

**DRAFT**

**IODP-Industry Science Program Planning Group Meeting**

**Minutes**

28-29 January 2008

Pau, France

IIS-PPG Attendees:

Didier-Hubert Drapeau, Didier-Hubert.DRAPEAU\_at\_total.com, IIS-PPG (Host)  
Rod Graham, Rod.Graham\_at\_Hess.com, alternate for Andrew Pepper  
Erdem Idiz, Erdem.Idiz\_at\_shell.com, alternate for Andrew Bell  
David Roberts, d.g.roberts\_at\_dsl.pipex.com, IIS-PPG  
Kurt Rudolph, kurt.w.rudolph\_at\_exxonmobil.com, IIS-PPG  
Ralph Stephen, rstephen\_at\_who.edu, IIS-PPG (Chair)  
Yasuhiro Yamada, yama\_at\_electra.kumst.kyoto-u.ac.jp, IIS-PPG

Ex-Officio Attendees:

Jean-Luc Auxietre, Jean-Luc.AUXIETRE\_at\_total.com, Total  
Jan Behrmann, jbehrmann\_at\_ifm-geomar.de, Science Planning Committee Liaison  
Dan Evans, devans\_at\_bgs.ac.uk, ECORD-ESO  
Yoshi Kawamura, kawamuray\_at\_jamstec.go.jp, CDEX  
Manik Talwani, IODP-MI, by conference call

IIS-PPG Regrets:

Andrew Bell, Andy.Bell\_at\_Shell.com, IIS-PPG  
Richard Davies, Richard.Davies\_at\_durham.ac.uk, IIS-PPG  
Harry Doust, harrydoust\_at\_hotmail.com, IIS-PPG  
Andrew Pepper, apepper\_at\_hess.com, IIS-PPG  
Martin Perlmutter, mperlmutter\_at\_chevron.com, IIS-PPG, failed conference call  
Yoshihiro Tsuji, tsuji-yoshihiro\_at\_jogmec.go.jp, IIS-PPG

## **Executive Summary**

This was the fourth meeting of the IODP/Industry Science Program Planning Group. To promote development of industry related drilling proposals, to facilitate communication, and to develop effective links between academic and industry scientists, we generated eight consensus statements at the meeting:

**IISPPG Consensus Statement 0108-01:** IISPPG commends IODP-MI on their efforts to establish an industry supported ocean drilling program. The IISPPG is pleased to have played a role in this endeavour.

**IISPPG Consensus Statement 0108-02:** IISPPG encourages Arctic drilling. We recommend that oil and gas industry representatives attend the Arctic drilling workshop being proposed by Bernard Coakley in Bremerhaven.

**IISPPG Consensus Statement 0108-03:** IISPPG thanks CDEX and ECORD for attending the meeting. Closer interaction between the industry members of the IISPPG and the IO's is necessary to develop drilling proposals since some aspects require new or modified platforms. Invite IO's to at least one IISPPG meeting per year.

**IISPPG Consensus Statement 0108-04:** IISPPG would like to continue to play a role in nurturing IODP drilling proposals but in an extension of the UK-ILP model we encourage development of joint industry-academic consortia: a) to facilitate access to industry seismic data, b) to carry out and fund any necessary reprocessing, analysis and interpretation of the data, and c) to fund any necessary pre-drilling surveys. (Use BESACM as a pilot project)

**IISPPG Consensus Statement 0108-05:** Industry-IODP cooperation is still evolving and to respect the long tradition of industry involvement in the academic ocean drilling programs we recommend that the next IISPPG meeting focus on establishing the ground rules for an IODP industry liaison panel as a standing committee of IODP

**IISPPG Consensus Statement 0108-06:** IISPPG encourages the oil and gas companies to join IODP-MI as Associate Members.

**IISPPG Consensus Statement 0108-07:** IISPPG will pursue a workshop on the theme of High Value Single Wells. The focus here is on sites that can be drilled on a single leg of the riserless ship and would be competitive in the existing round of proposals (prior to 2013).

**IISPPG Consensus Statement 0108-08:** IISPPG requests that Jean-Luc Auxietre (Total) replaces Didier Drapeau and that Rod Graham (Hess) replaces Andy Pepper as members.

We thank Didier-Hubert Drapeau and Total for graciously hosting the meeting.

## 1) Introduction

In addition to furthering the white paper process that had been initiated in The Hague, two primary concerns of this meeting were a) reviewing the IIS-PPG mandate and mode of operations and b) reviewing the progress with the Industry Supported Ocean Drilling Program (called the Industry Task Force at the Sapporo meeting).

## 2) Minutes of the Previous Meeting

The minutes of the previous meeting, in Sapporo, 23-24 July 2007 were accepted.

## 3) Review the Progress on Consensus Items from the Sapporo Meeting.

IISPPG Consensus Statement 0707-01: SASEC Consensus Statements 0706-07 and 0706-08 represent radical changes in the manner with which academic scientists collaborate with industry in ocean drilling. The “Deal” between academic scientists and the funding agencies and the drill ship operators is changing dramatically. We recommend that options for pursuing substantial industry support for the IODP drilling platforms be pursued by an Industry Task Force (ITF) independent of the IODP SAS. The ITF would consist of representatives from the petroleum industry, the Implementing Organizations, IODP-MI and SAS (ex-officio) facilitated by IODP-MI. **IODP-MI has prepared a proposal for an Industry Sponsored Ocean Drilling Program (ISODP) using the JOIDES Resolution. (During the meeting we had a conference call with Manik Talwani. This topic is covered in more detail below - 8b.)**

IISPPG Consensus Statement 0707-02: Given the already strong proposal pressure and the much reduced availability of the IODP drilling platforms for the remainder of the program, there is little point in further “promoting development of IODP drilling proposals to address industrial priority research within SAS or within the context of the ISP”. We recommend an IISPPG meeting in Paris in January-February 2008 to complete the white papers and to consider other avenues for pursuing academic-industry liaisons within SAS (for example, more mini-workshops similar to the Tokyo workshop). **With the advent of the ISODP the role of the IISPPG might change. A summary of background information on this topic and of our discussion on this topic is given below - 8d.**

IISPPG Consensus Statement 0707-03: The industry members of IISPPG would like to investigate the potential of using platforms currently utilized by IODP for industry developed drilling consortiums. A possible project envisioned could be, for example, an Arctic basin analysis program. In order to proceed in a timely manner, we request that IODP-MI ascertain the level of interest of the IO’s in pursuing and facilitating this approach to solving IODP funding issues. If there is interest, prior to the IISPPG or ITF engaging the entire industrial community to inquire about creating this consortium, we need the following information that will drive corporate decisions: (1) the approximate cost of the ships for drilling in both ice free and ice covered locations in the Arctic, (2) the drilling capabilities of each ship, (3) the scheduling and availability, and (4) the fiscal

responsibilities (liability, etc). While this potential program would be driven by industry interests we believe that there could be significant opportunities for scientific collaboration with academia and government. **Material on the specifications of the various platforms is included as Appendices 19 and 23. The IO's were invited to the Pau meeting to address these issues and representatives attended from ECORD-ESO and CDEX - 8c.**

IISPPG Consensus 0707-04: We recommend that the SPC appoint Andrew Bell (Shell) as a new member of the Industry-IODP Science Program Planning Group (IIS PPG), replacing resigned member Neil Frewin, effective immediately. **This membership change was approved at the August SPC meeting.**

IISPPG Consensus 0707-05: We request that SPC and the National Funding Agencies sort out all funding issues with respect to IISPPG member travel reimbursement. To be effective, the IISPPG needs members from multi-national oil companies and negotiating "who pays the travel" is not an effective use of IISPPG time. **This seems to be working.**

IISPPG Consensus 0707-06: We recommend industry participation at the IODP rapid climate change workshop if approved (Kurt Rudolph). **No progress.**

IISPPG Consensus 0707-07: We recommend that technical sessions and/or panel discussions be held at AAPG, GSA and/or EAGE (Kurt Rudolph, Andy Pepper, and Marty Perlmutter to evaluate). **No progress.**

#### **4) Update on IODP activities, the August 2007 SPC meeting, and the Draft IODP Implementation Plan**

Although Harry Doust did not attend this meeting he did prepare an updated figure on "Active proposals of possible industry interest" that was presented (see Appendix 1). Three new themes were Deep Biosphere, Gas Hydrates and Instrumentation. The PPG was also reminded of the September 2001 summary on "Critical Industry Interests for IODP" (Appendix 28 of the July minutes).

Feedback from the August SPC meeting was presented (Appendix 2) as well as the Draft IODP Implementation Plan (Appendix 3).

Jan Behrmann gave an update on the ship schedules from the latest OTF meeting (Appendix 4).

#### **5) First science leg of the Chikyu**

Yamada-san gave a short presentation on his experiences on the first science leg of the Chikyu.

#### **6) Progress reports on IIS-PPG white papers.**

##### **6a) Rifted margins mission proposal**

Ralph Stephen presented a progress report on the BESACM (Birth and Evolution of the South Atlantic Conjugate Margins) white paper (see Appendices 6, 7 and 8 of the Sapporo minutes for an overview and background documentation). The BESACM project was a sub-section in the Rifted Margins Mission Proposal (COBBOOM - #720 ) that was submitted for the April 1, 2007 deadline by John Hopper. None of the mission proposals were approved by the SAS (Appendix 5). In addition the rifted margins work was not designated as an objective in the Draft Implementation Plan (Appendix 3). Some aspects of rifted margins work may be appropriate for the ISODP. Although the PPG views this as high priority work of interest to industry it is not clear how to proceed.

#### **6b) Mesozoic paleo-oceanography and source rocks**

Harry Doust had prepared a draft white paper and other materials for the Sapporo meeting (see Appendices 9, 10, 11 and 12 of the Sapporo minutes). This is primarily an activity of the UK-IODP Industrial Liaison Panel. Erdem Idiz lead the discussion on this.

Appendix 6 is an outline for a UK-ILP meeting, in Durham, September 21 and 22, 2007, that never happened. The title was "A WORKSHOP DEDICATED TO PLATE TECTONICS, PALAEOCEANOGRAPHY/ PALAEOCLIMATE, SOURCE ROCKS, AND THE DEEP BIOSPHERE". The UK-ILP meeting, in Durham, January 30 and 31, 2008 (immediately following the PPG meeting), that did happen was titled "Understanding ocean redox and formation of Corg-rich sediments during extreme and transitional climate modes". These were the same meetings, at different stages of the planning process.

#### **6c) Silica diagenesis, shallow compaction and fluid flow**

There were no presentations or discussion on this topic.

#### **6d) Arctic drilling**

At the Sapporo meeting arctic drilling had been identified as a top priority for industry, even though it was recognized that neither the JOIDES Resolution nor the Chikyu were capable of working in the ice (see Appendices 29 and 30 of the Sapporo minutes). Rod Graham and Kurt Rudolph lead the discussion. Bernard Coakley has been leading an effort for a workshop on "Scientific drilling in the Arctic" which is targeted for Bremerhaven in November 2008 (Appendix 7).

#### **6e) Source-to-sink sediment transport processes**

There were no presentations or discussion on this topic.

#### **6f) High-scientific-value single wells**

Dave Roberts gave an excellent presentation on wells that could be drilled by the JOIDES Resolution on a single leg but would still be of high scientific value to industry (Appendix 8). Sites included the Northwest Indian Ocean, the Eastern Mediterranean, the Gulf of Mexico, the Namibe Basin, the Orphan Basin, the Hatton-Rockall Basin, and the South Falkland Plateau. Dave has requested feedback from other members of the PPG in preparation for a workshop that will be held in conjunction with a July 08 IISPPG meeting in Houston.

## **7) Updates on national IODP-industry liaison efforts.**

### **7a) UK ILP**

There were no presentations or discussion on this topic other than the workshop presented above in 6b).

### **7b) Japan**

Tsuji-san sent this short statement regarding PPG activities in Japan: "Regarding my presentation on the Japanese industrial relation to the IODP, what I can say at present is that we had a meeting of the geology and exploration committee members of Japanese Association for Petroleum Technologies. In the meeting we had a special presentation focused on the operation of Chikyu, by Mr. Saga of CDEX. Some companies expressed small possibility to use Chikyu in her non-IODP shiptime, but it was not an official comment. I transferred the message of Talawani-san to the committee members and some key persons in our industry in Japan regarding the usage of Joides Resolution. But, no positive comment has been obtained."

### **7c) US liaison efforts - RPSEA and DeepStar**

At the Houston IISPPG meeting in January 2007 we had a presentation from Mike Grecco who represented RPSEA and DeepStar (see Appendix 2 of the Houston minutes). This initiated a collaboration between IODP-MI and RPSEA/DeepStar and IODP-MI became a member of both groups. In Sapporo Ralph Stephen gave an update on the membership of IODP-MI in both RPSEA and DeepStar (Appendix 14 of the Sapporo minutes). More details on the collaboration are given in Tom Janecek's presentation at the June SASEC meeting (Appendix 27 of the Sapporo minutes). In Pau Ralph Stephen gave a progress report on this effort using materials from IODP-MI (Appendix 9) and RPSEA (Appendix 10).

## **8) Review of the IIS-PPG mandate and mode of operations**

### **8a) Introduction and Background**

Ralph Stephen presented a brief overview on the IISPPG mandate, the issue of industry financial support for scientific ocean drilling, and the IISPPG recommendation for an Industry Supported Ocean Drilling Program (previously called the Industry Task Force) (Appendices 11 & 12).

## **8b) The Industry Supported Ocean Drilling Program (ISODP)**

The IISPPG has been discussing various approaches to obtaining large amounts of industry funding (>\$10M) for the IODP platforms, essentially the Chikyu and JOIDES Resolution. At our Sapporo meeting we recommended the formation of an Industry Task Force (ITF) that "would consist of representatives from the petroleum industry, the Implementing Organizations, IODP-MI and SAS (ex-officio) facilitated by IODP-MI". IODP-MI has prepared a proposal for an Industry Sponsored Ocean Drilling Program (ISODP) using the JOIDES Resolution. Manik Talwani lead this discussion by conference call (Appendices 13[Talwani presentation], 14[SAS Consensus Statements], 15[ISODP Proposal], 16[ISODP Addendum], 17[Guidelines from NSF], 18[IODP-MI membership] and 19[JOIDES Resolution specs]).

The IISPPG is supportive of the ISODP concept. We encourage oil and gas companies to join IODP-MI as Associate Members and to participate in developing the ISODP. We are concerned that the existing SAS proposals, which were prepared by the academic community at essentially no charge to the drilling program, may get transitioned to the ISODP without adequate compensation to the proponents. Since the ISODP is totally independent from the SAS there is not much else we can do. The IISPPG remains, however, the only SAS committee specifically charged with industrial liaison.

## **8c) Feedback from IO's**

We thought it would be worthwhile to get feedback from the IO's on the ISODP model. All of the IO's were invited to attend the Pau meeting and we had representatives from CDEX (Yoshi Kawamura) and ECORD-ESO (Dan Evans).

We initiated the process by addressing the points listed in this Consensus Statement from the Sapporo IISPPG meeting: "IIS-PPG Consensus 0707-03: The industry members of IISPPG would like to investigate the potential of using platforms currently utilized by IODP for industry developed drilling consortiums. A possible project envisioned could be, for example, an Arctic basin analysis program. In order to proceed in a timely manner, we request that IODP-MI ascertain the level of interest of the IO's in pursuing and facilitating this approach to solving IODP funding issues. If there is interest, prior to the IISPPG or ITF engaging the entire industrial community to inquire about creating this consortium, we need the following information that will drive corporate decisions: (1) the approximate cost of the ships for drilling in both ice free and ice covered locations in the Arctic, (2) the drilling capabilities of each ship, (3) the scheduling and availability, and (4) the fiscal responsibilities (liability, etc). While this potential program would be driven by industry interests we believe that there could be significant opportunities for scientific collaboration with academia and government."

In his presentation on the ESO, Dan Evans reviewed the financial predicament facing IODP and gave a summary of the ISODP process (Appendix 20). Since there is strong industry interest in the Arctic and since the Chikyu and JOIDES Resolution cannot

work in the Arctic, there is an opportunity for ECORD/ESO to meet the industry demand. Dan outlined a scenario based on the EUREKA/EUROGIA model and building on the ACEX experience that would not necessarily involve IODP at all.

Jan Behrmann gave a follow-up presentation on the Aurora Borealis, an ice-breaker with a deep sea drilling capability similar to the JOIDES Resolution (riserless) which is being proposed in Europe (Appendix 21). This is in the preliminary design phase and it could meet many scientific and industrial requirements for Arctic Drilling.

Kawamura-san gave a short presentation on the Chikyu operations, outlining the funding realities (Appendix 22). They also need industry support. The specifications of the Chikyu are given in Appendix 23.

#### **8d) The future of the IISPPG**

SPC "views the membership of the IIS-PPG as a valuable connection with industry scientists, which in the current climate of reduced program funding could be of major help to the program" (quotes in this section are from Jim Mori in an email dated 11/26/07) (Appendices 24 and 25). How can the PPG (or new SAS group based on the PPG) help to foster new ties between IODP facilities and industry?

"What is the future direction for the PPG (finish, continue, evolve to a new type of group)? The PPG has a 3 year mandate (starting from about January '06). Based on the past PPG activities and the potential new opportunities for the industry to directly charter IODP facilities, SPC would like a recommendation for its March 2008 meeting on future activities within the PPG or a new entity evolving from this group."

What is the status of the industry-IODP proposals and pre-proposals that the PPG has encouraged. Is this process working? Does the SAS need more proposals for academic/government money? Is this process useful for attracting industry money?

Furthermore industry-IODP interaction has a different style in different countries. For example, the ILP in the UK is a very active group whose goal, to encourage industry-IODP science proposals, overlaps the IISPPG mandate. A practical model in the UK has industry providing the data and the government providing the funding to re-analyze it for scientific objectives. The Virtual Seismic Atlas (VSA) being developed at Leeds has proven to be an important vehicle for cooperation. Another example is the industry-IODP workshop that was held after the Sapporo meeting in Tokyo. How can the diversity of styles be used to the benefit of IODP?

The PPG was asked to discuss these topics over dinner Monday evening. On Tuesday morning each meeting participant was asked specifically to present an opinion. All participants were in favor of continuing the PPG, at least for the near term. The justification falls in three general areas:

- 1) The IISPPG remains the only SAS committee specifically charged with industrial liaison duties. Given all of the activity at the moment (eg, the ISODP, the Aurora

Borealis, the UK-ILP) it makes sense to have a dedicated committee a) to keep an eye on everything, b) to disseminate information among IODP academic and industry scientists, IO's, and funding agencies, and c) to look out for the interests of basic science.

2) The IISPPG would like to continue to play a role in nurturing IODP drilling proposals but in an extension of the UK-ILP model we encourage development of joint industry-academic consortia: a) to facilitate access to industry seismic data, b) to carry out and fund any necessary reprocessing, analysis and interpretation of the data, and c) to fund any necessary pre-drilling surveys. (For example, we could use BESACM as a pilot project.)

3) To respect the long tradition of industry involvement in the academic ocean drilling programs we recommend an IODP industry liaison panel as a standing committee of IODP. Industry-IODP cooperation is still evolving but the next IISPPG meeting should focus on establishing a mandate for the standing committee.

Other comments were:

a) The ISODP timing (a commitment of industry money by May-June 2008) is unrealistic. Legal issues such as liability and the treatment of proprietary data will take much longer to sort out.

b) In the Arctic it will be vital to have IODP-industry liaison, spanning US, Japan and ECORD interests.

c) It is desirable to continue. Drilling the mesozoic source beds section will require the PPG.

d) IODP scientists need to exploit the available industry seismic data.

e) We need to continue the tradition of getting top level industry scientists on IODP panels.

f) The IISPPG is useful for the IO's.

g) The PPG is necessary as a focus of industry interest within the SAS and IODP.

h) Keep mandate 1: "Most important, define industrial priority research within the IODP context, and promote development of IODP drilling proposals to address such objectives within the context of the ISP."

i) The PPG is necessary to coordinate existing collaborations.

j) In addition to developing proposals with new themes, it is important to develop new types of proposals (eg, ISODP).

- k) The PPG should continue to support the evolution of the ISODP and to work towards an Arctic drilling program.
- l) I am impressed with the industry commitment to IODP.
- m) I like the white paper process.
- n) The IISPPG is a good mechanism to raise the awareness of IODP in Japanese industry.
- o) The IISPPG should encourage more riser proposals.
- p) The IISPPG has a lot to offer but it is conflicted with funding issues. The IISPPG needs to spend more time on science. It will be interesting to see how well the IISPPG works, now that the funding issues have been transitioned to the ISODP.
- q) Mandate 2 ( "... develop effective links between academic and industry scientists, facilitate communication and cooperative scientific and technical development activities between the IODP and industry, ...") will continue to be important as a bridge to the ISODP.

## **9) Outreach Activities**

Very little was done on outreach activities (Consensus Items 6 and 7 from the Sapporo meeting) at this meeting.

## **10) Membership**

We would like to replace Didier Drapeau with Jean-Luc Auxietre (Total) and Andy Pepper with Rod Graham (Hess). Neither Drapeau nor Graham were either Lead Agency or IODP Member Representatives.

## **11) Next Meeting**

The next meeting was tentatively scheduled for Houston in June or July 2008. Kurt Rudolph, Exxon, volunteered to host the meeting. In conjunction with the Houston meeting, Dave Roberts will lead a workshop on "High-Value Single-Wells" (see Appendix 8).

## **Acknowledgements**

We thank Didier-Hubert Drapeau and Total for graciously hosting the meeting.