JR Facility Science Evaluation Panel (SEP) Meeting 29-30 June and 1 July 2015 Institut Universitaire Europeen de la Mer, Brest, France

Science Subgroup

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Jang-Jun Bahk Korea Institute of Geoscience & Mineral Resources (KIGAM)

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Marguerite Godard Université Montpellier

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Verena Heuer University of Bremen

Steve Hovan Indiana University of Pennsylvania

Minoru Ikehara Kochi University
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Barbara John² University of Wyoming

Dick Kroon University of Edinburgh (SEP Co-Chair)
Kathie Marsaglia California State University, Northridge

Cecilia McHugh City University of New York – Queens College

Lisa McNeill University of Southampton

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Tomoaki Morishita Kanazawa University

Yuki Morono JAMSTEC

Tim Naish Victoria University of Wellington

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Ashok Singhvi Physical Research Laboratory

Weidong Sun Guangzhou Institute of Geochemistry
Jason Sylvan University of Southern California

John Tarduno University of Rochester
Andreas Teske University of North Carolina

Jun Tian Tongji University
Masanobu Yamamoto Hokkaido University

Unable to attend

¹ Alternate for Satoko Ishimaru

² Alternate for Eric Ferre

Site Subgroup

Juichiro Ashi University of Tokyo

James Austin University of Texas at Austin

Roger Flood State University of New York at Stony Brook

Andrew Gorman³ University of Otago

Sean Gulick

Mads Huuse

Priyank Jaiswal⁴

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Jiabiao Li Second Institute of Oceanography

David Mallinson East Carolina University (SEP Co-Chair)

David Mosher Natural Resources Canada, Geological Survey of Canada

Dhananjai Pandey National Center for Antarctic and Ocean Research

Robert Pockalny University of Rhode Island

Zhen Sun South China Sea Institute of Oceanology

Gabriele Uenzelmann-Neben Alfred Wegner Institute

Helenice Vital Universidade Federal do Rio Grande do Norte

Peter Vrolijk ExxonMobil Upstream Research Co.

Liaisons and Observers

Jamie Allan National Science Foundation (NSF)

Rita Bauer IODP Science Support Office (SSO) - UCSD/SIO

Keir Becker IODP Forum Chair - University of Miami Peter Blum JRSO – Texas A&M University (TAMU)

Kara Bogus JRSO –TAMU

Nobu Eguchi JAMSTEC Center for Deep Earth Exploration (CDEX)

Holly Given SSO – UCSD/SIO

Karsten Gohl European Consortium for Ocean Research Drilling (ECORD) Facility Board (Chair) Susan Humphris JOIDES Resolution Facility Board Chair - Woods Hole Oceanographic Institution

Barry Katz Chevron Corporation - EPSP (Chair)

Adam Klaus JRSO –TAMU Mitch Malone JRSO –TAMU

Sally Morgan ECORD Science Office (ESO) – University of Leicester

Angela Slagle USSSP - LDEO

Shouting Tuo IODP China – Tongji University Bridget Wade University College London

Unable to attend

³ Alternate for Ben Clennell (ANZIC)

⁴ Alternate for Derek Sawyer (US)

⁵ Alternate for Serge Berné (ECORD)

1. Welcome and Introductions

Science Evaluation Panel (SEP) Co-Chair, Dick Kroon, welcomed the SEP to Brest.

1.1 Call to order and self-introductions

Dr. Kroon called the meeting to order and asked attendees to perform self-introductions.

1.2 Logistical Announcements

Meeting host, Marc-André Gutscher, reviewed the basic logistics for the meeting.

1.3 Approval of Meeting Agenda

Dr. Kroon reviewed the agenda and its implementation over the 3-day meeting. No members presented additions or changes, and the agenda was approved.

2. Reports from IODP Entities

2.1 Perspectives from the JRFB Chair

JRFB Chair, Susan Humphris, reviewed the expeditions recommended for scheduling by the JRFB in their April 2014 (for FY'16-'17) and May 2015 (for FY'17-'18) meetings. She noted that the JRFB expects funding for 10 months of operations in FY'18 and 10 months of operations in FY'19 as a result of recommending the South China Sea Rifting (P878) Complimentary Project Proposal (CPP), which was scheduled as two expeditions in FY'17.

Dr. Humphris stated that the Facility Board also wanted to show the community their commitment to moving the ship around the world via their updated long-term cruise track statement (which she presented) as well as their recommendation that the first FY'18 expedition be the Australia Cretaceous Climate and Tectonics (P760), and that the Hikurangi Subduction Margin (P781A) follow in FY'18 as well.

She noted that Rick Murray, NSF's Director of Ocean Sciences, updated the JR Facility Board regarding funding, the National Research Council's Sea Change Report, and NSF's response to the Sea Change Report. The JR Science Operator had already met the Sea Change Report's recommendation for a 10% decrease to IODP funding through operational improvements, the addition of CPPs into the schedule, and the reduction of transit times (savings in fuel). Dr. Humphris also stated that Dr. Murray spoke to the reinvestment of savings into the IODP.

Dr. Humphris highlighted the:

- Working groups assigned to review and simplify the Proposal Submission Guidelines and the Site Characterization Guidelines.
- Upcoming Curatorial Advisory Board (CAB) member rotations, the CAB's role, and the CAB's need for nominations.
- Anthony Koppers' acceptance of the role of JRFB Chair.
- Upcoming Facility Board member rotations and the United States Science Support Program (USSSP) need for nominations.
- Chikyu IODP Board (CIB) and European Consortium for Ocean Research Drilling (ECORD)
 Facility Board feedback regarding their appreciation of the effectiveness and thoroughness of the SEP.

More information is provided in Dr. Humphris' presentation, which is posted at http://www.iodp.org/meeting-presentations.

NSF's IODP Program Officer Jamie Allan closed this session by clarifying some misconceptions regarding Complementary Project Proposals (CPPs). He reiterated that CPPs are IODP science expeditions. The proposals may get an expedited science evaluation and, if recommended for scheduling, the sponsoring entity receives additional science party berths on the expedition in line with their financial contribution. Dr. Allan noted that for CPPs using the JR, the CPP funds are provided as an unrestricted donation to the NSF.

2.2 Report from NSF and Status of the JR Facility

Dr. Allan reviewed the key points of the Sea Change Report, and NSF's response to that report. These included:

- Implementation of a >10% reduction in IODP operational costs through:
 - o A more efficient ship track and less expensive fuel
 - A simplified JR management structure
 - Some reduction in logging services⁶
- Consideration of additional savings options of:
 - Base partner contributions raised to cover 1/3 of costs
 - CPP cost restructure in next phase of IODP

Dr. Allan stated that the Sea Change report has had an enormous impact at NSF, and it reflects quite positively on the IODP. He pointed out that, political support for the JR is currently strong at NSF, and that he will continue work to get the IODP back to a funding level that can support 10 months/year operation and perhaps even 12 months in some years in the future.

Dr. Allan then reviewed:

- JR Operational (funding) Levels
- The new USSSP Cooperative Agreement with Lamont Doherty Earth Observatory
- The upcoming JR Facility Review
 - Language from the Cooperative Agreement
 - o The Review Panel the NSF will pay all cost for panel participation
 - o The Review Schedule a work in progress
- Marine Geology and Geophysics (MGG) Funding of IODP Related Seismic Survey Proposals

Dr. Allan stated that the review will look at the overall IODP science progress as well as the JR Facility. More information is provided in Dr. Allan's presentation, which is posted at https://www.iodp.org/meeting-presentations.

2.3 JR Science Operator (JRSO) Report

Mitch Malone, JR Science Operator Liaison, presented highlights of the last three expeditions, upcoming expeditions, the JRSO efforts to assign co-chiefs, and he updated the attendees regarding:

- Scientific staffing for Expeditions 362 (Sumatra), 363 (Western Pacific Warm Pool), and 366 (Mariana Convergent Margin)
- The new Expedition Project Manager/Staff Scientist (EPM/SS), Trevor Williams, who starts 1 August 2015
- An EPM/SS posting for borehole geophysics, petrophysics, or geophysics, which closes 15 September 2015

⁶ While there is less processing at sea and logging staff select cruises only, the full suite of logging tools are still available on every expedition.

More information is provided in Dr. Malone's presentation, which is posted at https://www.iodp.org/meeting-presentations.

2.4 MSP / EFB, IO Report

This presentation was delayed until after lunch to accommodate ECORD FB Chair, Karsten Gohl's schedule.

2.5 Chikyu / CIB, IO Report

Center for Deep Earth Exploration (CDEX) Liaison Nobu Eguchi provided the CDEX/CIB Report, which included summaries of:

- Chikyu IODP Long-term Planning
- Chikyu IODP Expedition 365
- CIB 2015 Meeting Consensus Items
- CIB Membership starting 1 April 2015

Dr. Eguchi noted that the *Chikyu* is currently docked for repair, maintenance, and a 5-year inspection (Sept through January). Then, from March to April 2016, the *Chikyu* will undertake an IODP operation. More information is provided in Dr. Eguchi's presentation, which is posted at https://www.iodp.org/meeting-presentations.

3. Science Support Office Report

IODP Science Support Office (SSO) Director Holly Given summarized recent SSO activities as they pertain to the SEP and the review process. She emphasized to the meeting participants their need to become familiar with clarifications to the two IODP Confidentiality Policies, which were updated because of an uptick in confidentiality inquiries regarding industry data. She noted that the revised documents were accepted by the JRFB, EFB and CIB, and she informed the meeting participants that their compliance with these updated policies would be gathered through the circulation of a sign in/acceptance sheet.

Dr. Given highlighted the SSO's addition of the "data lead" identifier to the Proposal Data Base (PDB) (per community request), the upcoming review of the Proposal Guidelines and Site Characterization Guidelines documents (per the JRFB Meeting), the two amphibious proposals to be reviewed at this meeting, and Dr. Michiko Yamamoto's remote availability during this meeting. She reviewed proposal submission rates vs. Site Survey Data Bank (SSDB) file submission rates, and asked for SEP input as to how to be clearer to proponents as to what they should submit. Dr. Given wrapped up her presentation with a review of the active proposal statistics and a request for continued input from the community regarding iodp.org, PDB and SSDB.

More information is provided in Dr. Given's presentation, which is posted at https://www.iodp.org/meeting-presentations.

4. Seismic data collection and environmental agencies

Sean Gulick, SEP Science Subgroup Member, provided an introduction to the status of seismic surveys in the eyes of academia, NGO's, and other national and international governing bodies. His topics included:

- The Role of Site (Seismic) Surveys in Scientific Ocean Drilling
- Challenges to the Seismic Community
- Ocean Noise What is known and unknown

- Seismic Survey Funding and logistics
- · The Role of the IODP SEP

Dr. Gulick stated that he was asked to finish his presentation with a draft consensus statement, obtain feedback from the group, and deliver a final consensus statement at the end of the meeting. Keir Becker, IODP Forum Chair, asked that the final statement stress the need for improved and continued funding for seismic surveys, and Dr. Given recommended that the final statement be clear in its reference to active seismic sources. Dr. Gulick stated that he would e-mail the latest statement to the meeting attendees, gather their input over the next two days, and present a final for consensus vote on the last day of the meeting.

The final consensus statement is presented in Section 11 (below) and more information is provided in Dr. Gulick's presentation, which is posted at https://www.iodp.org/meeting-presentations.

5. Older Dormant SEP Proposals

Dave Mallinson, SEP Co-Chair – Site Subgroup, presented Dr. Michiko Yamamoto's summary table of proposals for which there has been no proponent activity for 5 years or more. Dr. Humphris informed the meeting attendees that these proponents were contacted via e-mail, that the e-mail provided the ship's track, and it asked for their intent regarding their proposal (Will you submit a new proposal or not?).

The SEP members agreed that text should be added to the Proposal Submission Guidelines stating that active proposals will be reviewed periodically and if a proposal has had no activity (at least some communication/correspondence regarding scheduled progress) for 5 years, or if the JR is leaving the ocean in which the drilling is proposed, the SEP may deactivate the proposal. Dr. Mallinson noted that it is our standard procedure to communicate only with the lead (contact) Principal Investigator (PI).

Dr. Kroon stated that the group had reached a consensus to send a letter telling proponents on Dr. Yamamoto's list that their proposals will be deactivated. The letter should encourage them to update their science and resubmit a new proposal in the new system.

2.4 Mission-Specific Platforms / EFB, IO Report

Karsten Gohl, ECORD Facility Board Chair, presented a report of progress for the ECORD-FB from their March 2015 meeting. The information included:

- A current list of ECORD Facility Board members
- Membership and meeting issues
- A summary of Mission-Specific Platform Proposals at the EFB (and their status)
- A schedule of proposed MSP expeditions through 2023

Dr. Gohl stated that 2018 will be a polar year for ECORD. He noted that the EFB has a certain number of proposals in their holding bin; pending additional funding, some of these proposals could be scheduled.

Sally Morgan, ECORD Science Operator (ESO) Liaison, presented a summary of ESO operations recently scheduled. She summarized their latest developments in seafloor drilling technologies, noted that the First ECORD Training Course was hosted in Bremen in March, and that ECORD has a new MSP Third Party Tool Policy.

More information is provided in Dr. Gohl and Dr. Morgan's presentation, which is posted at https://www.iodp.org/meeting-presentations.

2.6 Forum Report

Keir Becker, IODP Forum Chair, summarized the ICDP-IODP joint proposal review process, as it was approved by the IODP Facility Boards. His report included the:

- ICDP-IODP Committee on Joint Evaluation of Amphibious Drilling Proposals (ADPs)
- Process and Timeline for Adoption
- Original Committee and ECORD Facility Board Modified Definitions of ADPs
- General Principles for Coordinated ICDP-IODP Evaluation of ADPs
- Flowchart for ICDP-IODP ADP Pre-Proposals (Workshops) Development
- Flowchart for ICDP-IODP ADP Full Proposal Development
- Implementation of ADPs
- Suggestion for Joint ICDP-IODP Working Group to Work Out Implementation Principles

The working group in the final bullet was identified as Dave McInroy, Uli Harms, Gilbert Camoin and to-be-named members from the ICDP Executive Committee or Assembly of Governors. Dr. Becker agreed to sit with the Watchdogs for the current ADP proposals to help them through the process. He also asked members to give him their opinions on continuing the joint scientific drilling Town Hall Meeting at AGU.

Dr. Becker then reviewed the IODP's progress toward an even distribution of expeditions and full proposals by New Science Plan science themes/challenges. More information is provided in Dr. Becker's presentations, which are posted at https://www.iodp.org/meeting-presentations.

6. The Proposal Review and Advisory Process

6.1 Review Procedures

Dr. Kroon (SEP Co-Chair - Science) summarized the review process as follows:

- Review procedures:
 - Highlights from the SEP Terms of Reference
 - General evaluation criteria for IODP proposals and response letters
 - Rating of the proposal (after external review)
 - Characterizing the Site Survey Data
 - Watch Dog (WD) Preparation of Proposal reviews
 - Notes regarding drilling plan review
 - Proposal Evaluation Form
 - o Co-Chief recommendations completed offline after the review
 - Actions for Panelists with Conflicts of Interest
- Review of results from January 2015 SEP Meeting
- Evaluation of (possible review result for) proposals submitted the 1st of April
- IODP-ICDP ADP Proposal Flowchart for Pre-proposals (workshops)
- IODP-ICDP ADP Proposal Flowchart for full proposals

Dr. Kroon also detailed the difference between the SEP holding bin and the Facility Board's holding bins. More information is provided in the Review Procedure presentation, which is posted at https://www.iodp.org/meeting-presentations.

6.2 Discussion of data guidelines and site characterization

Dr. Mallinson provided a detailed explanation of the proposed new site data rating scheme (revised to match the SSDB and detailed in slides 26/27 of the presentation linked in Section 6.1). He asked that the Panel implement this new classification scheme immediately, and solicited comments and recommended changes. EPSP Chair, Barry Katz, asked that the phrase "to support the drilling effort" be changed "to support scientific aspects" to better reflect the difference between the SEP and EPSP roles in data review.

With this change, the Site Subgroup members agree to use this new data rating system in their presentations. Dr. Mallinson asked that any interpretations based on the data be included in the site survey section of the Review Report.

Finally, Dr. Mallinson reminded the attendees that Dr. Kroon was stepping down as the SEP Science Co-Chair and asked them to provide nominees for his replacement. He provided the meeting attendees with a summary of qualities of a good candidate and the functions performed in this role. More information is provided in the Review Procedure presentation, which is posted at https://www.iodp.org/meeting-presentations.

7. Review of Proposals

7.1 Revised proposals

The SEP began their reviews of revised proposals.

18:00 Meeting Adjourned for the Day

Tuesday 30th of June 2015 09:00-17:00

7.1 Revised proposals (continued)

The SEP completed their reviews of revised proposals.

7.2 External reviews

The SEP reviewed externally reviewed proposals.

7.3 New proposals

The SEP began their reviews of new proposals.

18:05 Meeting Adjourned for the Day

Wednesday 1st of July 2015 09:00-16:00

7.3 New proposals (continued)

The SEP completed their reviews of new proposals.

8. Summary of SEP reviews

Proposal#	Туре	PI	Stage	Platform	Theme	Result
730	Full2	Taylor	SEP	MSP	СО	External review
771	Add (Full2)	Hodell	SEP	JR	СО	Forward to JRFB
796	ADP	Kopf	SEP	MSP	EM	Revise
832	Full2	Sutherland	SEP	JR	СО	External review
834	Full2	Uenzelmann-Neben	SEP	JR	EC	External review
847	Full2	Weber	SEP	JR	СО	Deactivate
852	CPP	Stewart	SEP	MSP	СО	Revise
857A	Full	Rabineau	SEP	Chikyu	BF	Deactivate
878	Add	Sun	НВ	JR	EC	Forward to JRFB
879	Full	McNeill	SEP	MSP	EC	Holding Bin
885	Pre	Bahk	SEP	JR	EM	Develop Full
886	Pre	Morishita	SEP	Chikyu	EC	Develop Full
887	СРР	Flemings	SEP	JR	EM	Revise
888	Full	Stern	SEP	JR	EC	Revise
889	Pre (ADP)	Ellouz-Zimmerman	SEP	JR	EC	Deactivate

: Came back from external review			
: Revised			
: New			

9. SEP chair nomination

The SEP took up the question of Dr. Kroon's replacement and the eight names submitted from the floor were discussed. The panelists present decided to ask for a show of hands for three of the names (noting that only one was a current panelist). The current panelist, Ken Miller of Rutgers University, received substantially far more hands than the other two. Therefore, on behalf of the SEP membership, the Science Support Office will put forward Dr. Miller's name as the next SEP Chair for approval by the JR Facility Board.

10. Schedule of next SEP meeting

Dr. Kroon announced that the next SEP meeting was scheduled for 12-14 January 2016 at Scripps Institution of Oceanography in La Jolla, California.

11. All Other Business

Drs. Kroon and Mallinson lead the meeting attendees in extending their thanks to meeting host Marc-André Gutscher for his extensive efforts in coordinating both a productive and pleasant meeting.

Request for Co-Chief Nominations

Dr. Kroon requested that the group provide co-chief nominations to Rita Bauer at science@iodp.org for the following expeditions:

Hikurangi Subduction Margin (781A) South China Sea Rifting (878) – 2 expeditions Central Arctic Paleoceanography (708) Antarctic Cenozoic Paleoclimate (813)

Rita will compile the nominations and send them to Dr. Malone (JRSO) and Robert Gatliff (ESO).

Review of Motions and Consensus Statements

Consensus Statement 1

Dr. Mallinson presented the following statement regarding dormant proposals:

The SEP recommends deactivation of the following dormant proposals (i.e., no proposal activity within the previous five years), with the statement that proponents are encouraged to resubmit:

635-Full	740-Full	754-Full2	753-Pre2
658-Full	750-Pre	756-Pre	772-APL2
692-Full	659-Full	761-Pre	

Deactivation is recommended so that proponents can update the science, objectives and hypotheses, allowing resubmissions to remain competitive.

He received no comments or requests for changes and the statement was accepted by consensus.

Consensus Statement 2

Dr. Gulick presented the latest draft statement regarding seismic surveys and with the addition of a few final comments, the following statement was accepted by consensus:

The IODP Science Evaluation Panel (SEP) wishes to convey concern regarding the increased pressures on the acquisition of academic active-source seismic data, some of which by design is conducted in support of scientific ocean drilling. Continued reduction in the international marine geoscience communities' ability to collect seismic data in areas of scientific interest is jeopardizing the scope and impact of IODP science. The SEP consensus is that the IODP should stress the importance, both to member country funding agencies and environmental permit organizations worldwide, of high-quality subsurface images for science and safety in connection with expected continuation of IODP. Furthermore, SEP looks forward to IODP playing a role in bringing sound science to ongoing discussions of mitigation for (seismic-based) noise in the marine environment.

Panel Rotations

Dr. Kroon reviewed the list of SEP members rotating off this fall, and thanked them for their excellent service. He asked that all meeting attendees work to nominate qualified candidates to fill these vacancies.

12:50 Meeting Adjourned