbsf.

Leg 193 – Ontong-Java Plateau

Leg 193 is the first in a proposed two-leg program aimed at understanding the formation of the world's largest plateau. A transect of drill holes into basement across the Ontong Java Plateau will be drilled to determine its age and duration of emplacement, the range and diversity of magmatism, the environment of eruption and post-emplacement vertical tectonic history of the plateau, the effects of rift-related tectonism, and the paleolatitude of the OJP at the time(s) of emplacement.

In response to discussion Hay noted that SCICOM recognizes that some projects may require two legs, but it has refrained from scheduling a second leg until the results of the first leg are known.

7.2 FY 2000 Preliminary Budget

Kate Moran presented the preliminary budget. The total FY`00 budget amounts to \$46.18M and meets all of the basic science requirements of the FY`00 plan on schedule.

FY`00 Budget Total: \$46.18 M

• Ship Operations	23,397,000
• Science Services	4,242,500
• Logging Services	4,716,000
• Drilling Services	3,441,000
• Information Services	2,406,000
• Publications	1,708,500
• Technical Developments/SOEs	2,255,500
• Operations Headquarters	1,999,700
• JOI/JOIDES Office	2,013,800

The question of ice support for Prydz Bay was assessed by TAMU/ODL based on previous experience in the same area. They decided that it would not be necessary, approached ODL, and the latter has agreed.

There are no final decisions on technical development and SOEs. The budget will be tight because it includes CORKs, as well as equipment for gas hydrates and the deep biosphere studies.

Moran noted that no costs for post-2003 planning activities are yet included in the budget.

Catherine Mével inquired what is meant by information services? Moran replied that this refers to both ship and shore based services.

John Orcutt noted that LWD is not budgeted for PACMANUS, although existing documents indicated that drilling PACMANUS would not be useful without LWD. Susan Humphris stated that some objectives could still be met without LWD, but that LWD would be very important if it could be supported. Orcutt regretted that drilling objectives might be severely compromised by budget constraints. David Goldberg stated that proponents are looking for outside funding to support LWD, and the matter will be referred back to SCICOM.

Bob Detrick asked that the procedure to prioritize SOEs be clarified. Moran responded that recommendations from PPGs (especially gas hydrates) regarding technological developments will be discussed in early March, and the operators will bring options to the next meeting of SCICOM for prioritization. Detrick asked whether the framework document presented by Susan Humphris and approved by EXCOM will be considered.

Moran replied that it would be. Detrick suggested that EXCOM should see how established priorities match up with the framework document at its next meeting.

EXCOM Motion 99-1-8

EXCOM approves the science plan for ODP Legs 189 to 193.

Proposed by Harrison, seconded by Stoffa; 15 in favor.

8. Management and Operations Reports (TAB I)

8.1 Partnerships Strategies

Kate Moran reported that JOI has been pursuing development of several cooperative projects with industry. These include:

1. Development of a South Atlantic GIS stratigraphic database, being carried out through the Energy and Geoscience Institute at the University of Utah.
2. Development of contacts with the Drilling Engineers Association.
3. Signing of the Memorandum of Agreement (MOA) for the JOI/JAMSTEC Cooperative Development Project concerning the Advanced Diamond Core Barrel.
4. Development of an advanced pressure coring system (HYACE = Hydrate Autoclave Coring Equipment) with Hans Amann at the Technical University in Berlin.

In the ensuing discussion it was recognized that the effort to develop contacts to industry should not rely on JOI alone. In view of this the EXCOM passed the following motion:

EXCOM Motion 99-1-9

EXCOM recognizes the benefits that have accrued to ODP from planning and operational input from industry scientists and engineers, through the Advisory Structure and through the subcontractors. We believe the benefits of industry partnerships are potentially even greater in the future. In particular, now is the time to develop true partnerships with industry and other research institutions from the beginnings of conceptual development of IODP. EXCOM commends the effort of JOI to develop such collaborations and requests that these efforts be continued, focusing on multinational companies and international consortia, and working with the Advisory Structure as appropriate. EXCOM further calls upon all JOIDES members to work to bring industry experts into intellectual and practical participation in the Scientific Drilling community in each country. EXCOM requests the Director of ODP at JOI and JOIDES members to develop full communication and coordination of these efforts. Development should be reported in the JOI report to each EXCOM meeting.

Proposed by Briden, seconded by Feary, 15 in favor.

Kate Moran also reported on developing contacts with other programs, particularly the Nansen Arctic Drilling Program, IMAGES, and the International Continental Drilling Program (ICDP).

A number of EXCOM members expressed particular interest in seeing closer cooperation with the ICDP, emphasizing that these might share equipment and eventually science. Asahika Taira noted that a meeting will be held early in February in Japan involving all drilling programs. Helmut Beiersdorf suggested that this might be discussed separately among a small group. John Mutter noted that he is liaison to ICDP.

Beiersdorf nominated Mutter as Chair of an *ad hoc* ODP-ICDP Subcommittee. Taira and Comas were asked to serve on it, with Hay to observe. Beiersdorf noted that Rolf Emmermann from Potsdam is Chair of ICDP. ICDP should be represented at COMPLEX.

Margaret Leinen inquired about Nansen Arctic Drilling (NAD). Moran noted that NAD would like a stronger level of cooperation and that now would be a good time to develop this. Jim Briden observed that EXCOM has lost connection with NAD by rotation of Larry Meyer. Susan Humphris recalled that EXCOM had requested SCICOM to set up a communication liaison to NAD. SCICOM has just received a letter from NAD requesting formation of a PPG within ODP for stronger link. Beiersdorf suggested that SCICOM consider relations with NAD at its next meeting.

Briden inquired of Moran about JOI/JOIDES websites, mirror sites, and coordination with TAMU. Moran replied that there was no detailed evaluation yet of speed and access on current web servers. Briden noted that it is important not to lose access to principal reports of program, and that Europe has trouble accessing US websites during peak hours.

Mutter inquired whether thought had been given to possible partnership for funding of ODP by NSF and DOE, NOAA, etc. Mike Purdy noted that there is no clear answer. Multi-agency funding has advantages but questions of responsibility arise and loss of long term dedication. The difficulties are very strong in light of substantial budget problems at other agencies.

8.1.1 DOE Gas Hydrates Projects

Kate Moran reported that JOI has been exploring the possibility of support from DOE for methane hydrate drilling and the shipboard microbiology laboratory.

8.1.2 Status of JOI/JAMSTEC Cooperative Development Project

Kate Moran reported that the agreement for cooperative development had been finalized.

8.2 Status of Program Reviews

Kate Moran reported on recent and upcoming reviews.

8.2.1 Co-Chief Review

The annual Co-Chief Scientist Review took place in Washington, October 1–2. Overall comments were very favorable, although the Co-Chiefs would like to see more flexibility in the planning stages and in making lab space available.

Some of the general comments included:

- the need for better international coordination of science party selection,
- the need for even more flexibility in all areas,
- praise for the new sample distribution policy,
- a need for early coordination with ODL,
- the PR at port calls are a success, but leg press releases are a “failure,”
- email to the ship needs to be improved.

The Co-Chiefs recommended some specific equipment and tools

- logging-while-drilling (LWD),
- new XRF,
- x-ray imaging of cores,
- better toothpicks (for smear slides).

8.2.1 Performance Evaluation Committee V

The members of the committee will be Earl Doyle, Hans Dürbaum, Ross Heath (Chair), Dan Karig, Tom Loutit, Nori Nasu, Amos Nur, and Karl Turekian. The committee will have its first meeting in Washington in February 1999, and completion of its study is expected in September 1999.

8.3 Status of Revisions to the ODP Policy Manual

Moran reported that the manual is currently being updated to reflect the new JOIDES advisory structure and program-wide administrative policies.

8.4 Continuing Internationalization Efforts

Moran reported that there are ongoing discussions with scientists and administrators in several countries that may have an interest in joining the program in the future.

8.5 Public Affairs Report

Kate Moran noted that recent port calls in Sydney, Wellington, and Fremantle have involved visits to the ship and have received much local publicity.

News articles concerning the program have appeared in *Nature*, *Science*, and in major newspapers in the US, UK, Germany, Australia, and Japan. There have been online connections with news of the program on CNN. ABC News Online will report on Leg 184 (ABCNEWS.COM).

Upcoming port calls in Hong Kong and Tokyo will have major PR activities.

8.6 Status of major Phase III Technical Development

8.6.1 Microbiology Lab

The Microbiology Lab is essential to the development of the Deep Biosphere Initiative. Significant investigations will be undertaken on Leg 185. A laboratory van will be on board. Microbiologists included in the scientific party will conduct experiments to assess contamination in sample recovery.

Plans for the future laboratory are being developed. There are three options for adding an eighth level to the lab stack. This level would include space for microbiology, gas hydrates and long term observatories. These options are included in the dry dock bids.

8.6.2 Active Heave Compensation

Jeff Fox reported that five vendors have offered to look at the ship one more time before making a final bid. ODP/TAMU expects to receive final bids by February and to select a finalist by March.

8.6.3 Hammer Drilling

Jeff Fox reported that ODP/TAMU will propose new tests to SCICOM at its March meeting. There will be new tests this spring and final tests following drydock, pending SCICOM approval.

Bob Detrick noted that a problem occurred on Leg 179 with bit destruction. He inquired if land tests will resolve whether this problem is fixed? Fox replied that land tests cannot mimic active heave. Catherine Mével inquired whether the hammer drill will be ready for Manus Basin? Fox noted that Manus Basin was approved without hammer drill capability but that tools for advance tests should be ready for that leg. Feary inquired whether the scientific party would be on board for these tests. Fox replied that this is an engineering test, and that any science that comes out

of it will be a bonus. Samples recovered will be cataloged and archived. It is expected that the science party on board for the tests will be minimal.

8.6.4 Measurement-While-Coring (MWC)

Dave Goldberg reported that Leg 179 enabled us to determine what happens at seafloor during coring. He noted that Leg 185 will enable us to find out what is going on with the drill string, and Leg 186E after installation of active heave compensation will determine effects on the bit. The goal is to have real-time information on what the drill string is doing.

8.6.5 Wireline Tools

Dave Goldberg cited new measurements that may be possible in the future, including pore-fluid sampling and permeability testing, nuclear magnetic resonance (NMR), determination of the noble gas content of the pore fluid. These cannot be done on the JR now, but the technology already exists.

8.7 Drydock Update

Jeff Fox presented a brief update on the plans for drydock.

Summary Discussion of Management and Operations Reports

Beiersdorf inquired whether EXCOM can state that it is pleased with progress on these fronts? There were no objections voiced; it was concluded that there was consensus approval. EXCOM appreciates the job done by JOIDES and SCICOM on setting priorities.

Bob Detrick commented on the discussion about recent budget problems and the success of the Program Managers at dodging trouble. He expressed gratefulness about the FY'00 outlook, but cautioned against letting down our guard and losing sight of priorities in planning for the future.

Margaret Leinen agreed in principle, but expressed concern about giving the impression that the program does not need more money. With adequate funding EXCOM would never have decided to eliminate the printed Scientific Results volume or delay the microbiology lab, and we would already have the ability to use all available logging tools. We have "dodged bullets" but were not able to deliver science at the state of the art level desired by the scientific community.

Jim Briden noted that the current state of good affairs results from the last minute decision against the need for an ice boat on Leg 188, so we should not fool ourselves about the ongoing budgetary restraints.

Helmut Beiersdorf observed that the SCICOM strategy for prioritization document clearly identifies how shortfalls may affect the science goals.

9. Executive Session (if necessary)

The committee decided not to hold an Executive Session.

The meeting was adjourned for the day at 4:30 PM.

10. IODP Planning

10.1 Status of the OD21 Program

Asahiko Taira presented a brief overview of the history of development of the OD21 program. The critical meetings and major events in the development of the program are summarized below.

1990 February

Council for Ocean Research and Development of the Japanese Government in Japan

1992 February

OECD Mega-Science Forum in France

1994 February

ODP EXCOM/STA JAMSTEC Meeting for Deep Drilling Program in the 21st Century in Japan

1996 February

OD21 International Conference in Japan

1996 March

ODP Long Range Plan established

1996 October

International Workshop on Riser Technology in Japan

1997 June

IWG (International Working Group) Pre-meeting in France

1997 July

CONCORD (Conference on Cooperative Ocean Riser Drilling) in Japan

1998 November

ODP/OD21 Technical and Operational Workshop in Houston

Masakazu Murakami reported on the current status of the OD21.

10.1.1 FY'99 OD21 Budget

The Japanese Government has decided to include the initial part of the riser drilling vessel construction budget into the governmental draft budget for FY'99. It is almost certain that the program will be approved by the Diet around the end of March. Basic design and ship construction will start in April.

There will be a substantial increase of OD21 related budget for FY'99, from US\$ 12M (FY'98)→US\$ 28M (FY'99)

- including ship design and construction and “Development of sub-sea floor system prototype (core sampling system and long-term monitoring system),” etc.,
- total construction cost is approximately US\$ 500M (for a 2,500m class Riser Drilling Vessel of approximately 30,000 ton),
- ship construction budget for FY'99 is US\$ 22M with authorization of issuing 5-year term contract up to US\$ 116M for basic design and ship hull construction,
- other parts of ship construction (a) onboard drilling units and electric system and (b) sub-sea system (riser, BOP, etc.) and onboard research facilities, will be approved one after another subject to the Diet review.

10.1.2 Schedule of ship construction and sea trial/experimental operation

- Basic schedule plan for the program will remain the same.
- Starting basic design from April 1999.
- The drilling vessel is scheduled to be completed by the end of FY'03 with the sea trial and experimental operation starting in FY'04 around the Western Pacific.
- Various issues and items concerning preparations for the sea trial and experimental operation should be coordinated with ODP.

10.1.3 Program pre-evaluation

- Evaluation Subcommittee (Chair: Prof. Matsuno) of the Deep Ocean-Earth Drilling Program (ODP/IODP) evaluated the OD21/IODP Program in accordance with the “National Guideline on the Method of Evaluation for Government R&D.”
- The subcommittee concluded with a positive evaluation of the program.
- The subcommittee will meet from time to time to review the progress of the program.

10.1.4 Japanese basic position on OD21/IODP

A strong relationship between ODP and OD21 is essential to develop IODP.

- Japan is moving from the “concept” stage to the “implementation” stage.
- Functions of Japanese OD21 organizations must be clarified and their relations to ODP function be defined.

The Japanese position concerning JOIDES’ IODP Planning activities can be summarized:

- Japan appreciates JOIDES’ active and positive involvement in IODP planning.
- OD21 intends to participate actively in JOIDES’ IODP Planning.

International cooperation is essential.

- It is a major premise that OD21/IODP will be conducted with international cooperation.
- Japan will respect recommendations and advice of IODP.
- Japan needs continuous and strong international support for OD21/IODP.

EXCOM Motion 99-1-10

EXCOM congratulates our Japanese colleagues on the funding in their FY’99 draft budget for the construction of a new drillship with riser capability. This represents the successful culmination of nine years of effort by STA/JAMSTEC, in cooperation with MONBUSHO and ORI, and a potential investment of over \$500M (US) in the future of scientific ocean drilling. We commend Japan on the vision and leadership it has shown in pursuing the OD21 initiative, and we look forward to incorporating the unique new capabilities of this drillship into a post-2003 IODP.

Proposed by Detrick, seconded by Prior; 15 in favor.

10.2 Correspondence between EXCOM and IWG Chairs (TAB K)

Bob Detrick gave a historical perspective on post-2003 planning. At its Summer 1997 meeting, EXCOM received a request from IWG to initiate planning. At its January 1998 meeting, EXCOM adopted a timetable for the COMPLEX meeting, the Technology & Operations Workshop, and the establishment of a seismogenic zone DPG based on the outcome of the CONCORD meeting. This timetable was presented to IWG at June 1998 meeting in Bonn, and EXCOM and the IWG discussed resources necessary to support these activities.

The expectation was that the present JOIDES advisory structure would take a leading role in post-2003 planning, although concerns have been expressed about the workload and cost of the planning effort.

Last summer EXCOM approved the letter to IWG regarding how to proceed with the planning effort. The key element is the need to create a new committee to undertake planning, under the current JOIDES structure.

Helmut Beiersdorf noted that a response from the IWG has been received. The IWG response letter favors the proposal, placing planning within the existing JOIDES advisory structure. However, the letter notes that care must be taken to ensure proper representation of OD21 in the planning process.

Beiersdorf proposed the establishment of IPSC as a subcommittee reporting through SCICOM. He argued for a clear link between IPSC and JOIDES, with direct ties also to the emerging OD21 advisory structure. IPSC should formulate plans and advise the IWG. The IPSC would be at liberty to form its own working groups. In time IPSC should enlarge and eventually evolve into an independent planning structure.

Jim Briden pointed out the importance of clarifying whether IPSC reports directly to SCICOM or reports to IWG through SCICOM.

Don Heinrichs noted that the draft mandate states that IPSC reports through not to SCICOM, so any IPSC report stands by itself, though SCICOM has the right to comment or append its own report.

Art Nowell remarked that the envisioned purview of IPSC includes topics (e.g., budgetary matters, etc.) that do not fall within the realm of normal SCICOM business. He also inquired about the relationship between IPSC and EXCOM.

Catherine Mével stated that she understands the need for IPSC, but noted that the task seems too large to be undertaken by small group of people such as the one that is proposed. Beiersdorf responded that he envisions that IPSC will enlarge with time and become independent. He noted that generically the membership of IPSC could firstly include scientific, technological, and managerial components. This group must be effective in representing the interests of the different potential supporters. He suggested that, for example, there might be two members from Japan, two from US, and two others including industry for a total of six members.

Beiersdorf listed the proposed qualifications for the IPSC Chair:

- not currently in ODP leadership position
- well acquainted with ODP from all perspectives: leg participant, co-chief, panel member or chair
- fully familiar with general science behind LRP, interior, environment, and OD21
- familiar with technical and operational aspects of ODP and DSDP
- skilled manager with past leadership role
- accepted by scientific drilling community
- good salesperson—must sell IODP to lead funding agencies

Leinen suggested an additional quality—strong diplomacy skills.

Hay stated that he and Humphris have talked confidentially with eight individuals that had been identified as potential chairs at a small JOI manager's meeting in Nova Scotia in September 1998. At that meeting it had been suggested that the SCICOM and EXCOM Chairs might select the IPSC Chair.

Barry Raleigh said that a decision like this one typically goes through a formally constituted search committee, for example a subcommittee of executive committee of EXCOM.

Raleigh asked whom this person will work for, assuming it to be a full time employee of JOI.

Purdy noted that he assumed that the chair would be a member of the academic community and would receive substantial salary support, albeit not full time. In this respect the Chair of IPSC would be in a situation similar to that of the Chair of SCICOM.

Detrick and Leinen urged that EXCOM return to the structure issue. Leinen noted that the wiring diagrams shown by Beiersdorf included the entities and people involved but not all of their relations among each other. The diagram presented earlier by Murakami does not show links from current operators directly to IPSC. Beiersdorf reminded EXCOM that Murakami's was an oversight diagram and not an information flow diagram. Detrick also found the wiring diagrams confusing. He suggested that EXCOM should refer to the written mandate, which clearly defines IPSC as reporting through SCICOM to EXCOM and to the IWG.

Leinen expressed concern about how Japan perceives the proposed structure. Murakami referred to the Japanese flowchart to clarify and state simply that good linkage is needed between the OD21 and ODP advisory structures. Murakami noted that OD21 should be better integrated into JOIDES planning. Taira stated that a subcommittee of SCICOM may be the best way to use expertise of JOIDES, but we must consider the point of reporting to EXCOM. Also, knowledge of financial support of OD21 may prove essential to IPSC, so further discussion of how to incorporate OD21 into the advisory structure was necessary. Beiersdorf indicated that IPSC will remain an integral part of JOIDES structure for only 1-2 years. The key issue is whether OD21 has proper representation.

Orcutt noted that the future program consists of riser and nonriser components and at this time IODP is an empty box. He noted that the IPSC Chair must keep in mind that the new two-ship program should be driven by science at this point.

Hay noted that although the IPSC will be a subcommittee that will report through SCICOM, it will probably not include SCICOM members. IPSC reports through SCICOM so SCICOM stays fully informed and will be involved in developing consensus about future plans. Humphris agreed that IPSC should report through SCICOM instead of directly to EXCOM because otherwise we would have two groups focusing on planning and reporting to EXCOM.

EXCOM Motion 99-1-11

EXCOM approves the establishment of an IODP Planning Subcommittee (IPSC) as a subcommittee of SCICOM.

Proposed by Raleigh, seconded by Leinen; 14 in favor, 1 abstention (Feary)

Helmut Beiersdorf then presented a statement of the overall goal, mandate, and membership for IPSC, and asked for EXCOM approval.

David Feary inquired about clarifying OD21 involvement. After discussion, Beiersdorf added the following item to the mandate:

4. IPSC will maintain a close working relationship with OD21.

Jim Briden urged that in line 1 of the first charge of the draft mandate the words "key areas" be replaced with "the."

Bob Detrick noted that since EXCOM had already approved IPSC as a subcommittee of SCICOM, SCICOM should select its members.

Jim Briden stated that appointment of the IPSC Chair is a very important matter, almost like appointing a future SCICOM Chair.

Art Nowell suggested changing the wording to permit up to seven subcommittee members.

Mike Purdy stated that IWG does not want to get into formal approval of IPSC. He suggested that EXCOM approve the membership of IPSC in consultation with IWG.

Further discussion emphasized that IPSC will report to the JOIDES EXCOM through SCICOM, that it will interact closely with OD21, and that it will advise IWG.

EXCOM Motion 99-1-12

EXCOM approves the mandate of the IODP Planning Subcommittee (IPSC).

JOIDES IODP Planning Subcommittee Mandate

OVERALL GOAL: As requested by the IWG, JOIDES will establish an advisory group to respond to requests for advice on IODP planning.

The IODP Planning Subcommittee (IPSC) is a subcommittee of SCICOM responsible for defining the scientific, technical, operational, and budgetary requirements of the IODP for the new drilling program that will succeed ODP. The IPSC will report through SCICOM to EXCOM and the IWG. It will have the authority to recommend the formation of other working groups and seek advice from others as needed.

MANDATE:

1. Develop a strategy for detailed planning activities that will address scientific objectives, technical and operational issues, and the financial and management requirements for the new drilling program in a timely fashion.
2. Oversee the implementation and evolution of the strategy as the planning progresses.
3. Maintain close working relationships with SCICOM, and in particular with the SCICOM Chair, and meet with SCICOM as necessary to coordinate planning for IODP with ongoing activities.
4. Maintain a close working relationship with OD21 Japanese Advisory Committee.

MEMBERSHIP:

The IPSC will consist of up to seven members nominated by SCICOM and approved by EXCOM in consultation with IWG. It will include representatives from countries and consortia who have a commitment to scientific ocean drilling post-2003 through their membership on IWG, as well as a representative from industry. The term of service will be three years.

Proposed by Dalrymple, seconded by Harrison; 14 in favor.

Bob Detrick noted that it is important that this matter move forward without delay and that there is no time to wait for the next EXCOM meeting. He inquired about the mechanism for selection and approval of subcommittee chair and members. Beiersdorf replied that SCICOM's staffing proposal will be sent to EXCOM by e-mail for review. Briden suggested that there be a waiting period of ten days for discussion of the draft proposal of IPSC staffing submitted to EXCOM by the SCICOM chair. Heinrichs noted that the IWG meets in late March or early April—an ideal time to consult them.

Bill Hay echoed Jim Briden's concerns and noted that the chair for IPSC should be appointed as soon as possible. We would lose valuable time if we wait until March. The Chair should help to select the membership.

Margaret Leinen proposed a process for selecting the IPSC Chair. There would be a Search Committee consisting of four EXCOM members, the current and former chairs plus two others, and the current and former SCICOM chairs. The Search Committee selects candidates, and makes recommendations to EXCOM. EXCOM makes the selection and approves by email or Fax.

Beiersdorf suggested that one of two at-large EXCOM members should be from Japan, the other from the US. Mutter noted that the at-large member from the US should be selected by JOI BOG.

EXCOM Motion 99-1-13

EXCOM approves the proposed structure of the search committee for the IPSC Chair.

IPSC Chair Selection Process

Search Committee will consist of:

EXCOM members:

Current Chair

Previous Chair

Two Members

(1) Japan

(2) nominated by US members of EXCOM

SCICOM members:

Current Chair

Previous Chair

Search Committee consults,
recruits appropriate candidates
evaluates candidates
makes a recommendation to EXCOM

EXCOM selects and approves chair by email or fax in consultation with IWG.

Proposed by Leinen, seconded by Briden; 15 in favor.

10.3 Status of IODP Planning Meetings

10.3.1 Technology and Operations Workshop (TAB L)

Bill Hay reported on the Technology and Operations Workshop that was held in Houston, November 17-18, 1998, chaired by Susan Humphris and Kensaku Tamaki. After reviewing the status of the ODP and plans for OD21, the workshop considered new developments in deep water drilling technology.

The problem of fracture pressure gradient continues to be a major obstacle to the development of a deep water riser. Although CONOCO is currently drilling with a riser in water depth of 7700' (2370 m), industry consensus is that 2500 m is probably a limit for riser drilling. Therefore eight companies have formed a consortium to develop an alternative "riserless" drilling technology.

The alternative will probably involve some sort of flexible, small-diameter "hose" extending from ship to sea floor, and mud pumps on the sea floor. Using this technology the mud column in the hole can be adjusted to (near) ambient pressure at the sea floor.

Industry is moving toward larger diameter (6 5/8") drill pipe to handle larger loads and is also exploring the use of composite materials.

The ensuing discussion focused on management and infrastructure issues. One conclusion was that "IODP should consider working through companies that provide services rather than setting up a whole infrastructure to do everything." It was suggested that it would be useful to conduct a feasibility study to identify the options for technology organization management.

After noon on the first day, the participants broke into working groups concerned with particular topics:

- Drilling Operations Working Group,
- Downhole Measurements and Sampling Working Group,
- Operation and Logistical Procedures Working Group,
- Scientific and Engineering Services Working Group.

Their recommendations and suggested actions are presented below.

10.3.1.1. Drilling Operations Working Group

Recommendations:

1. Given that there are major advances currently underway in “riserless” drilling, and that there are new approaches to casing, ODP needs to stay informed and retain the flexibility to be responsive to changes in technology over the next few years.
2. IODP should plan to be aligned with industry as it moves to 6 5/8" drillpipe.

Action Items:

1. Scientific goals need to be better defined (COMPLEX).
2. Revise the example boreholes used in the 1995 Engineering Conference in Japan and convene a small group of industry representatives to assess the IODP need in the light of current technology.
3. Ensure industry participation in COMPLEX.
4. Work with industry to develop safety policies and procedures for IODP drilling on any platform.
5. Continue to hold Technology and Operations Workshops on a periodic basis as planning progresses.

10.3.1.2. Downhole Measurements and Sampling Working Group

Recommendations:

1. ODP should remain informed about advances in downhole measurements and sampling in industry so that tools developed by industry that have scientific applications can be used by IODP.
2. The design of any sampling equipment should ensure that the physical sample size is compatible with downstream processing.
3. Satellite ship-to-shore transmission of logging data should be used for quality control and near real-time analysis.
4. LWD/MWC should be used in any unstable formations.
5. Drilling mechanics measurements should be used to reduce the risk of sticking and other hazards (such measurements might include annular pressure, downhole torque measurements, etc.).

Action Items:

1. Technological development is required in the following areas:
 - drilling and sampling of unconsolidated sands,
 - more use of *in situ* measurements, including geotechnical investigations,
 - pressure-temperature measurements for *in situ* sampling,
 - collection of microbiological samples,
 - collection of pore fluids.
2. ODP should work with industry on technological developments of mutual interest (e.g. SWD).
3. Evaluate the scientific application of “fly-in” ROV and towed vehicle technology for post-drilling logging.
4. Evaluate the scientific need for deviated wells.

10.3.1.3 Operation and Logistical Procedures Working Group

Recommendations:

1. The design of the new drillship needs to have the flexibility to handle riser and “riserless” technology.
2. There needs to be a formal process of front-end loading (FEL) and project life-cycle management to ensure a stable and cost-effective organization.
3. There needs to be stable long-term management of the program operations.
4. ODP should develop a portfolio of proposals for drillships of opportunity. As projects are selected for drilling, each should go through the full preparations so that they are ready when the drilling opportunity presents itself.

Other recommendations addressed:

- cruise lead times,
- optimal cruise length,
- site survey requirements,
- staffing and scheduling.

Action Items:

1. Evaluate the infrastructure required for 5-year planning and site characterization and survey work.
2. Conduct a technical and economic feasibility study for cruise length that includes supply vessel requirements for:
 - personnel, staffing, and people transfer,
 - distance from port,
 - weather and sea-state conditions,
 - regulations dictating maximum days at sea in the country operating the vessel.
3. Conduct a full feasibility analysis to determine the supply ship needs as a function of drilling location and time on drilling site. Multiple supply platforms need to be evaluated including:
 - one supply ship and a helicopter for personnel,
 - one supply ship (including personnel) and a fuel tanker,
 - use of the riser ship as the supply ship,
 - mother-daughter docking capability or ship-to-ship transfer capability.
4. ODP staff should participate in industry drilling on riser ships to gain experience in the operations.

10.1.3.4. Scientific and Engineering Services Working Group

Recommendations:

1. A small, centralized management team to oversee provision of scientific and engineering services to all platforms within IODP is recommended.
2. A multi-platform program will best be served by shore-based central facilities for core analyses and transportation of cores to that facility, rather than full scientific parties and facilities on each platform.
3. If the scientific party working on the core is dominantly shore-based, there need to be mechanisms in place that will facilitate team building and interaction between the scientists.

4. Methods for core storage and transportation that provide temperature, humidity and gas-controlled environments are essential. Logistically a core storage facility on deck that would be easily transportable is recommended.
5. Geotechnical surveys need to be incorporated into the site survey process, particularly for the riser vessel. These should include geotechnical *in situ* tests, such as the CPT and the Deep Water Gas Probe.
6. Engineering developments within the program should utilize off-the-shelf industry equipment whenever possible.

Action Items:

1. To determine the shipboard lab facilities required on each platform, conduct an analysis of the critical measurement and sample analyses that must be conducted onboard a drilling platform for reasons of
 - (a) safety,
 - (b) real-time drilling decisions,
 - (c) capture of ephemeral properties.
2. Evaluate the types of shore-based facilities required, and determine the optimal way to provide them (i.e., by discipline, by region, etc.).
3. Evaluate the costs relative to international needs of a centralized core repository.
4. An operational disaster plan needs to be developed that will apply to all IODP platforms.

In the discussion, John Orcutt noted that a depth limit of 2500 m for a riser places severe limits on the science that can be achieved. He added that we have a paramount need to think about the “riserless” approach to drilling in deeper water. Chris Harrison inquired whether “riserless” drilling will eventually replace all riser drilling in industry? Hay replied that this is uncertain, but it might eventually become widespread because it reduces costs. Catherine Mével inquired as to what depth industry is aiming. Hay replied that it is his understanding that they want to drill in 10,000 feet of water. Bob Detrick noted that assumptions about length of riser must influence basic ship design. He inquired whether the OD21 ship will be designed for a 2500 m or longer riser. Shinichi Takagawa noted that the “riserless” system is not yet a reality, and its design is still unknown. Japan will build a 2500 m riser and study the possibility of a 4000 m riser. He further noted that a longer riser requires a higher center of gravity. Jeff Fox stated that industry’s intention to abandon riser drilling in deep water also takes into consideration the high cost (\$80–100M US) of the platform necessary to support the system. Mével suggested that including the capability of handling a 4000 m riser must affect the design of ship. Takagawa replied that it would not affect the design too much.

Margaret Leinen urged that EXCOM clarify what activities IPSC will have with respect to these issues. For example, does JAMSTEC plan to incorporate partner input? Does JAMSTEC expect input from IPSC on ship design? Beiersdorf replied that IPSC will develop strategy for technology and operations. John Mutter noted that according to the wiring diagrams, IPSC will somehow be involved.

EXCOM Motion 99-1-14

EXCOM accepts the report of the ODP Technical and Operations workshop and thanks SCICOM, and Susan Humphris and Ken Tamaki the workshop co-chairs, for organizing this meeting. This workshop was extremely valuable and raised a number of important technical and operational issues related to deep water riser drilling. EXCOM recommends that the IPSC, as its initial highest priority, addresses these issues in the context of post-2003 scientific goals and operational considerations. In its discussions IPSC should take advantage of a clear willingness on the part of industry to share its technical knowledge. IPSC is asked to provide a preliminary report to EXCOM at its June 1999 Meeting.

Proposed by Detrick, seconded by Orcutt; 15 in favor.

10.3.2 COMPLEX/Vancouver Meeting (TAB M)

Bill Hay presented a breakdown of themes identified from white papers and proportions of the submissions coming from different countries. He noted that letters of invitation have already sent out to first authors of white papers. Others will be invited, especially from industry. This is an open conference.

Catherine Mével urged that we involve ICDP in this meeting. John Mutter concurred, noting that overlap exists between ICDP and ODP. Beiersdorf stated that he would personally take care of this matter.

Asahiko Taira suggested that we might want to include other programs like NAD. Beiersdorf proposed that we ask Pias and the COMPLEX steering committee to consider this.

11. Future Meetings and Other Business

11.1 Sydney, Australia (June 29-30, 1999)

The next EXCOM meeting will take place in Sydney, Australia, on June 29 and 30. It will be hosted by David Feary.

11.2 Washington, D.C.

The winter 2000 EXCOM meeting will be held in Washington, D.C. in late January or early February 2000.

11.3 Other Business

EXCOM Motion 99-1-15

EXCOM thanks the personnel of the Woods Hole JOIDES Office for their outstanding stewardship of JOIDES activities during the past two years. Christina Chondrogianni and Shirley Waskilewicz ensured that the business of the many committees, panels, working groups and other planning groups went smoothly. They brought JOIDES information availability to new levels with website development and provided outstanding service to the growing JOIDES community. Kathy Ellins' thoughtful and enthusiastic service as liaison to EXCOM made our work easier and certainly more pleasant. We congratulate Susan Humphris for outstanding leadership in one of the most challenging times for ODP, and we thank her for her service to our community and to EXCOM.

Proposed by Leinen, seconded by Taira; 15 in favor.

Once more Helmut Beiersdorf thanked the RSMAS and in particular Chris Harrison and Otis Brown for graciously hosting the EXCOM, liaisons, and guests.

Meeting Adjourned 1:00 PM.