

**IODP Science Planning Committee**  
**16<sup>th</sup> Meeting, 30 August – 1 September 2010**  
**Scripps Institution of Oceanography (SIO)**

**University of California, San Diego – La Jolla, CA USA**

**Science Planning Committee - SPC**

---

Donna Blackman	Scripps Institution of Oceanography, USA
Gilbert Camoin*	CEREGE-CNRS, France
Daekyo Cheong (non-voting)	Kangwon National University, Korea
David Feary	National Academy of Sciences, USA
Gabriel Filippelli (Chair)	Indiana University-Purdue University Indianapolis, USA
Gretchen Früh-Green	ETH Zurich, Switzerland
Chris Hollis <sup>a</sup> (non-voting)	GNS Science, New Zealand
Hugh Jenkyns	University of Oxford, United Kingdom
Barbara John	University of Wyoming, USA
Takeshi Kakegawa	Tohoku University, Japan
Junzo Kasahara (Vice chair)	University of Tokyo, Japan
Chunfeng Li (non-voting)	Tongji University, China
Hirokazu Maekawa	Osaka Prefecture University, Japan
Richard Murray	Boston University, USA
Naohiko Ohkouchi	Institute for Research on Earth Evolution, JAMSTEC, Japan
Larry Peterson	University of Miami, USA
Singhvi, Ashok	Physical Research Laboratory, India
Ruediger Stein	Alfred-Wegener-Institute for Polar and Marine Research, Germany
Akira Takada	National Institute of Advanced Industrial Science and Technology, Japan
Suzumu Umino	Kanazawa University, Japan
Ben van der Pluijm	University of Michigan, USA
Jody Webster* (non-voting)	University of Sydney, Australia
Toshitsugu Yamazaki	National Institute of Advanced Industrial Science and Technology, Japan

\*Unable to attend.

a –Alternate for Jody Webster

**Liaisons, Guests, and Observers**

---

Jamie Allan	National Science Foundation (NSF), USA
Rodey Batiza*	National Science Foundation (NSF), USA
Se Won Chang (K-IODP)	Korea Institute for Geoscience and Mineral Resources, Korea
David Divins (USIO)	Ocean Drilling, The Consortium for Ocean Leadership, USA
Nobuhisa Eguchi	Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Issa Kagaya	IODP Management International, Japan
Barry Katz (EPSP Chair)	Chevron Corporation, USA
Hiroshi Kawamura	IODP Management International, Japan
Yoshihisa Kawamura*	IODP Management International, Japan
Hiroyuki Kikuta	Japan Drilling Earth Science Consortium (J-DESC), Japan
Hans Christian Larsen	IODP Management International, Japan
Jeanette Lezius (ESSAC)	Alfred-Wegener-Institute for Polar and Marine Research, Germany
Alberto Malinverno (USIO)	Lamont-Doherty Earth Observatory, USA

Mitch Malone (USIO)	Texas A&M University, USA
David McInroy	ECORD Science Operator (ESO), British Geological Survey, UK
Catherine Mével	ECORD Managing Agency, Paris Geophysical Institute, France
Charna Meth	U.S. Science Support Program, The Consortium for Ocean Leadership, USA
Seung-il Nam*	Korea Institute for Geoscience and Mineral Resources, Korea
Clive Neil (STP Chair)	University of Notre Dame, USA
Jin-Oh Park (SSP Chair)	University of Tokyo, Japan
Mary Reagan (USIO)*	Lamont-Doherty Earth Observatory, USA
Ian Ridley	National Science Foundation (NSF), USA
Jeff Schuffert	U.S. Science Support Program, The Consortium for Ocean Leadership, USA
Liz Screaton (USAC Chair)	University of Florida, USA
Marta Torres (SSEP Co-chair)	Oregon State University, USA
Shouting Tuo (IODP-China)	Tongji University, China
William Ussler (EDP Chair)	Monterey Bay Aquarium Research Institute, USA
Michiko Yamamoto	IODP Management International, Japan
Masaaki Yamao	Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Toshitsugu Yamazaki	(J-DESC Chair) National Institute of Advanced Industrial Science and Technology (AIST), Japan

\*Unable to attend.

## **IODP Science Planning Committee**

**16<sup>th</sup> Meeting, 30 August – 1 September 2010**

**San Diego, CA, USA**

### **EXECUTIVE SUMMARY (V.0.1)**

#### **1. Introduction**

##### **1.3. Approve SPC meeting agenda – highlight action items**

**SPC Consensus 1008-01:** The SPC approves the revised agenda of its sixteenth meeting on 30 August 2010- 1 September 2010 in San Diego, CA, USA.

##### **1.4. Approve last SPC meeting minutes**

**SPC Consensus 1008-02:** The SPC approves the minutes of its fifteenth meeting on 23–26 March 2010 in Sydney, Australia.

#### **7. SAS panel reports**

##### **7.1. SSEP**

**SPC Consensus 1008-03:** The SPC recognizes the spirit of SSEP consensus statement 1005-5, but, given the upcoming changes in science advisory structure, declines the statement at this time.

##### **7.5. EDP**

**SPC Consensus 1008-04:** The SPC endorses all consensus statements forwarded to it by the Engineering Development Panel (EDP) (EDP Consensus Statements 1007-04, -05, -06, -07, -08, -09, -10 and -23) for this meeting.

#### **12. OTF Report: IODP expedition scheduling II**

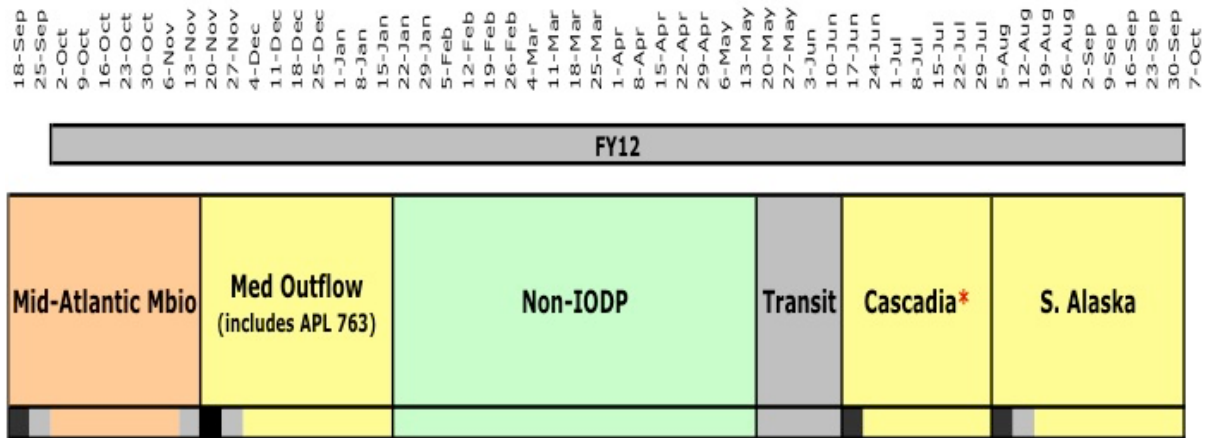
##### **12.2. SPC discussion and approval**

**SPC Motion 1008-05:** The SPC recommends IODP Proposal 681-Full2 Lesser Antilles Volcanic Landslide as the preferred contingency for Proposal 553-Full2 Cascadia Margin Hydrate for FY 12 JR schedule.

Van der Pluijm moved, Murray seconded  
14 in favor (*Blackman, Feary, Kakegawa, Maekawa, Murray, Ohkouchi, Peterson, Stein, Takada, Tokunaga, van der Pluijm, Yamazaki, Filippelli, Kasahara*); 3 opposed (*Frueh-Green, John, Umino*), 0 abstained, 3 non-voting (*Li, Cheong, Singhvi*)

**SPC Consensus 1008-06:** The SPC continues to recognize the high merit of recovering a high-resolution North Atlantic climate reference section off the Iberian margin as the prime objective of Proposal 763-APL. SPC also acknowledges Site Survey Panel (SSP) concerns that the deeper sequence at the location of proposed site PORT-1A contains evidence of mass transport deposits (MTDs) that will affect the APL objective of obtaining a continuous, undisturbed sedimentary section. In response to the recommendation by SSP that the drilling location for 763-APL be shifted to avoid MTDs, and with the concurrence of the lead proponent, SPC approves the relocation of the 763-APL drillsite to the location of SHACK-04A, one of a series of sites contained in Proposal 771-Full from the same proponent group. SSP has rated the site survey status of SHACK-04A as “1Aa” and SPC agrees that the scientific objectives of this APL can be more than adequately addressed at the new location. SPC reiterates its support for a fourth APC hole to 150 mbsf in order to ensure recovery of a complete sequence and to provide sufficient sediment for what is likely to be very high sample demand.

**SPC Consensus 1008-07:** The SPC approves FY12 JR schedule as presented by OTF chair Hans Christian Larsen.



\* Pending resolution of funding

**SPC Consensus 1008-08:** The SPC approves FY12 Chikyu schedule as suggested by NanTroSEIZE Project Management Team (PMT) as Plan (5x5x5) TD around 5200 m.

Year	PMT Plan (5x5x5) TD around 5200m	Plan A+ (5x5x10) TD 7000m	Plan A' (5x5x7) TD 6200m	Plan A''(5x5x5) TD 6200m
2010	20days20" csg @ 850m	20days20" csg @ 850m	20days20" csg @ 850m	20days20" csg @ 850m
2011	116days(3.9mth) 16" csg @2100m (as deep as possible) (LWD, No Core) 13-3/8" @3300m (as deep as possible) (LWD, Core 100m, Wireline logging, VSP)	116days(3.9mth) 16" csg @2100m (as deep as possible) (LWD, No Core) 13-3/8" @3300m (as deep as possible) (LWD, Core 100m, Wireline logging, VSP)	116days(3.9mth) 16" csg @2100m (as deep as possible) (LWD, No Core) 13-3/8" @3300m (as deep as possible) (LWD, Core 100m, Wireline logging, VSP)	116days(3.9mth) 16" csg @2100m (as deep as possible) (LWD, No Core) 13-3/8" @3300m (as deep as possible) (LWD, Core 100m, Wireline logging, VSP)
2012	99days(3.3mth) 11-3/4" @4700m Core 100m Wireline logging.	99days(3.3mth) 11-3/4" @4700m Core 100m Wireline logging.	99days(3.3mth) 11-3/4" @4700m Core 100m Wireline logging.	99days(3.3mth) 11-3/4" @4700m Core 100m Wireline logging.
2013	94days(3.1mth) Drill 8-1/2"(LWD) to confirm Mega-splay fault. Sidetrack 8-1/2" hole and Core 200m (minimum). Wireline Logging. No need to set 9-5/8" csg.	298days(9.8mth) Drill 8-1/2"(LWD) to confirm fault ST 8-1/2" hole and Core 200m Continue drlg to 6000m. U-ream & set 9-5/8" csg. Drill 8-1/2"(LWD) below Plate Sidetrack and drill to 6900m. Core from 6900m to 7000m Wireline logging. Plug back & Suspend	205days(6.8mth) Drill 8-1/2"(LWD) to confirm fault ST 8-1/2" hole and Core 200m (minimum). Continue drlg to 6100m. Core from 6100m to 6200m. Wireline Log U/ream and set 9-5/8" csg @6000m Plug back & Suspend	150days(5mth) Drill 8-1/2"(LWD) to confirm fault ST 8-1/2" hole and Core 200m (minimum). Continue drlg to 6100m. Core from 6100m to 6200m. Wireline Logging Plug back & Suspend
TTL	329 days (11mth)	533days(17.8 mth)	440 days(14.7mth)	385days(12.8mth)

\* "Year" in the figure above represents Japanese Fiscal Year starting 1 April and ending March 31.

**17. Proposal handling during transition II**

**SPC Consensus 1008-09:** SPC asks SSEP to analyze proposals within their pool in November 2010, and determine following;

1. Which have the highest scientific potential
2. Which APLs align with FY2012 drilling schedule and draft FY2013 shiptrack

**SPC Consensus 1008-10:** SPC will consider OTF and SPC proposals at March 2011 for transferring to the new SAS

**SPC Consensus 1008-11:** At the March 2011 SPC meeting, SPC will consider the prioritization of proposals from SSEP when SPC decides which proposals to transfer to the new SAS

**SPC Consensus 1008-12:** SPC will work with IODP-MI in the March-August 2011 timeline to individually advise proponents of all proposals as to the status of their proposal

## 20. Approval of new SAS chair and vice-chair

### 20.1. STP chair and vice-chair

**SPC Consensus 1008-13:** The SPC appoints Saneatsu Saito and Douglas Schmitt as chair and vice-chair of the Scientific Technology Panel (STP) respectively, effective immediately.

### 20.2. SSP chair and vice-chair

**SPC Consensus 1008-14:** The SPC appoints Gilles Lericolais and David Mallinson as chair and vice-chair of the Site Survey Panel (SSP) respectively, effective immediately.

## 23. Review of motions and consensus statements

**SPC Consensus -15:** The SPC greatly thanks to Ohkuochi's deep knowledge of the program, especially the paleoclimate aspect of carbon in black shale from the mantle origin. He is always so cool. He acted as nice interpreter of Japanese. He explained the culture of Japanese and the status of Japanese government in the relation to scientific view point, and why Chikyu' operation has not been so easy. His comments were critical in SPC decision making. Thank you Ohkuochi and we will miss your enthusiastic contributions.

**SPC Consensus 1008-16:** The SPC thanks Hugh Jenkyns for his service on SPC. He is recognized for his careful evaluation and presentations of proposals and his insight on scientific issues related to stratigraphy, climate and tectonics.

**SPC Consensus 1008-17:** The SPC thanks David Feary for his service, commitment and enthusiasm as a member of the panel. A New Zealander with Australian pedigree serving as a US representative demonstrates how seriously we take national interests. Capitalizing on a long experience in ocean drilling, Dave complemented regular member duties with informative get-togethers for new and returning US members, and encouraged informal meetings with a range of stakeholders in support of the program's current and future goals. Dave demonstrated a firm commitment to diversity in research targets and a keen sense of likely success. Importantly, he served the IODP with an ever-present smile and healthy sense of humor that often served us well.  
Thank you, Dave.

**SPC Consensus 1008-18:** The SPC thanks Gilbert Camoin for his dedicated and highly effective service within SPC. His deep knowledge in all aspects of paleoclimate/paleoceanography, especially those related to sea-level change, played always a crucial role in SPC decision making. The SPC will miss his experience, enthusiastic contributions, and humor, and wishes Gilbert every success in his future activities – inside and outside of IODP.

**SPC Consensus 1008-19:** Larry Peterson served IODP community wonderfully. His always reliable and his substantive participation will be solely missed. A man with a few words, but when Larry speaks people listens. He provide insights always with dignity, sensitiveness and concerns for what is the best for the program. His gracefully intellect will be difficult to replace. Thank you very much for your great contribution. IODP is better because of it.

**SPC Consensus 1008-20:** The SPC thanks Donna Blackman, the University of California San Diego, and Ocean Leadership for hosting the 16<sup>th</sup> IODP Science Planning Committee Meeting, held at Scripps Institution of Oceanography. The meeting venue was incredible, enhanced by the exceptional weather, making it even more difficult to remain in the beautiful Forum, and not on the beach. The SPC thanks Neil Driscoll for a tremendous beach walk/field excursion through the Eocene fan system exposed in cliffs north of Scripps. Finally, the SPC thanks ICP10 for the opening night reception.

**IODP Science Planning Committee**  
**16<sup>th</sup> Meeting, 30 August – 1 September 2010**  
**San Diego, CA, USA**

**DRAFT MEETING MINUTES (Ver. 0.2)**

<b>Monday</b>	<b>30 August 2010</b>	<b>09:00-17:30</b>
---------------	-----------------------	--------------------

**1. Introduction**

**1.1. Call to order and introductions**

SPC Chair Gabriel Filippelli called the meeting to order at 9:02. All meeting participants introduced themselves. Filippelli noted that Gilbert Camoin could not attend the meeting and sent his apologies.

**1.2. Welcome and meeting logistics**

Local host Donna Blackman welcomed the meeting participants to Scripps and outlined the logistics for the meeting.

**1.3. Approve SPC meeting agenda – highlight action items**

Gabriel Filippelli listed some of the major agenda items for the meeting: (1) Approval of Prioritization of FY2012 expedition schedule; (2) Prioritizing Mission Specific Platform proposals; (3) Proposal handling during transition; (4) Long-range expedition planning; (5) Discussion and feedback on draft science case; (6) Discussion of new SAS ToR, proposal flow. Filippelli asked if there were suggestions for changes to the agenda. No suggestions.

**SPC Consensus 1008-01:** The SPC approves the revised agenda of its sixteenth meeting on 30 August 2010- 1 September 2010 in San Diego, CA, USA.

**1.4. Approve last SPC meeting minutes**

Gabriel Filippelli asked for comments or suggestions for changes to the draft minutes for the fifteenth SPC meeting (March 2010, Sydney, Australia). With no comments the committee approved the minutes by consensus.

**SPC Consensus 1008-02:** The SPC approves the minutes of its fifteenth meeting on 23–26 March 2010 in Sydney, Australia.



**1.5. Items approved since March 2010 meeting**

745-CPP was approved after SPC discussion through emails.

**SPC Motion 1007-01:** SPC supports the scientific objectives of 745-CPP which has the potential to result in fundamentally new research to be performed by the IODP and to open new fields for its successor. SPC forwards this CPP to OTF for possible scheduling.

Früh-Green moved; Murray seconded;

*17 in favor (Blackman, Camoin, Feary, Filippelli, Früh-Green, John, Kakegawa, Kasahara, Maekawa, Murray, Ohkouchi, Peterson, Stein, Takada, Umino, van der Pluijm, Yamazaki); 0; against; 0 abstained; 0 did not vote; 4 non-voting (Cheong, Hollis, Jenkyns, Li)*

**1.6. SPC procedures and protocol**

**1.6.1. Terms of reference, Robert’s Rules, voting procedures**

Gabriel Filippelli referred to the SPC terms of reference and noted that an SPC decision requires either a consensus or an affirmative vote of at least two-thirds of all members present and eligible to vote. He also pointed out that a quorum comprises two-thirds of the committee. Filippelli mentioned that the SPC occasionally uses straw votes, which are unofficial and generally do not appear in the minutes (unless specifically requested by the chairperson). He explained that SPC meetings are conducted according to Robert’s Rules of Order, and listed some of the salient points from this set of rules. Filippelli, noting that English was not the first language for most meeting participants, asked everyone to speak slowly and clearly, and to make their point in as few words as possible.

**1.6.2. Conflict-of-interest policy and statements**

Gabriel Filippelli reviewed the conflict-of-interest procedures for the meeting. He stated that potential conflicts should be declared before the committee discusses scheduling. He added institutional conflict is normally not taken as a conflict.

Name	Declaration	Ruling by Filippelli
Blackman	Institutional conflict	Not conflicted
Feary	Institutional conflict (ongoing NRC Ocean Drilling Review)	Not conflicted
Früh-Green	Proponent; 758-Full2  Participant in planning for Hess Deep	Conflicted for MSP scheduling discussion Not conflicted
John	Proponent; 758-Full2	Conflicted for MSP scheduling discussion
Ohkouchi	Proponent; 745-CPP Institutional	Conflicted for scheduling Not conflicted

Li	Proponent of a SSEP proposal (735-Full)	Not conflicted
Umino	Proponent; 552	Conflicted for scheduling discussion
Malone	Institutional conflict (TAMU)	Not conflicted
Malinverno	Proponent; 659	Conflicted for scheduling discussion
Mével	Institutional conflict	Not conflicted
Murray	Participant in Exp.329	Conflicted for scheduling discussion
Maekawa	Proponent; 505	Conflicted for scheduling discussion
Neal	Proponent ; 548	Conflicted for MSP scheduling discussion
Screaton	Proponent;555 and 603	Conflicted for scheduling discussion

## 2. Agency reports

### 2.1. MEXT (Japan)

MEXT report is provided in the agenda book. No MEXT representative attended this meeting.

### 2.2. NSF (U.S.)

Jamie Allan noted that this program made tremendous progress last year in designing a new, optimized program structure. Funding approval for a new program in the US depends not only in having a good science plan, but also depends on strong science community endorsement and backing.

Ian Ridley said that NSF has supported the scientific drilling in the oceans through DSP, ODP and IODP, but that program renewal is never guaranteed, irrespective of the past program accomplishments. These are particularly difficult fiscal times at NSF with new programs in ocean science, and other programs within NSF, competing with scientific ocean drilling for funding. The drilling program finds itself in a highly competitive environment and every resource needs to be utilized in presenting the US scientific drilling program renewal package to the National Science Board (NSB). ODP at NSF is particularly impressed by the quality of the new science plan for ocean research drilling and the dedication of many members of the science community in producing the new plan. However, this document is only one part of the program that will be examined by NSB, continued scientific relevance and community support being another critical part.

Ben Van der Pluijm asked what the role of NSF is, and what NSF's commitment regarding the budget for this program. Allan replied that NSF/OCE fought hard for the current funds.

Funding in FY10 was slightly increased over FY09 (independent of stimulus funds), with FY11 and FY12 likely having only minor increases in funding. FY12 funding is probably adequate to support the envisioned schedule. FY13 funding could be tight.

### **2.3. EMA (ECORD)**

Catherine Mével reported that ECORD would be able to implement only one MSP by the end of the program. It is not due to short funding but structural problems, namely ECORD does not have enough funds for POC. ECORD is also investigating the possibility of implementing one additional cheaper expedition. She introduced joint IODP-ICDP booth at EGU in Vienna, three summer school programs held in 2010, MAGELLAN program to support workshops to facilitate development of drilling proposals, “Deep Sea and Sub Seafloor Frontier” workshop with the next EDP meeting, three new lecturers selected for “ECORD Distinguished Lecturer”, Dominique Weiss, Helmut Weissert and Kai-Uwe Hinrichs. ECORD council is actively involved in preparing for the next IODP program and there will be meetings for it. Mével asked European SPC members to help lobbying in each country.

Ben van der Pluijm asked if there was any consistent financial support for IODP in Europe. Mével replied that ECORD was paying a lot as SOC. Filippelli asked why SOC and POC issues were not on table earlier. Mével replied that it was due to the higher operational costs than expected. She found the European committees pay only for specific projects, not broad themes. ECORD is now investigating more efficient way to get funded.

Mével stated that ECORD was looking for a different co-funding mechanism in the next phase. Larsen said that the current mechanism would be not a viable model considering economy power level of Europe. Filippelli suggested that a well-crafted consensus statement could help. Neal proposed a factsheet to show what IODP does and what IODP does not because of funding problem. He believed that consensus statement would not be enough.

Gabriel Filippelli wondered if overhead cost would be unavoidable. Allan replied that there has been strong effort to reduce overhead. IODP-MI decreased the budget by over \$1M a year. USIO decreased personnel to less than 100 FTE's. NFS is trying to minimize the cost and maximize the operation.

Filippelli noted that the discussion was now verging on the SASEC responsibilities. This funding discussion would continue in executive session.

### **2.4. MOST (China)**

Shouting Tuo reported IODP-related activities in China. He introduced 7 Chinese participants in 2009-2010 IODP expeditions, 4 participants in future expeditions and 2 proposals. Two proposals, 638-Full and 735-Pre, were submitted by Chinese lead proponents. NNFC (National Natural Science Foundation of China) funded \$22M for the survey of South China

Sea basin evolution, sediment response and deep biosphere. He explained a surge of interests and popularity in deep-sea research in China, referring to the 1st Deep Sea Research Meeting 27-30 June 2010 and an article from Nature "China outlines deep-sea ambitions". He introduced Chinese ocean drilling vessel. He mentioned the possibility of becoming a full member of post 2013 program.

Gabriel Filippelli found it very encouraging to know that China is thinking of becoming a full member.

Ben van der Pluijm asked for the information on the capabilities and functions of the Chinese vessel. Tuo answered that the vessel's size is like JR and planned as riserless drilling ship. The vessel is half for industry and half for science, and might be a Chinese contribution to the post-2013 program.

Hans Christian Larsen commented that Chinese ocean community was not so big compared to the continental group. He asked if Chinese ocean community is now growing. Tuo replied that it was growing and the fund was also growing.

Larsen asked if industry was involved in designing the ship. Tuo replied that they were not involved yet.

## **2.5. KIGAM (Korea)**

Se Won Chang reported on the current status of K-IODP. K-IODP project is funded by Ministry of Land, Transport and Maritime Affairs (MLTM) and submitted the new 7 years proposal to MLTM. The proposal was approved by MLTM and Ministry of Planning & Finance. K-IODP sent the 5 shipboard scientists and 3 onboard scientists in 2009 and 1 shipboard scientist in 2010. 2 Korean scientists will be on board for Exp. 329 and 2 Koreans applied to Exp. 333. K-IODP opened K-IODP summer school in 2009 and more than 20 students attended the summer school in 2009 and in 2010 as well. K-IODP supports students to attend IODP-related summer schools. K-IODP and J-DESC are in preparation of APL to #605-full4 and will submit it by October 1. K-IODP and J-DESC will have JKOD workshop in Okinawa for preparation of new Okinawa Trough Drilling Proposal from 10-12 October in this year.

Barbara John asked what was the topic in the summer school. Chang replied that it was on Paleoclimate.

Chris Hollis asked if K-IODP got funded through to 2017. Chang replied yes. 7 years project for next phase was approved. Hollis asked if the budget would increase to the membership level. Chang replied no.

Hiroshi Kawamura asked if there was any activity concerning the new science plan. Chang replied that K-IODP was planning to have a meeting this year to discuss IODP activities.

## 2.6. ANZIC (ANZIC)

Chris Hollis introduced Geoff Garrett the new chairman of ANZIC governing council, Richard Arculus and Peter Barrett who are the ANZIC members of SPWC, Chris Yeats the member of IWG+ drafting group. He listed IODP expeditions that ANZIC was involved in. He reported on Australian Earth Sciences Convention & SW Pacific IODP Workshop. In IODP workshop, 7 potential proposals were discussed and two proposals to be developed as pre-proposals. He also listed the future and current proposals from ANZIC. ANZIC welcomes the decision to bring JR to the Indian Ocean in 2012-13, given the highly ranked proposals in the area.

ANZIC's stance on the new program's name is; 1) ANZIC does not support a major change because the existing name is relatively new and is only now becoming widely known. 2) ANZIC prefers no change or minor change (e.g. International Scientific Ocean Drilling Program in line with ICDP) 3) A major change should be only be considered when a major transformative change is made to the program.

## 2.7. MoES (India)

Ashok Singhvi introduced Indian participations and proposals. He summarized IODP related activities and programs in India. IODP booth at AOGS-Hyderabad (July 2010) offered information on IODP-India and IODP-MI. He presented Indian IODP science plan, drilling themes in the northern Indian Ocean, and drilling proposal to be submitted 1st Oct 2010. He summarized potential target for India; Andaman Sea Barren island, Carlsberg, Rodriguez triple junction, Afanasy Nikitin Sea mount , Laxmi ridge, Chagos-Laccadive ridge. He presented the proposed drilling locations on a map.

Ministry of earth science India invites SPC/PMO meeting in Goa during 2011-2012

## 3. Implementing Organization (IO) reports (see written reports)

### 3.1. CDEX

Nobu Eguchi reported on the operations of recently implemented and upcoming expeditions.

[NanTroSEIZE stage3] – Plate boundary deep riser-1 (expedition 326, 15 July – 20 Aug)

[Deep hot biosphere 1] – subseafloor biosphere in a deep-sea hydrothermal system in mid Okinawa Trough (expedition 331, 1 Sep.-3Oct.)

[NanTroSEIZE stage2] – Riseless observatory & subduction inputs & heat flow & NanTroSLIDE (expedition 332&333, 25 Oct – 1- Jan)

[Deep coalbed biosphere off Shimokita] (expedition 337).

Eguchi explained CDEX's effort not to repeat the accident of losing a riser pipe due to high current. The countermeasures are; 1) Current behavior simulation, 2) In situ current measurement, 3) Real-time VIV monitoring system, 4) Modification on riser pipes and 5)ROV cursor update.

Jamie Allan asked for clarification on industrial coring. Eguchi replied that industrial coring is spot coring not wireline coring.

Clive Neal asked about the viability of Exp. 337 measurement plan. Eguchi replied that the plan would be submitted by Feb 2012.

Hans Christian Larsen reminded Eguchi that scientific prospectus has to be ready 2 months prior to the beginning of Exp. Filippelli commented that community raised concerns of delay in prospectus. Eguchi replied that CDEX was also concerned about the schedule, but budgetary issue had to be solved. Filippelli appreciated whatever CDEX does to remedy this situation. Delay makes the chance of scientific review and response narrower. Sreaton reinforced this issue from USAC perspective. USAC has a lot of difficulty in staffing without a prospectus. This is not only CDEX issue. Staffing without detailed information is a very critical issue. Eguchi asked SPC for co-chief nomination for NanTroSEIZE deep riser holes operation. Filippelli asked for co-chief list from past.

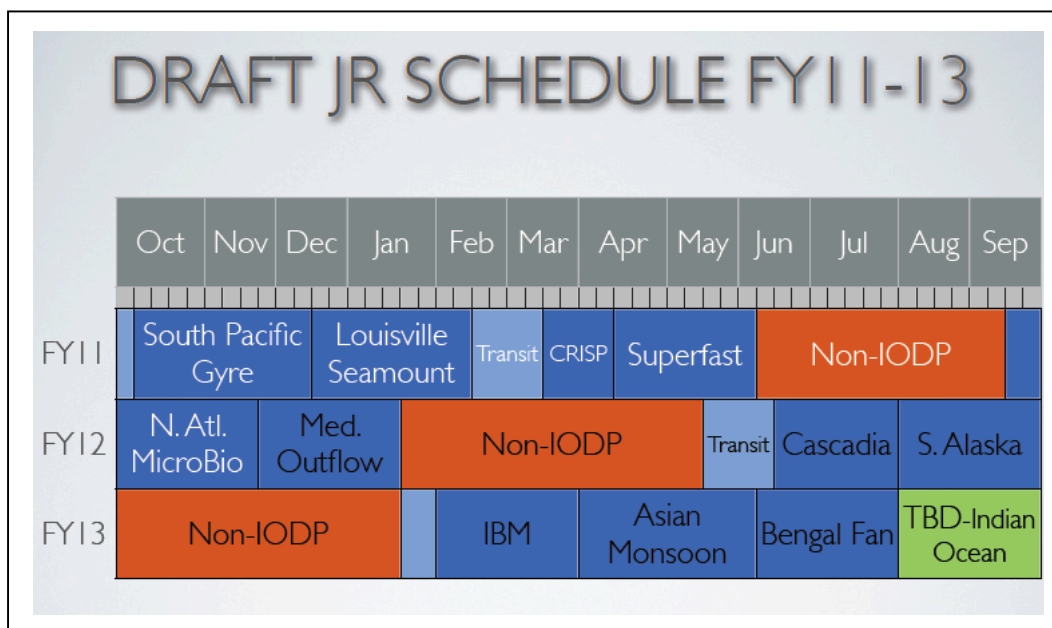
Ruediger Stein asked if there was any plan to come back to Okinawa in near future within IODP. Filippelli explained the background that objectives of Okinawa Biosphere would not be fully achieved in upcoming expedition due to the time limit. Murray asked why the objectives would not be achieved. Eguchi replied that it was because of the combination of time and funding. Currently there was no plan to go back and achieve the objectives. Okinawa is an alternate operation for NanTroSEIZE.

### 3.2. USIO

David Divins introduced FY10 JOIDES Resolution (JR) schedule. JR had Transit and Maintenance (T&M) period from 9 March to July 2010. The T&M projects included; 1) Placing a protective barrier between the mission-specific van mezzanine and the moon pool. 2) Reorganizing core description area to improve ergonomics and configuration. 3) Reorganizing hold deck refrigerated space. 4) Replacing cooling system in cold lab in preparation for intensive microbiology work. 5.) Remodeling the thin section laboratory. 6) Repairing the analytical gas line system.

A team of 8 scientists assessed how the new laboratory and data handling systems are functioning and where improvement is still needed in Vitoria BC, Canada on 27-29 June. Juan de Fuca hydrogeology expedition (5 July-5 September) started. He explained the details of the operation for each hole. Cascadia A-Cork Observatory (APL734) is coming soon (5-19 Sept). The objectives are 1) New permanent advanced CORK to be installed at ODP site 889, 2) ACORK configuration will facilitate pressure monitoring at multiple formation levels on the outside of 10 ¾ inch casing string. After Cascadia CORK, transit time is 20 days (19Sept – 9 Oct.)

David Divins continued to JR FY11 schedule. FY11 has South Pacific Gyre (9 Oct. – 13 Dec.) ,Louisville Seamount (13 Dec. to 12 Feb.), Transit (12 Feb. – 15Mar.), CRISP (15 Mar. – 14 Apr.), Superfast (14 Apr. – 4 Jun.), Non-IODP (4 Jun. – 17 Sept.) and Mid-Atlantic Mbio (17 Sept. – 20 Nov.). He continued further to the tentative FY12 and FY13 schedule.



Divins

summarized USIO port call activities. The port call was held in Victoria, Canada in September 2010, including ship tours, press conference, presentations to VIPs and public lecture. As the outreach and education activities, 6 outreach specialists joined in Juan de Fuca 327 expedition. Onboard video-conference was held during the expedition. School of Rock 2010 has 15 participants for two week research experience in Cascaia CORK expedition. USA science and engineering festival will be held on 23 October 2010. Video-conference is scheduled between South Pacific Gyre expedition and *Drilling Engineering Association* (DEA) booth. New IODP DVD (20-30min) is released. If want it, email Divins.

Richard Murray asked where the Superfast 2 week extension request came from and went to. Divins replied that it was from co-chief to OTF and SASEC. Larsen added that it was SASEC’s decision.

Filippelli asked where non-IODP activity in FY11 would be. Divins replied that it would be working with Chevron JIP group to do coring in Gulf of Mexico. USIO has no option for FY 11 and JR would be tightened up.

Signhvi commented on the tentative schedule for Bay of Bengal Expedition and that the weather in Bay of Bengal in June and July is not good for operation.

van der Pluijm noted that FY13 schedule shown in Dvins’s presentation looked already solid. Filippelli explained that FY13 was still open. Otherwise, IODP could not encourage people to submit proposals to the program that has no place for them and will end soon.

Filippelli commented that outreach activities for last 2 years were great. Divins concurred and said that NRC was impressed as well. USIO is trying to have at least 1 or 2 E&O specialists on each exp. Malone commented that USIO learned the limit of onboard E&O activities. Torres suggested that E&O activities need a serious assessment on their impact.

Hollis asked how international the E&O participation was and if there was any chance for local educators to get involved. Divins replied that currently national funding pays for national people. USIO is open for discussion. Hollis asked if there was any guideline. Divins replied that currently there was no guideline, but USIO would work on it.

### 3.3. ESO

David McInroy introduced equipment on Greatship Maya's drill floor. He explained the operations in Expedition 325 Great Barrier Reef environmental change (GBR). The preliminary scientific assessments showed that the expedition would fulfill the following objectives; 1) Establish the course of postglacial sea level change in the GBR, 2) Define sea-surface temperature variations for the region over the period 20–10 ka, 3) Analyze the impact of sea level changes on reef growth and geometry.

Additional scientific outcomes from Expedition 325 include information on new sea level and paleoclimate in LGM (MIS2), pre-LGM (MIS3), and several earlier Pleistocene periods, and also include a high-resolution record to complement the sea level and paleoclimate records derived from the reef cores collecting on the shelf edge. He added the schedule of preliminary report (online), editorial meeting (7-11 Dec.) and ORTF (Feb or March 2011).

McInroy explained about the future MSP plans. There are three candidates (proposal 548, 716, 581) for the only one slot before the end of the program. ESO is organizing scoping meetings with proponents for all three expeditions. ESO will also consider new proposals that are ranked and forwarded to OTF for scheduling.

David Feary asked about the status of logging operation for GBR. McInroy replied that logging was done.

Hugh Jenkyns asked if recovery was improved through the expedition. McInroy replied that recovery improved toward the end due to improved current and weather conditions. Alberto Malinverno asked if void space was calculated in the recovery rates. McInroy replied it was not. Singhvi asked if 30% recovery compromised the sea level objective. McInroy replied no.

Stein asked how much funds were used for scoping of 3 proposals and how much would be done later. He suggested that some scoping should be deferred until SPC makes prioritization. McInroy replied that ESO tried to get as much info as possible for March. Larsen informed that OTF asked for scoping of Hawaii and Chicxulub. Katz added that EPSP had no issue with Hawaii and Chicxulub. Ohkouchi asked if British Petroleum oil spill in Gulf of Mexico could have negative effect to the Coralgall banks. McInroy replied that it could.

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

### 4.1 General report

Hans Christian Larsen introduced new IODP-MI organizational structure. He explained that IODP-MI went through consolidation of two office to one office in Tokyo.

Hiroshi Kawamura summarized 2<sup>nd</sup> IODP-MI triennium review. The items discussed in the review are; 1) Science – a) Effectiveness of the IODP science planning process, b) SAS functionality, c) Relationships between the SAS, IODP-MI and the IOs, d) Evaluation and ranking of IODP proposals in terms of addressing IODP scientific goals, 2) Technology - a)



Effectiveness of SAS service panels, b) Integration of Implementing Organizations, 3) SAS in the future – a) Analysis of SAS activities within the context of current financial, legal, logistical, technical, and operational realities, b) Help focus discussion for post-2013 scientific drilling. Triennium report was submitted to NSF and copy to MEXT on this July. The final report is available at <http://www.iodp.org/triennium-review>.

Kawamura reported the statistics of submissions for 1 April 2010 deadline (14) and of active proposals in the system (103). He showed the breakdown data by ISP theme, proponent country, SAS stage. He informed on workshop schedule; “Reaching the mantle Frontier: Moho and Beyond” on 9-11 September in Washington D.C. He introduced new people in IODP-MI, Muyuki Otomo (Outreach), Michko Yamamoto (SAS) and Dannali Harris (Contact accountant).

Murray noted that slide 19 (proposal status by SAS stage) would be helpful during later discussion about what to do with the proposals for new program. He expressed surprise at many proposals in OTF stage. Filippelli explained that the proposals in OTF were already scheduled or would be scheduled.

Filippelli asked if 10/1 is the last call. Kawamura replied yes. Filippelli noted that IODP would have to make the community understand that the 10/1 is not the final chance but it continues to the new structure. Ohkouchi stated that many proponents were anxious about what would happen to their proposals after 2013. He stressed that IODP must explain to them.

## **4.2. FY11/12 engineering development**

### **4.2.1. IODP-MI recommendations**

Issa Kagaya reported FY10 engineering project status. SCIMPI (Simple Cabled Instrument for Measuring Parameters In-situ) moved to design phase and pressure housings are under production. MDHDS (Motion Decoupled Hydraulic Delivery System) is now in the final year of development for system design and fabrication. New projects, MMM (Multi-sensor Magnetometer Module logging tool) and DSS (Drilling Sensor Sub) are operated by USIO. Ultra Deepwater Drilling Scoping Study had workshops, 30 June 2010 Kanazawa and 9-11 September 2010 Washington DC.

Kagaya summarized FY11 engineering plan with SCIMPI, MMM and DSS. SCIMPI will start onboard test at ODP site 1245 after land test, data calibration QA/QC test and manual execution. MMM will complete tool delivery, modifications, and third party tool certification. DSS moves to lab rig test.

Kagaya introduced FY12 new SOC engineering project, EDP-2012-01B : Wireline Hydraulic Testing and Borehole Imaging Tool for Stress Measurements. This \$617k project is aiming to develop a tool to combine several approaches to in-situ stress measurement.

Filippelli asked if there was any FY11 engineering development proposal to discuss. Kagaya replied no and added that SCIMPI proponents were looking for a chance to test SCIMPI in

transit in 2011.

## **5. SASEC report (items other than renewal efforts)**

Filippelli reported on SASEC meeting 14-15 June 2010 Kyoto, which he attended as a non-voting member. In the meeting, SASEC decided to request to NSF for extending drilling at SuperFast by ~2 weeks and the request was approved.

SASEC asked SPC to develop a plan for reviewing the active proposals within SAS and identifying high priority proposals with respect to the current and new science plan. The proposals with high priority will be considered for the first phase of scientific ocean drilling in the new program. SPC should engage SSEP in this review process during their November 2010 meeting. SASEC likes to review the results of this proposal transition process at their January 2011 meeting.

A subcommittee will draft terms of references of new SAS committee/panel with guidance from IWG+ and the Second Triennium Review Committee.

SASEC endorses development of a Joint Program Planning Group focused on increasing scientific understanding of the role of past climates in influencing hominid evolution.

Even with the transit penalties in going to the Indian Ocean, SASEC strongly endorses the inclusion of drilling of Proposals 605-Full2 Asian Monsoon and 552-Full3 Bengal Fan before the end of the program. These address high priority scientific objectives of the Initial Science Plan (ISP) and important societal problems.

Filippelli summarized the background of Superfast extension issue. Allan added that the two week extension request was endorsed by SASEC, then IODP-MI, USIO, and then by NSF, MEXT. Filippelli explained how the request came up; the co-chiefs were concerned about meeting the minimum objectives of their expedition on superfast, and they discussed on their concern with OTF through Hans Christian Larsen who explored the concept of being able to gain a little bit extra time on this expedition. Because the project already began there, it had to be consulted with SASEC and they approved this additional time. It seemed reasonable to him and he didn't voice concern in the SASEC meeting. However was open to discussing whether this was truly a unique situation, or whether SPC might want to advise OTF on how to proceed should this situation arise again.

Donna Blackman believed that the scientific objectives SPC approved have not changed. In that sense, she thought that SPC would have ended up at the same conclusion.

Feary voiced concern that this might be a new way for co-chiefs to interact further. This could allow every co-chief to lobby for additional time or to resist to APL. Murray agreed with Feary. It seems a backdoor in the process. He understood that there was no impact to other science, but perhaps, either of two week time or money would be better invested in other opportunities. Früh-Green commented that SPC should remember of this proposal's history that their operation time was cut into a half. When SPC was discussing on this reduced-time plan, SPC already expected this problem and expected extra time if it's

allowed. She stressed that this case was a special case and cannot apply to others. Larsen concurred with Früh-Green. Filippelli asked if extra budget put in this extra time. Allan replied that NSF was careful stay out of this until SAS endorsed it. Two more weeks here means two weeks less sometime in the future. Divins agreed with Allan that the extension means that something may have to be sacrificed later and nobody knows what that is. He cautioned to be careful in that decision.

Blackman remembered that the proposal seemed to be reasonable for them to spend 4 weeks in the last March meeting. However, now they lack time, which means that the information at that time was not enough. What this panel needs in the future is more information from PI and IOs. Marta commented there should be guidelines to explain how this type of flexibility is allowed.

Barry Katz recommended that there needs to be a clear statement on why this happened and what should happen to avoid future problem.

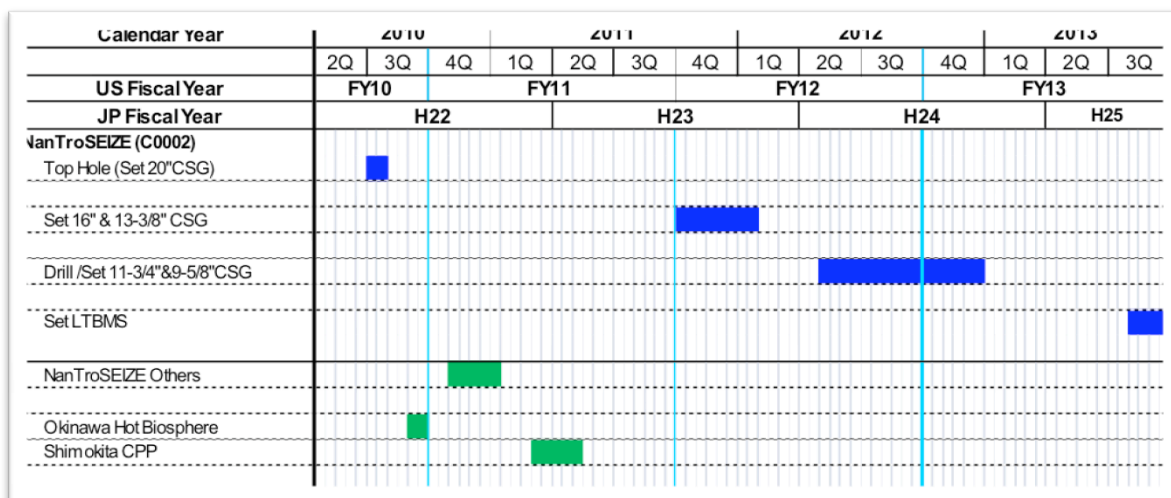
van der Pluijm questioned how the COI was handled in this case in SASEC. He noticed that both Superfast co-chiefs appeared as members of SASEC. This fact might be disturbing to the community. He added that it could have easily happened that the co-chiefs of Costa Rica Sesimogenic Zone Project (CRISP) asked for two more weeks. Larsen added that Benoit Ildfonse was alternate for Teagle. van der Pluijm commented that it looked more suspicious. This kind of problem should be avoided.

Filippelli raised his concern about tension between co-chiefs of APL and expedition. He noted that IODP has to make sure that APL co-chiefs understand that they are stand alone, and the APL will be implemented. Malone commented that tension is not before but during expedition. Murray asked if SPC can anything to help. Malone replied that IOs made suggestion to OTF that co-chiefs should be included in discussions as early as possible, so that they can be involved in early planning phase to manage better.

## **6. OTF Report:**

Hans Christian Larsen reported on Operations Task Force (OTF) meeting held on 28th Aug. 2010. He presented a map with location of each expedition (exp.301-325). He introduced JR long range plan for FY12-13, MSP plan for FY11-13, Chikyu plan for FY11-13. He continued to expedition schedule up through Nov 2011. JR will be working for Jun de Fuca, Cascadia ACORK, South Pacific Gyre, Louisville Seamount, CRISP, Superfast, Non-IODP, Mid-Atlantic Microbiology in FY10 and FY11. If costs for Cascadia prove excessive, an alternate option needs to be selected from Atlantic, Lesser Antilles and Hess Deep.

CHIKYU proposed drilling schedules (FY11-13)



Larsen explained the ESO situation that there would be only one MSP before the end of the program. ESO is now exploring the use of sea-bed rock drills, including developing logging capability for Hawaii and Coralgal Banks. The scoping meetings are scheduled for Chicxulub, Hawaii and Coralgal Banks. Larsen showed the planned progress in the drilling depth of Chikyu NanTroSEIZE in 2011-2013 (3300msbf for 2011, 4700msbf for 2012, 6200msbf for 2013). JR FY12 schedule has 4 options and FY13 has 5.

Mével noted that Chikyu would not be able to go through the plate boundary and it was deferred to the next phase. She asked what the consequence of the delay in NanTroSEIZE would be. Larsen replied that it would depend on the new program. This project still has priority in the new program.

Blackman appreciated that reaching the plate boundary is a high priority in the new program, but was concerned that it might convey a message that one of the first activities for Chikyu in the new program is again in Japanese waters. Being operated in Japanese waters is not a problem, however she thought that there would need to be a message to tell

community that Chikyu is a global resource and it is also going to other parts of the globe. Takeshi Kakegawa commented that Chikyu could go anywhere only if there is a good

proposal for it. Larsen noted that Jamstec was doing site survey in east pacific for Moho drilling and it is the only place where Mohole is discussed. So, the problem is that Chikyu is needed off Japan where it has the best chance for PB drilling.

## 7. SAS panel reports

### 7.1. SSEP

Marta Torres introduced the members of SSEP meeting on 18-21 May 2010, Kochi Japan. The SSEP reviewed 7 proposals (748-Full2, 754-Full2, 766-APL 758-Full2, 769-APL, 770-Full, 772-APL) for seafloor processes and deep biosphere and 7 proposals (737-Full2, 751-Full, 758-Full2, 768-Full2, 765-Pre, 767-Pre, 768-APL, 771-Full) for solid earth/petrology and paleoclimate/oceanography. The result of the review was; 1 Full to SPC, 1 CPP to SPC, 1 to external review, 5 to revise to full, 4 to revise APL, 2 pre to deactivate.

Torres reported on how SSEP worked on the first CPP review (745-CPP). What worked well are 1) watchdog assignment, 2.)Dedication and commitment of WDs, 3) Overall commitment to uphold the SSEP principles, 4) speedy establishment of a message board, 5) no big delay in making decision due to time zone difference. Things to be improved are 1) Designation of an IODP-MI point contact, 2) Greater recognition of the flexibility required for interpretation of IODP-MI rules, 3) More explicit note to WDs that they are on the verge of being involved in time-sensitive work, 4) Involvement of the remainder of the SSEP members.

Torres presented SSEP consensus 1005-3,4,and 5. The consensus 1005-5 was a request to SPC.

**SSEP Consensus 1005-5:** The SSEP asks SPC to provide stipulations regarding an appeal process regarding issues concerning SSEP decisions for proponents of proposals to be discussed and produced during the next meeting of SPC.

Murray asked if the consensus 1005-5 came from a particular proposal and the subject was about science or COI. He noted, if SPC decides to respond the request, SPC needs to set a bar for it, otherwise, everybody appeals everything. Torres replied that it was about the procedure of how SSEP reached the decision. SSEP people could not understand what happened after their review because complaints came to SPC, not to SSEP. Some panel members were extremely disturbed and unhappy about it. There should be an appeal mechanism for SSEP decisions. Proponents would complain in different way without it.

van der Pluijm didn't like to adopt the consensus 1005-5, because SPC will be dissolved soon and discussion will be meaningless next year anyway. Marta replied that it could be a good timing because the new system would have new rules of engagement. It could also have a new mechanism in which proponents can express their unhappiness about panel decisions. SSEP expects this suggestion to be considered for the next phase, not for right now. Murray suggested "receiving". He thought that SPC should respect this significant discussion in SSEP and should receive it.

Junzo Kasahara asked why this consensus came up now. Torres replied that it might be nature of the communication..

Filippelli hesitated to make a policy based on an exception. He recommended suggesting to IWG+ to consider how they might want to develop a process for such exceptional cases.

van der Pluijm pointed that it has already been received, but accepting is different. Filippelli asked Mével if IWG+ could still act on such stipulation request from SPC. Mével replied yes. Larsen commented that this problem is not trivial, because appealing for scientific judgment is very difficult.

van der Pluijm suggested rejecting the consensus statement. Murray suggested having discussion when SPC discusses on Terms of Reference for the new SAS panel/committee. Shinghvi commented that it is not good to postpone this to future. SSEP should be the appeal board and SPC will receive outcome from SSEP.

**Tuesday**

**31 August 2010**

**09:00-17:30**

### **7.1. SSEP (continued)**

Filippelli suggested that SPC would decline this particular consensus statement, but necessitate some response to the committee. He liked to hear a motion about how SPC should respond to this particular consensus statement.

**SPC Consensus 1008-03:** The SPC recognizes the spirit of SSEP consensus statement 1005-5, but, given the upcoming changes in science advisory structure, declines the statement at this time.

### **7.2. SSP**

Jin-Oh Park provided SSP review results from the last SSP meeting in Brest, France, 26-28 July 2010. The panel reviewed 17 proposals (12 Full, 5 APL), which breakdown by stage is 6 in OTF, 2 in SPC and 4 in SSEP. OTF proposals are; 633-Full2 (1Aa, 1Bb), 637-Full2 (2Cb, 2Cc), 644-Full2 (1Bb, 2Cb), 681-Full2 (1Aa, 1Ba, 1Bb), 705-Full2 (1Aa, 1Ab), 732-Full2 (1Ba, 1Bb, 1Bd), 763-APL (2Cd). SPC proposals are 672-Full3 (1Ba), 748-Full2 (1Aa, 1Ab, 1Bb, 1Ca, 1Cb).

Park explained about the SSP consensus statement and its background. SSP panels discussed and reached the consensus statement to appeal SSP's value and need in the new SAS structure.

**SSP consensus statement:** The Site Survey Panel urges that the new Science Advisory Structure has within its mandate the assessment of the scientific readiness and appropriateness of all proposed drilling sites, by highlighting site survey data inadequacies and ensuring submission of relevant data to a readily accessible database.

Filippelli pointed that 637-Full2 (New England Shelf Hydrogeology) is in holding bin, not in

OTF yet, and 681-Full2 (Lesser Antilles Volcanic Landslides) was released from holding bin the day before.

Filippelli expressed surprise at the lack of readiness of 644-Full2 (Mediterranean Outflow), despite it is already in the FY11 schedule. Park commented that the low ranking was given to only one site. Kawamura informed that the proponents would submit new better data for next review. Früh-Green wondered that it would be too late for the game. Philippelli believed they already had excellent data but they haven't submitted yet. Stein commented that the proponents have not reacted to the advice from SSP. That's why the review 1Ba has never changed since 2007. Philippelli noted that SPC should know which site it is and how that affects to their scientific objectives.

Filippelli found 763-APL (Iberian Margin Paleoclimate) is associated with 644-Full2 (Mediterranean Outflow) and also already in FY11 schedule. Jenkyns referred email from the proponents, which indicated that preparations are moving forward. Malone pointed 763-APL site is very close to the low ranking site of 644-Full2. Philippelli asked if they were the same site. Hugh replied that they might be different sites. Philippelli wondered why the 644-Full2 site was downgraded. Kawamura found the two sites are different. Larry said they are actually very close. Philippelli asked Park, Stein and Kawamura to meet in the next break to discuss this issue and report back to SPC.

Stein commented that he was impressed with how detailed the panel went to and he recommended that the new SAS should also have this type of expertise.

Murray asked Park and Stein if 672-Full3 (Baltic Sea Basin Paleoenvironment) had enough nurturing. The proposal has strong science, but the proponents are new in IODP and not ready for a lot of works they were required. Stein replied that he would meet some of the proponents next week and carry the message to them.

Hollis asked if SPC needed to respond to the consensus statement. Park replied that it is only FYI for SPC and it has already sent to IODP-MI and SASEC. Larsen ensured that IODP-MI took this consensus statement very seriously.

Filippelli informed SPC that Nao Ohkouchi was out during the morning, giving a presentation at the ICP meeting, but will return in the afternoon.

### **7.3. EPSP**

Barry Katz provided the summary of EPSP activities since March 2010 SPC meeting. EPSP meeting was held at CDEX in Yokohama and reviewed 745-CPP, 601-Full3 and 705-Pre2. He introduced the features of the proposed operation of 745-CPP. He noted that with 601-Full3, EPSP changed philosophy from attempting "do no harm" to "minimal impact", and approved the eleven requested sites. EPSP discussed on feasibility of 705-Pre (Santa Barbara Basin Climate Change) and reconfirmed that considerable distance exists between what the panel may be comfortable with and what the proponents of drilling proposal envision. He summarized post-meeting E-reviews on Exp 327, 328, 329, 330, 331 and 2010 NanTroSEIZE which are all approved.

#### 7.4. STP

Clive Neal summarized STP meeting held in Geneva, 5-7 Aug.2010. The meeting produced 28 consensus statements and 12 action items including IODP Depth Scale Document, Role of STP in the New SAS, STP Roadmap, Microbiology Issues, and Preservation of Cutting materials. He picked up the related 7 consensus statements to present; [consensus 1008-1] IODP Depth Scale Document, [Consensus 1008-2] Role of STP in the new SAS, [Consensus 1008-05] CDEX Data Error Report, [Consensus-09] Approval of measurement plan for IODP Exp. 329, and [Consensus 1008-12] Inclusion of the Scientific Technology Roadmap as Appendix to the new Science Plan. (See Appendix A)

Neal introduced a curator's question as to whether the Kochi core repository can throw out cores that have not been requested for the last 20 years. STP's answer was no. Allan stressed that DSDP and ODP cores are the property of the NSF and are on loan to IODP for international community use. Any potential change in the curation of these cores must be discussed with NSF before implementation.

Murray declared that he was a participant of Exp.329. Filippelli stated that he was not conflicted.

Kasahara asked how depth scale to be united. Neal replied that it would be simplified.

#### 7.5. EDP

Bill Ussler presented the EDP consensus statement from the last meeting. The SPC-related statements are: [consensus 1007-04] Unfinished EDP Business, [consensus 1007-05] Offer of an Engineering Contribution to the SPWC for Inclusion in the New Science Plan, [consensus 1007-01] Technical Review of Draft Science Plan, [consensus 1007-06, 07, 08] Preliminary EDP Response to SAS Transition Questions Posed by the SPC Chair, [consensus 1007-09] Critical Importance of Engineering Development for Achieving Scientific Drilling Goals, [consensus 1007-10] Sustained Funding and the Potential for Expanded Collaboration and Partnerships for Support of Engineering Development, [consensus 1007-23] IODP-MI Allocation of at-sea Engineering Testing Time to Active Engineering Development Projects. (See Appendix B) He suggested a new SAS logo, PEP-SEA.

Murray asked when is the best timing for EDP to look at proposals. Ussler replied that the time when proposal firstly comes in is the best. He suggested that three members in Proposal Evaluation Panel should be engineering specialists and those should go to other panels or talk to IOs. Torres commented that SSEP only evaluates science but should include engineering. Integrated approach suggested by Ussler would be a good idea. Allan commented that IODP learned technology awareness is important. Ussler suggested including some of engineers in STP. Torres noted that EDP's strong point is they are looking at both of future and current needs, because tech development takes longtime.

<p><b>SPC Consensus 1008-04:</b> The SPC endorses all consensus statements forwarded to it by the</p>
---



Engineering Development Panel (EDP) (EDP Consensus Statements 1007-04, -05, -06, -07, -08, -09, -10 and -23) for this meeting.

## 8. Executive Session

No minutes were recorded during Executive Session.

## 9. Report on International Working Group *Plus* (IWG+)

Catharine Mével provided an update from IWG+. The last meeting was held in Kyoto, June 2010 and next meeting will be in Miami, January 2011. The IWG+'s decisions were; 1) The POC/SOC distinction will be abolished, 2) Platform providers will cover all costs associated with operating their platforms, 3) Commingled funds will be maintained to support integrative activities and contribute to Chikyu operations, 4) Three member categories : Lead Agencies, Platform Providers, Members, 5) IODP-MI will continue as CMO through the transition to the new program(till 2016), NSF will remain the banker, but after 2016, all will be open, 6) SSEP-SPC-SASEC relation will be simplified into 2 panels, 7) EPSP will continue and other service panels still under debate.

Mével explained what actions IWG+ took and will take for the SAS transition; 1) new SAS structure will be emplaced by mid-2011, 2) The current SAS will be progressively disbanded, 3) The last SASEC meeting will be June 2011, 4) SASEC/IODP-MI have been tasked by IWG+ to fine-tune the details of the future SAS panels and their Terms of Reference as well as the fate of existing proposals, 5) Letter sent out to the community by the SASEC chair to explain the progress, 6) SASEC is tasked with a plan to deal with existing proposals and asked SPC and SSEP for input.

Filippelli commented that, in the current system, SASEC oversees SPC and it is also an executive authority. But, in the new system, Program Governing Board (PGB) is completely separated from any kind of science assessment. Allan commented that scientists in the SAS are not directly involved in the governance of the current program. SASEC functions as the executive authority of the SAS, not the program. Filippelli was confused because the current SASEC also consists of scientists. Neal expressed his confusion that the panel system changes from 3 to 2 tiers and he thought SEA is the executive authority, but now PGB is defined as the executive authority. Mével noted that SASEC actually doesn't have a role now. This is frustrating funding agencies. Neal saw it as taking SASEC out and putting funding agencies instead. Murray understood that SAS works only for scientific advisory and the top of SAS will be SEA and PGB is not in SAS.

Larsen noted that CMO constituted SAS and final decision is made by PGB. Murray asked what the executive aspect of SEA. Mével explained that SEA does what both SASEC and SPC do now does and their decision needs approval from funding agencies. Neal pointed that

the responsibilities are not clear. Mével replied that it was still under discussion. IWG+ will give SPC a better explanation of the new structure in the next meeting.

van der Pluijm asked if SASEC decides which proposals go where. Mével replied no, SASEC was asking SPC to do it.

Ian Ridley commented that IODP-MI and BoG are legal requirements, so they have to exist. The relation between BoG and others are still to be worked out.

## **10. Future of current SAS panels**

Hiroshi Kawamura provided information on the transfer and what the new structure would look like. The first call for proposals will be October 2011. The current 3 tier system will change to 2 tier. EPSP continues. SSP is not decided yet to be an independent panel or a part of PEP. The name of STP will change to TP. New system will weigh on workshop based proposal development rather than nurturing through SAS.

Murray commented that the current service panels are tremendously burdened with responsibilities. For example, STP are tasked as a measurement panel, downhole tools panel and information handling panel, which is the reason why STP had to create as many as 35 consensus statements as Neal presented today. SSP also needs more members to deal with a lot of proposals. Thus, he had concern about SSP to be folded in PEP. He cautioned that too much consolidation could result in loss of expertise and information.

Neal noted that the new system was designed to avoid backlogs in the system and to streamline a mountain of proposals. The special feature of the structure is that PGB is completely separated from evaluation.

Ussler asked if SEA has the responsibility to determine proposal's feasibility. Mével replied yes. Neal noted that the point of the flow is IO's involvement at the early stage to get a first cut on operation feasibility. Ussler asked how SEA gets the information on budget feasibility. Clive replied that it is done through scoping by IOs.

## **11. Proposal handling during transition I**

Gabriel Filippelli presented a summary of current proposal pressure (103 active proposals) and shares his view that a set of high priority proposals would fill schedule in the first and second year of the new program, because newly submitted proposals would not be ready to implement immediately. He stated that SPC was charged to develop a plan to identify proposals to remain in the new SAS as the core proposals to start new program. Larsen commented that the current proposals should be considered as resources for the new

program. Filippelli invited comments from the SPC.

Früh-Green commented that the new SAS has new criteria and SPC should keep it in mind more than counting too much on the SAS stages level where the current proposals reside in.

Feary commented that criteria to select proposals would be the new science plan. SPC should ask proponents how it could conform with new sci plan.

Kakegawa asked how long transitional period would be. Filippelli replied one year.

Mével commented that SPC should make sure that the new program would have enough proposals for 2-3 years.

Filippelli noted that, if SPC moves all proposals to the new program, the community would have a perception that the current SAS doesn't do anything new for this transfer and the new SAS also would not do anything new. This could make proponents think that there would be still very little chance to getting proposals implemented. He hoped that the transfer would give proponents an impression that there would be opportunity to get a proposal smoothly implemented in the new program.

Nobu Eguchi introduced what happened in the previous transition from ODP to IODP. ODP asked all proponents if they agree to forward their proposals to IODP and most proponents agreed. Filippelli commented that it was because they were similar programs.

Stein suggested that good proposals should go forward to the new program. Other proposals in the system should not be deactivated but SPC should send a letter to proponents to encourage them to resubmit their proposal. The proponents don't have to rewrite their proposals. Blackman agreed with Stein. She thought that SPC should not overwhelm the new panel with too many proposals with many addenda and a bunch of reviews. She recommended an open field for everyone to come back. Murray agreed with Stein and Blackman. He suggested asking the proponents for one page summary to tell how their proposal fits in the science plan. Früh-Green pointed out that SPC would handle this transfer before the new plan comes out next summer. Therefore, SPC cannot ask the proponents to present how their proposal fit in the new program.

Torres suggested that some OTF proposals would be used for SEA's head start. Others with good science should go to PEP to be evaluated with new criteria.

van der Pluijm thought that SPC should be highly selective. It doesn't mean limiting only to OTF proposals or including all SPC proposals. SPC should select candidates from OTF and SPC based on science. Neal agreed with highly selective model also to show that it is a new program. Larsen cautioned against being too selective, because nine months after the new SAS starts, they need a lot of proposals to set an annual platform schedule.

Kawamura thought that many of OTF proposals should go down to PEP, because they don't fit SEA's criteria which doesn't allow lack of readiness in site survey and EPSP issue. He suggested being not too selective because the number of proposals would be expected to

significantly go down, because the new SAS does not nurturing anymore, so eventually they would reject many proposals.

Jeff Schuffert predicted that there would be a difficulty to plan future drilling schedule with a limited number of proposals in the new system.

Allan commented that we should be considering what “high ranked proposal” is. He suggested that science in regional area and thematic distribution should be considered.

## **12. OTF Report: IODP expedition scheduling II**

### **12.1. OTF update**

Filippelli provided SPC holding-bin update. Proposal 681-Full2 Lesser Antilles Landslide was released from SPC holding bin on 30 Aug. 2010. 705-Full2 Santa Barbara Basin needs further EPSP discussion with proponents. 637-Full2 New England Hydrogeology is waiting for proponent response. 613-Full3 East Asia Margin has some issue with EPSP.

### **12.2. SPC discussion and approval**

Hans Christian Larsen introduced the draft FY12 JR schedules and concerns. He reminded the panel that they needed to identify a contingency plan for 553-Full2 Cascadia Margin Hydrates. He explained Cascadia’s situation that it would need an alternative expedition because IODP might not have enough funding (aprox. \$3M) for its CORK operation of it. He requested SPC to select one of Lesser Antilles and Hess Deep (Atlantic proposals (659-Full and 661-Full2) were eliminated due to weather window). Stein asked status of 633-Full2 Costa Rica Mud Mounds because 633-Full2 was the alternative for 553-Full2 before. Larsen replied that Cost Rica Mud Mounds is also a CORK proposal needing significant funds. The alternate should be a less expensive proposal.

Junzo Kasahara presented 681-Full2 Lesser Antilles proposal. Früh-Green presented 551-Full Hess Deep. Filippeli invited comments from the SPC.

Murray expressed concern about the difficulty in drilling into rocks. Früh-Green replied that the proponents anticipate stable and unaltered hard gabbros that should not give them a problem.

Filippelli summarized that Hess Deep could provide a piece of puzzle that we do not have yet, and Lesser Antilles could be an opportunity to explorer geohazard aspect which we

have not covered yet. van der Pluijm commented that Lesser Antilles would be attractive to onshore and offshore communities. John noted that that the Lesser Antilles proponent group is not well imbedded in this program. Blackman commented that if Hess Deep is selected, it might convince broader community that MoHole is not just one little view.

Filippelli noted that Lesser Antilles's score was 7.7 and Hess Deep's was 8.3. Lesser Antilles's ranking was 6 and Hess Deep's was 8.

Singhvi asked the timescale of geohazard. Kawamura replied 1/800yrs or 1/900yrs.

John found Lesser Antilles exciting. But, she has concern over core recovery. She pointed that the recovery from that type of deposit should be very difficult even on land.

Feary preferred Lesser Antilles. The science is new in IODP and could engage new communities.

Kakegawa also preferred Lesser Antilles. It could open new field to new people and could be the next step for new program.

Hirokazu Maekawa agreed with Kakegawa.

Stein preferred Lesser Antilles because, although Hess Deep is one of the popular topics with new information, Lesser Antilles is quite new.

Akira Takada preferred Lesser Antilles. But he thought that Lesser Antilles needs to explain how to determine the age and Hess Deep needs to explain how to divide new and old materials.

van der Pluijm asked if there is an opportunity to add two weeks to Lesser Antilles drilling schedule. Actually it is a broader project and might need extra time to do its science better. He stressed that the information on how to proceed this kind of request and who should ask is important and would be helpful for the proponents who are not so connected in this community.

**SPC Motion 1008-05:** The SPC recommends IODP Proposal 681-Full2 Lesser Antilles Volcanic Landslide as the preferred contingency for Proposal 553-Full2 Cascadia Margin Hydrate for FY 12 JR schedule.

Van der Pluijm moved, Murray seconded

14 in favor (*Blackman, Feary, Kakegawa, Maekawa, Murray, Ohkouchi, Peterson, Stein, Takada, Tokunaga, van der Pluijm, Yamazaki, Philippelli, Kasahara*); 3 opposed (*Früh -Green, John, Umino*), 0 abstained, 3 non-voting (*Li, Cheong, Singhvi*)

Filippelli returned discussion to the site readiness issue of 644-Full2 and asked Peterson to provide an update of site readiness issue of Mediterranean Outflow proposal. Peterson summarized that the proposed site (WI-021A) is not suited for proposed study because of presence of mass transport deposits.

Park noted that from the SSP point of view the proponents have to submit a crossing line for the site.

Stein explained the problem by pointing on the image of the seismic section. Murray clarified that the proposal has three lines but the proponents submit only one section. Park added that the other two lines are with very low frequency.

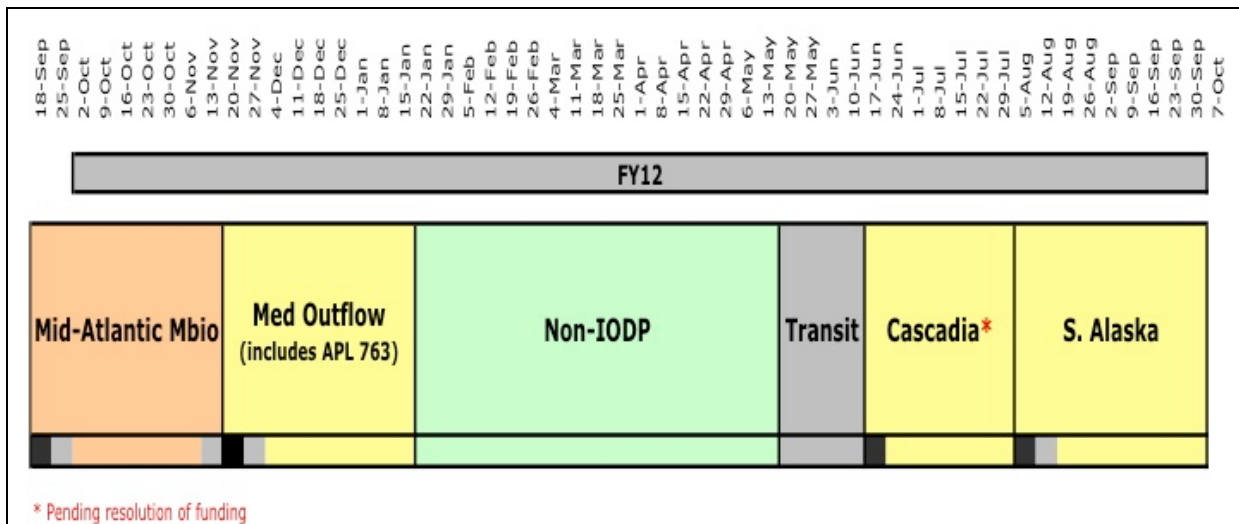
Früh-Green raised a concern whether it is right for SPC to pick a site from a proposal which does not reside in SPC and change scientific target? Peterson replied that he has tried to pick the spirit of 763-APL. Filippelli agreed with Peterson.

**SPC Consensus 1008-06:** The SPC continues to recognize the high merit of recovering a high-resolution North Atlantic climate reference section off the Iberian margin as the prime objective of Proposal 763-APL. SPC also acknowledges Site Survey Panel (SSP) concerns that the deeper sequence at the location of proposed site PORT-1A contains evidence of mass transport deposits (MTDs) that will affect the APL objective of obtaining a continuous, undisturbed sedimentary section. In response to the recommendation by SSP that the drilling location for 763-APL be shifted to avoid MTDs, and with the concurrence of the lead proponent, SPC approves the relocation of the 763-APL drillsite to the location of SHACK-04A, one of a series of sites contained in Proposal 771-Full from the same proponent group. SSP has rated the site survey status of SHACK-04A as “1Aa” and SPC agrees that the scientific objectives of this APL can be more than adequately addressed at the new location. SPC reiterates its support for a fourth APC hole to 150 mbsf in order to ensure recovery of a complete sequence and to provide sufficient sediment for what is likely to be very high sample demand.

Malone said that USIO would need to have new information before staffing if 763-APL is to be scheduled. Feary asked how staffing could be affected. Malone replied that APL proponents would be onboard.

Filippelli suggested approving the schedule, then IODP-MI and SPC would communicate with the proponents in next 3 months.

**SPC Consensus 1008-07:** The SPC approves FY12 JR schedule as presented by OTF chair Hans Christian Larsen.



Larsen presented FY12 Chikyū schedule.

Kasahara commented that CDEX should explain how they solved the problems that happened to Chikyū due to strong current this year. Larsen replied that a lot of activities were going on in CDEX. Because of no alternate plan, we should accept the situation. Eguchi explained CDEX’s activities (Cf. 3.1). van der Pluijm asked what happened while the strong current was there. Larsen replied that nothing happened.

**SPC Consensus 1008-08:** The SPC approves FY12 Chikyū schedule as suggested by NanTroSEIZE Project Management Team (PMT) as Plan (5x5x5) TD around 5200 m.

Year	PMT Plan (5x5x5) TD around 5200m	Plan A+ (5x5x10) TD 7000m	Plan A' (5x5x7) TD 6200m	Plan A''(5x5x5) TD 6200m
2010	20days20" csg @ 850m	20days20" csg @ 850m	20days20" csg @ 850m	20days20" csg @ 850m
2011	116days(3.9mth) 16" csg @2100m (as deep as possible) (LWD, No Core) 13-3/8" @3300m (as deep as possible) (LWD, Core 100m, Wireline logging, VSP)	116days(3.9mth) 16" csg @2100m (as deep as possible) (LWD, No Core) 13-3/8" @3300m (as deep as possible) (LWD, Core 100m, Wireline logging, VSP)	116days(3.9mth) 16" csg @2100m (as deep as possible) (LWD, No Core) 13-3/8" @3300m (as deep as possible) (LWD, Core 100m, Wireline logging, VSP)	116days(3.9mth) 16" csg @2100m (as deep as possible) (LWD, No Core) 13-3/8" @3300m (as deep as possible) (LWD, Core 100m, Wireline logging, VSP)
2012	99days(3.3mth) 11-3/4" @4700m Core 100m Wireline logging.	99days(3.3mth) 11-3/4" @4700m Core 100m Wireline logging.	99days(3.3mth) 11-3/4" @4700m Core 100m Wireline logging.	99days(3.3mth) 11-3/4" @4700m Core 100m Wireline logging.
2013	94days(3.1mth) Drill 8-1/2"(LWD) to confirm Mega-splay fault. Sidetrack 8-1/2" hole and Core 200m (minimum). Wireline Logging. No need to set 9-5/8" csg.	298days(9.8mth) Drill 8-1/2"(LWD) to confirm fault ST 8-1/2" hole and Core 200m Continue drlg to 6000m. U-ream & set 9-5/8" csg. Drill 8-1/2"(LWD) below Plate Sidetrack and drill to 6900m. Core from 6900m to 7000m Wireline logging. Plug back & Suspend	205days(6.8mth) Drill 8-1/2"(LWD) to confirm fault ST 8-1/2" hole and Core 200m (minimum). Continue drlg to 6100m. Core from 6100m to 6200m. Wireline Log U/ream and set 9-5/8" csg @6000m Plug back & Suspend	150days(5mth) Drill 8-1/2"(LWD) to confirm fault ST 8-1/2" hole and Core 200m (minimum). Continue drlg to 6100m. Core from 6100m to 6200m. Wireline Logging Plug back & Suspend
TTL	329 days (11mth)	533days(17.8 mth)	440 days(14.7mth)	385days(12.8mth)

\* "Year" in the figure above represents calendar Year

Larsen stated that MSP has no drilling plan for FY12.

### 13. Collaboration with other scientific programs

#### 13.1. Joint IODP-ICDP PPG for Climate-Hominid Evolution research

David Feary explained the background of the Joint Program Planning Group (JPPG). This JPPG was built to support 724-Full2 Gulf of Aden Faunal Evolution targeting climate human evolution and support the publication of "Understanding climate influenced human evolution" which could call in additional drilling. IODP JPPG made a motion that JPPG officially invites ICDP to join the group. The group is currently in the stage of collecting members. Co-chairs (Peter Dominic supported by IODP, Andy Cowan supported by ICDP) came up with membership suggestions that were passed on to Filippelli.

Filippelli took over the explanation from Feary. Filippelli passed the membership suggestions to IODP-MI and IODP-MI contacted PMO. They started selection. More than half of members will be from IODP due to the national agreement on membership level. ICDP will have to match up the funds. Ocean Leadership already came forward with their support for the meeting venue in Columbia University in New York, USA.



### 13.2. Ocean Observatory Subcommittee report

Donna Blackman circulated a PDF about US Ocean Observatory Initiatives (OOI) and she explained all materials are in it and online. She added that the main focus of OOI is current date climate and atmosphere interaction and processes. Their objectives will mostly attainable at regional cable networks, which they are making now. According to this year schedule, cable has been laid and nodes are being installed, maybe now completed. Torres provide the information that OOI has not installed the nodes yet. They have done mapping and contacted cable companies. They would be operational in 2013. Blackman said that she would pursue the preexisting wireline re-entry system that was developed by Scripps and has been used until a few years ago, but not used since then. It would be an opportunity to use some of the IODP and future program assets. She will provide updates in next meeting.

Gretchen Früh-Green reported that Neptune Canada is having collaboration with US and European groups and making a big progress in the cable observatories. They set cable and instruments on main three hydrothermal fields. The plan is to install pressure, pH and He measurements. Europe has “Deepsea Frontier Initiatives” that includes a group for ocean drilling and she is a part of it. She stressed that this group is not competing with IODP but it is an additional funding source. Torres added that 553-Full2 Cascadia Margin Hydrates is a big drive for them. Früh-Green agreed. Mével added that there are more programs in Europe (e.g. ESONET EMO, DS3F).

Junzo Kasahara presented the activities for Ocean Observatories in Japan. He introduced the observatories installed in the area between Guam and Okinawa, and on-going project, DONET (Dense Ocean-floor observatory Network for Earthquakes and Tsunamis) that Jamstec is installing in Nankai Trough. DONET will be under full operation by March 2011. He reported on DONET assembly test and installation of the system with pictures. The system is partially working and the quality of the obtained data was high.

### 13.3. Other program

Hiroshi Kawamura distributed the list of active proposals with its related programs that was identified by SSEP. He summarized the list; total 103 active proposals, 24 proposals are related to MARGINS, 7 related to InterRidge, 12 to IMAGE, 17 to ICDP, 17 to PAGES. New science plan of PAGES has the word “IODP”. Draft science plan of GEOPRISM that is the successor of MARGINS has a lot of “IODP” and “ocean drilling”. Blackman asked if there were Asian programs. Filippelli replied that there must be some activities in Asian countries and they should be on the list in future. Torres commented that SSEP would be more proactive to identify related programs.

#### 14. Presentation and discussion of 745-CPP

Issa Kagaya presented 745-Add he received two days ago. The operations to be added are; 1) Drilling new non-riser hole C9002 within 30 m distance to the proposed riser-drilling site C9001-1A, 2) Retrieve shallow sediments under in situ pressure condition, including methane hydrates by HPCS with using high-pressure core liner, 3) Measure in situ temperature with APCT-3 at selected depth horizons, 4) Penetration depth 300 mbsf (Max - 365mbsf). The background of the addendum are; 1) Chikyu shakedown expedition in 2006, 365 meters of sediment cores recovered in upper sedimentary section, 2) In situ geochemical and geophysical properties of methane hydrate are still uncertain because of the pressure depletion during the core recovery.

Filippelli asked if this is an official addendum. Kawamura replied yes, but this was not passed to SPC yet. Filippelli could not recall an addendum submitted to OTF before. Kawamura replied that it happens when EPSP changes the site or if it is a minor issue not related to science.

Blackman asked if the contingencies addressed in the original objectives. Murray and Kasahara did not remember.

Katz noted that EPSP would have a concern about recovering hydrocarbon without riser. EPSP needs gas monitoring and full panel meeting. Filippelli commented that this was completely on EPSP. SPC cannot discuss whether it safe or not.

Murray commented that SPC would need to see better justification for the contingency to achieve scientific targets. Also, need the detail of the drilling plan from IO. He asked a clear explanation of relation with MITI site. Katz replied that EPSP assumed presence of coal. EPSP considers only safety issue.

Masaaki Yamao explained about the drilling location and operation plan of Shimokita expedition.

Filippelli asked what would control the start date of this operation. Yamao replied they would need to wait for weather to calm down in March. Filippelli asked what "likely start late March" meant. Yamao replied that it was because of Japanese fiscal year. It has to start before the next year starts on 1<sup>st</sup> April. 1<sup>st</sup> March would be also no problem.

Murray asked what was the process to evaluate the contingency plan we saw yesterday. He wanted to know when EPSP would review it and how the feedback goes back and forth. Larsen replied that the process needed to be done immediately. Yamao stressed that a contingency plan would be necessary, should riser mechanical trouble occur necessitating a switch to riserless drilling. Filippelli asked what would happen if EPSP does not provide a clearance for this contingency plan. Yamao replied that they could change location to get coal layer. Filippelli asked how they would get the contingency plan approved if they arrive and find that they cannot occupy as riser hole. Yamao replied that they should ask Japan Society of the Science Promotional (JSPS) which provide funds for 745-CPP for a permission. Kasahara commented that it would be difficult to get permission to drill that gas production area. Larsen stated that they also need to ask IODP-MI and lead agencies because the project was funded not only by JSPS but also IODP.

Blackman asked if the contingency had objectives that are high priority to IODP. Filippelli believed that SPC would need to look at the contingency plan after EPSP approval. Li commented that not getting to coal area would mean that the objectives are not completed. He recommended careful review on the contingency plan.

## 15. Discussion of draft Science Plan

Hans Christian Larsen presented the four grand challenges of the new science plan, 1) “Climate and Ocean Change: Reading the Past Informing the Future”, 2) “The Biosphere: Co-evolution of Life and the Planet”, 3) “Deep Earth Processes” and 4) “Earth in Motion: Geohazards, Fluid flow, and Active Experimentation”. He explained the peculiar features of each challenge. Filippelli invited comments from the SPC.

Kasahara commented that he was skeptical about “Carbon sources and fluxes related to gashydrates” part. This kind of topics is not for IODP, it is being done by industry.

Früh-Green commented on “CO<sub>2</sub> sequestration experiments” that oceanic crust has potential as CO<sub>2</sub> sequestration. Murray noted that if CO<sub>2</sub> sequestration is done in industry, IODP should focus on scientific side and societal impact. Katz replied that IODP does not have to worry about stepping on industry area. There are many aspects IODP can contribute. Hollis stated that CO<sub>2</sub> sequestration in ocean is clearly important to what will happen to oceans in the future. He stressed that SPC should think how IODP expertise could contribute to society in that area. Blackman saw CO<sub>2</sub> sequestration as an opportunity for IODP. She pointed that the draft new science plan has the box 4.3 “subseafloor capture and storage CO<sub>2</sub>” in “Deep earth process” chapter to show potential for using carbonation reaction in crust.

Murray commented that volcanic geohazard is missing from the geohazard section. Singhvi commented that geohazards are not measurable and stay in a regional context. He thought that what the new program could deliver in this area needs to be written in the text.

Feary found a lot of difficulties in reading the draft science plan. He thought that more valuable feedback could be expected after a science writer’s revision. He suggested that it is better to have 8-10 major topics to make workshops to develop proposals. Ridley agreed with Feary. Larsen replied that the science writer would provide a model chapter soon. He can provide the chapter to the SPC. “Blue Ribbon” committee and SAS (SASEC) will review in parallel.

Murray commented that the biosphere section is divided into two parts, the first half is about evolutionary life that is new in IODP and the second half is about subseafloor biosphere which is familiar theme in IODP. He wondered if it is a writing issue or new program expands the philosophy of what biosphere means to us.

Kakegawa suggested including a project connected with experimental research. IODP

studies and experimental lab works are deeply linked. He stressed that having such topics helps to get chemists into IODP community.

Filippelli noted that SPC could examine where the plan needs to be either focused or broadened based on their experience with reviewing proposals that are a product of the current ISP..

Singhvi commented that the science plan needs a section to say what the new program will deliver and how it will be useful to everyone.

Neal commented that the plan needs linkages between different sections. He also noted that planetology is missing from the plan, though planetary model will be a big help for the new science. Sreaton agreed on missing linkages. She also expressed her disappointment with going back to the old categorization, Climate, Deep Earth, Biosphere. Larsen replied that it is easy to say linkages, but not so easy to write it. He suggested adding a summary chapter including that part. Hollis commented that there were much repetition in different sections. He recommended having the writing team to improve integration across the four themes.

## **16. Prioritization of MSP proposals**

Gabriel Filippelli asked SPC to prioritize MSP proposals in SPC and OTF levels based on their scientific impact, operational readiness, and perhaps cost estimate. He explained the objectives and histories of the 6 proposals, 1) 548-Full 2 Chicxulub: Drilling the K-T Impact Crater, 2) 581-Full2 Late Pleistocene Coralgall Banks, 3) 637-Full 2 New England Shelf Hydrogeology, 4) 672-Full3 Baltic Sea Paleoenvironments, 5) 716-Full 2 Drowned Hawaiian reefs and 6) 748-Full Nice Airport Landslide. He said that SPC did not have to take action now. Basically nothing will happen between now and the March 2011 meeting with respect to the MSP. Kawamura added that SPC would have one more MSP proposal by March.

Murray commented that SPC should wait for the March 2011 meeting, because scoping is going on for three of them.. Blackman agreed with Murray.

Stein asked if the hazards survey could wait until after March 2011. McInroy replied that ESO asked for \$1M for site survey, but can wait until March 2011.

Murray asked if there would be enough time if Chicxulub is decided as the highest in March 2011. McInroy replied yes.

Peterson commented that IODP should go for high impact science such as Chicxulub, if IODP can manage the finance. Hollis agreed with Peterson. He referred to Cascadia situation. He suggested having Chicxulub as No. 1 for now, and allowing SPC to consider an alternative in March 2011.

**Wednesday****1 September 2010****09:00-17:00****17. Proposal handling during transition II**

Gabriel Filippelli requested member's opinion on how SPC treats the proposals during transition period.

Kasahara suggested that riser, non-riser and MSP proposals should be evaluated separately. He added that when SPC decides what to do with existing proposals, SPC should evaluate proposals with the definition of new SAS panel/committee. Früh-Green agreed with Kasahara. She suggested including balance of platforms, balance of ocean and readiness into consideration.

Feary said that we have to make sure that the new system will have enough proposals to do best science.

Hollis noted that SPC would need to identify which proposal goes to which panel: PEP vs SEA. SPC has the opportunity to identify a top tier of proposals that can be used to showcase the scope of the new program.

Singhvi recommended that we continue the process as usual until the end of this program. He assumed that the good proposals in the current system would be also good proposals in the new system, because the new system would be consist of the same members and same community.

Blackman noted that there would be an advantage to avoiding transferring anything to SEA and allowing PEP to do whatever they want to do. There is plenty of time to do so for PEP and SEA before the program needs new proposals.

Hollis suggested deciding which proposals go to OTF and everything else goes to PEP in the next meeting.

Toshi Yamazaki commented that the new science plan (NSP) must be one of the criteria. He was concerned that some good proposals in the current system could be dropped because of the difference between new and current science plans. He explained that the new science plan is, not like the current science plan, designed to appeal to the funding agencies.

Ohkouchi informed that SPWC has the concept that the proposal's theme does not have to fit the theme written in the new science plan. NSP is not a bible anymore but just a document to encourage new scientist outside of IODP and to appeal to the policy makers. Proponents do not need to refer to science plan in their proposal.

Murray commented that the NSP needs to clearly explain about how the NSP should be treated, and needs a clear statement like "other excellent science not described in this plan is encouraged". Without such explanation, PEP and SEA could think that science not written in NSP is not relevant.

Neil referred to criteria in the TOR for PEP; “How would the proposal advance the new Science Plan?” “If not, does it contain cutting-edge new science that should be addressed by the new drilling program?” These evaluation criteria shows that the new program could include new science that is not in the science plan.

Murray commented that we need to give the operators or IODP-MI a broad menu for logistical reasons. The current system already has enough good proposals in OTF or near OTF as many as the new system could run for the first 1-2 years. He thought that we could ask the proponents of those proposals to submit a one page update on their proposals and we would forward them to the new system. Everything else in the system should be returned to the proponents with an encouragement to re-apply. That would eliminate from our list about 30 proposals and still keep 10-15 in OTF and 5-10 in SPC.

Kakegawa commented that we need to prioritize, not rank, the proposals in OTF and SPC considering not only science but also operation cost, time to complete, readiness and geographical balance. The prioritization should be done separately for each platform.

Suzumu Umino commented that we need to forward many proposals to feed the new program that is attempting to be faster in its evaluation speed and thus faster in needing new proposals. The proposals in OTF and SPC should be forwarded to the new system. He agreed with Kakegawa and Kasahara on the prioritization based on the difference in the platforms. Especially with Chikyu, it needs more ready-to-go proposals in the new system, because Chikyu proposals take longer time for preparation and site survey. MEXT always requires Chikyu proposals at hand.

van der Pluijm commented on four points. First point is that proposal pressure is always the best indicator for the health of the program. Thus, eliminating might be bringing the program backward. Second point is that the new science plan is not really that new. 80% of the current proposals will map well into the new program. The third point is that we are not telling the new SAS what to do but we are telling what they could consider to do. Lastly, we have to avoid chilling the community by shutting down the promising proposals in any stage. We should select 30-35 promising proposals to pass on to the new system, telling them how exciting they are, not what they do with them.

Takeda commented that we should demonstrate that it is indeed a new program by selecting proposals that fit well in the new science plan.

Larry Peterson agreed with Blackman. No proposals should go to SEA, but should go to PEP because it is new evaluation structure and they should have the opportunity to select. The ones dropped from the selection should be returned to the proponents with encouragement to resubmit.

Früh-Green agreed with van der Pluijm on the proposal pressure and not discouraging the community. She disagreed that everything goes to PEP. She thought that it could be a wrong signal to push the “ready-to-drilling” proposals that already survived the current evaluation

system back again to evaluation process. She recommended forwarding the proposals in OTF and suggesting putting them in the pool to drill. Platform balance and disciplines relevant to the NSP are also important.

Kasahara commented that we don't have to think of transferring proposals now, because no one knows yet how the new system works. All proposals in OTF and some in SPC need to go to OTF, and the other proposals will be evaluated by the new system.

Singhvi commented that 80% of the proposals can be fit the new program. Don't let the community feel this is a break in the stream. Science will be the same and people will be the same. There should not be a break.

Ohkouchi commented that we don't have to be worried too much, because it's only downgraded from three-tier to two-tier system. The change will be small compared to the last change from ODP to IODP.

Daekyo Kim commented that we should respect the current system and philosophy. SPC's suggestion should be respected.

Li commented that most of the proposals could be very good assets to the new program. It's not a bad idea to hand over all proposals to the new program, because it is up to the new panels.

Stein commented that the proposals that we decide are excellent science should be forwarded to the new program. For the others, we write a letter to the proponents to encourage them to resubmit.

John suggested that the proposals in OTF go to SEA and the other proposals remaining in SPC go to PEP. The remaining proposals in the system are invited to resubmit to the new program and processed quickly. And new proposals go through a workshop process.

Jenkyns agreed with Früh-Green. We should take advice from OTF whether they think there are enough proposals residing at OTF considering logistics, schedule, and location. All proposals in the system except OTF-level should go to the new system to get evaluated in reference to the new science plan.

Hollis commented that everything forwarded to the current OTF goes to SEA, because SEA seems to be a panel for ready-to-drill proposals according the figure in the triennium report. Some others go to PEP. Mature proposals need one page template including information on its relevancy, theme and contribution. Maybe some reformulation in the proposals guidelines will be needed.

Blackman commented that the new system has complete freedom to do what they will do with our advice. She liked the idea that everything goes to the PEP, because this is not "our game" but "their game". She suggested giving them credibility.

Feary suggested putting the discussion off to the next March meeting, because the concept

of new structure that we are now based on could probably be changed. He noted that the current system has not been strong enough about rejecting proposals. However, it really has to be done to show what is exciting science and to show this is the body in charge of choosing it.

**SPC Consensus 1008-09:** SPC asks SSEP to analyze proposals within their pool in November 2010, and determine following;

1. Which have the highest scientific potential
2. Which APLs align with FY2012 drilling schedule and draft FY2013 shiptrack

Murray questioned if there is an implicit “and” or “or” between 1 and 2. He pointed out a possibility that poor scientific proposals with a logistically good potential could be forwarded.

Filippelli replied that we don’t have to worry about it for first one or two years rather than best science. 2 is more appropriate for SPC or OTF type proposals.

Torres asked the meaning of “proposals in SSEP”

Filippelli answered that it means all active proposals not in SPC and the ones that will not be forward to SPC.

Murray said that we ask SSEP to perform a triage about which is exciting and which has the highest scientific potential. Maturity cannot be the necessary reason to be forwarded. Proposal can be less mature but with much more scientifically attractive.

Blackman suggested forwarding the entire package packages in the system to the new system to help them go through the first run.

John questioned if SPC is asking SSEP to evaluate all, including proposals with good science but not revised on the last November.

Filippelli answered that it should be all.

Torres requested more guidelines for selection.

Filippelli said that we would provide guidelines to help SSEP on how they will prioritize the proposals. The March 2011 SPC meeting will have the proposals not only in SPC and OTF but also the ones not yet forwarded to SPC but with SSEP’s priority in the agenda.

Feary suggested encouraging SSEP to both rank and deactivate. He also encouraged SPC to do so. Feary suggested a three tier system: forward, encourage to resubmit, deactivate.

van der Pluijm objected to the deactivation. It could be a waste of energy debating which one is deactivated. He suggested passing them to the new system for nurturing if it's possible.



Früh-Green questioned how to treat the proposals with high feasibility and scientific potential but no budget.

Filippelli replied that SEA will make that decision.

Kasahara commented that we can ask the proponent if they can get the budget.

Filippelli said that there is a sense that we don't have to worry about individual proposals at least in the OTF pool and transfer those over to SEA to let them decide which one go to their OTF.

van der Pluijm objected to the idea that SPC decides which proposals go to which panel. He suggested not putting our labor on thinking where the proposals go but suggested saying what we like, because we have no idea what SEA or PEP does.

Filippelli agreed with van der Pluijm that it is difficult to move the whole program into the system that we don't understand.

Singhvi commented that SPC should work as usual until October 2011 when SPC's mandate is still valid and just pass the proposals over to the new system.

Murray recommended that SPC will give the new program a list of the proposals with the highest scientific potentials, then let them decide how they what to put them. SPC should keep working as usual until the end of the program, but also should be performing triage to ensure that not all of the current 105 proposals transfer immediately to the new system.

Hollis asked Murray if he suggested forwarding all proposals to PEP.

Murray replied that it's the all proposals that survive in SSEP and SPC triages.

Hollis said that if we choose "business as usual" model, we forward proposals to new OTF, although he doesn't see any difference in OTF and SEA proposals, because SEA draws ready-to-go proposals.

Murray replied that it is up to new people.

Hollis replied that it's up to us as well.

Filippelli suggested suspending that discussion until the March 2011 SPC meeting, by which time the new Terms of Reference for the panels will be finalized and new structure architecture will be finalized. He commented that we will be able to engage with SSEP in prioritizing the proposals.

Liz Sreaton questioned if SPC re-reviews the proposals forwarded from SSEP with their judgement.

Filippelli replied that SPC treats the proposals forwarded from SSEP November meeting as SPC's proposals and SPC relies on SSEP's decision concerning other remaining proposals in SSEP.

Neal commented that we have to get the new system to work along what it is designed for and stop trying to bypass. Because SEA proposals are ready-to-drill proposals, everything needs to go to PEP.

Filippelli commented that we need more clarification of what the new structure looks like and we will have this topic again in the March 2011 SPC meeting. He expects to have a much better understanding of what is going on after SASEC meeting in January 2011. At that point, if it is still not clear, he will embrace that suggestion and we will find out the information before March 2011.

Schuffert commented that he didn't understand the point of going back now to assign them prioritization. The proponents having reviews from SSEP can revise and resubmit it along the new guideline. He suggested not prioritizing proposals unnecessarily.

Torres cautioned against losing the information on understanding and knowledge about how SAS treats the proposals.

Schuffert replied that he is not in favor of cutting all of them off and he is for an "all-in" model, not for restrictive model. He added the information about the history of proposals was all preserved when it moved from ODP to IODP, and it will be preserved this time, too.

Filippelli commented that transferring all proposals from ODP to IODP was a horrible mistake. He thought that Schuffert's comment is a response to the fact we are trying to give a message to communities, not to individual proponent, referring to Larsen's comment that we have to contact the individual proponent to ask if they want to keep their proposals in the program. However, he stated that SPC now should do selection at this stage rather than all-inclusive model. He appreciated Schuffert's comment.

**SPC Consensus 1008-10:** SPC will consider OTF and SPC proposals at March 2011 for transferring to the new SAS

**SPC Consensus 1008-11:** At the March 2011 SPC meeting, SPC will consider the prioritization of proposals from SSEP when SPC decides which proposals to transfer to the new SAS

**SPC Consensus 1008-12:** SPC will work with IODP-MI in the March-August 2011 timeline to individually advise proponents of all proposals as to the status of their proposal

## 18. Long-range planning of expeditions

This agenda item was dropped.

## **19. New SAS structure**

Filippelli requested an open discussion on the structure of the new SAS.

### **Triennium Review Report**

Feary explained the summary of the triennium report, referring to the change from three panels to two panels and no ranking involved anymore. Though he agrees with the idea of two panels, he disagreed on the criticism, “considerable duplicated efforts and lack of continuity in reviewing proposals are leading to lack of consistency.” He said that the document seems to be designed by management consultants having little to do with science. He sees that the current ranking system works and that there really is no duplicated effort between SSEP and SPC. The document assumes that SPC completely re-reviews proposals, but it actually doesn't.

Kasahara agrees with Feary that there are no duplicated efforts between SSEP and SPC, because SSEP evaluates and SPC ranks. He doesn't see the advantages of the new system as much as it is portrayed in the document. Kasahara raised a concern about the effectiveness of two-tier system. The current system has a few proposals stuck in OTF for a long time because of difficulties in implementing the expeditions. Many other proposals are sitting in SSEP, also for long time. If the new SAS process runs quicker with two-tier system, many proposals quickly reach the OTF stage and the most of them may get stuck there for even longer time.

Larsen responded to the remark by Kasahara that the overflow with good proposals is a good sign showing that the program is working very well. He also mentioned about a problem of the ranking system that the ranking number decided by a specific proposal population of each ranking meeting is not consistent with the ranking number decided by other proposal population in other ranking meetings.

Kasahara said that even if the program would be happy with overflow in OTF, proponents would not be happy.

Larsen responded that misguiding could disappoint proponents more than the long waiting time in OTF. For example, the system keeps proponents in the evaluation stage for years, keeps asking them for revisions and addendums many times, and makes them think that they are almost there, then finally they find they are not. That is the disappointment IODP-MI does not want proponents to feel.

Blackman asked if the ranking numbers are used in OTF discussion. Larsen replied that the ranking numbers are considered. Malone added that weather windows, logical constraints and ranking are considered in OTF discussion.

### **Science Executive Authority (SEA) and Proposal Evaluation Panel (PEP)**

Jenkyns commented that SEA needs to be neutral. He pointed out the possibility that we have to surrender all decision to this small group and lose control.

Larsen responded that the PEP chair will be a member of SEA and four sub-chairs could attend SEA meeting as liaisons.

Filippelli noted that one solution to avoid SEA's dominance is that PEP does all of evaluation and send proposals not to SEA, but directly to OTF. And, SEA does other things like assessment of geographic balance. OTF has membership including PEP people, so science works.

Früh-Green pointed that, in Filippelli's model, PEP might be a huge structure with huge responsibilities.

Filippelli answered that the responsibility could be smaller because the new panel will not nurture proposals in the same way that the current SSEP does.

Neal commented that the difference between prioritization that PEP will do and ranking that the current SPC does is not clear.

Murray agreed on the strong PEP model and also agreed on the idea of not having proposals too long in the system. However, he cautioned against losing the nurturing aspect completely. No nurturing could cause a risk of creating an "old boy network", in which only proponents who know how the network works win and proponents with great science but don't know how it works lose. He thought the current system weighs too much on nurturing, but losing it completely is not a good idea.

Blackman commented that if PEP works well and is a strong component of SAS, only proposals that PEP wants drilled will be forwarded to SEA. Since all proposals that SEA must consider are high priority for PEP, the discussion of 'loss of control' is moot.

Larsen commented that the top salaried position in PEP would be filled after open competition. Anyone could be in that position, without US or Japan or Europe nomination. Some members of OTF and SEA could come from PEP.

Murray indicated that there could be a risk of a big name candidate who doesn't know IODP well being chosen as PEP chair.

### **Proposal tracks**

Feary suggested that there could be different proposal tracks for each vessel (Chikyu, JR and MSP.)

## **Service Panels**

Murray noted that service panels need true expertise. If we have the right expertise in PEP to deal with SSP or EPSP work, it works. However, as SAS won't have any control over who get in the panel, anyone nominated by a Program Member Office can get in. There is no guarantee that service panels will have the right expertise.

Park commented that SSP needs enough members corresponding to the number of proposals reviewed in SSP meeting.

Larsen commented that SSP needs to exist separately from PEP. As to engineering aspect of proposals, IOs provide information for PEP.

Murray stressed that technological panel should report to not only IOs and IODP-MI but also to the SPC successor. PEP or SEA need technological input and a Technology Panel, and would also benefit from receiving guidance on what should be paid attention to. He thought that more than one panel should address technological needs.

## **Site Survey issues and Nurturing**

Blackman noted that success in funding regional studies that provide Site Survey data involves the broader community. If proponents for the new program are required to have the majority of their survey data in hand (at least scheduled) before submitting a Full proposal to IODP, then there would already be good support for projects that IODP drills. Pre proposals could take advantage of positive feedback from (PEP) to leverage their funding request for the regional/Site Survey studies. Blackman sees the involvement of the broader community (via review of Site Survey proposals) as a positive thing for the new program, with potential to improve integration between drilling and other scientific results.

Larsen said that site survey maturity could be considered differently from proposal's maturity and SAS could keep them in an OTF holding bin. He stressed the importance in quick evaluation process to avoid proponent's complaints on different advices given from rotating members of the panel.

Stein disagreed on the one-round nurturing. He thought that one-round is not enough for getting everything including site surveys done and ready for drilling. He recommended at least three-rounds.

Larsen suggested "time limit" instead of "number of rounds."

Stein liked this idea.

Feary raised concerns about how long site surveys take to be funded. He suspected that many proponents might exceed the time limit simply awaiting the funding and implementation of site surveys.

Ridley commented that proponents have to find funding for collecting site survey data and that's why site surveys take time.

### **Workshops and funding**

Feary stated that IODP has to make sure that the workshop system actually works. He introduced, as an example, a proposal developed from the workshop in 2007 for hazard drilling that only now is on the list of possible drilling on 2012. He liked the idea of workshop-nurturing but worried about the time it could spend.

Mével commented that it depends on the style of workshop. Feary's example took time because it was thematically large workshop with many people with different expertise. More focused workshops dealing with one proposal takes less time.

Früh-Green asked if ICDP has the same workshop system.

Mével replied that ICDP workshop doesn't work in the same way. In ICDP, a proposal is accepted by the program at first, then the program funds a workshop. The workshop organizes logistical issues--not so much the science.

Ridley explained about the difference in how people get funded between ICDP and IODP. In ICDP, a workshop is held to develop proposals, which makes a compelling proposal before funding agencies see it. On the other hand, in IODP, a proponent is repeatedly asked for more site survey data, they repeatedly need to go to a funding agency to get such a less-compelling proposal funded. We have to think about how to be more successful in getting funded.

Ussler added a change needs to occur in how to address funding associated with technical innovation or expensive installation.

Filippelli stated that there should be a path for proposals that have not gone through the workshop process. Proposal with very unique and high impact scientific plan should be put through even if not derived from or refined in a workshop.

John stated that there needs to be a mechanism to commingle funds to get international participation in workshops and to attract scientists from everywhere.

Allan replied that there would be commingled funding available to support those kinds of workshops. Proposals built by a broad community should be at the forefront of the program.

### **Call for proposals**

Mével questioned if the two times/year call for proposal submission is needed.

Filippelli also questioned if there needs to be any deadline.

Larsen replied that the current system has no submission deadlines and proponents can submit anytime. IODP only promises twice a year reviews.

Mével said that twice a year meeting would a huge burden because PEP is going to be a huge group.

Filippelli commented that twice a year meetings facilitated by interactions between panels is important to ensure that proposals have the greatest chance of getting through the system quickly.

Früh-Green suggested a possible model in which new proposals can be submitted once a year and revised proposals can be submitted twice a year, because if the revision could be minor, 6 months is enough time to collect data and resubmit.

## **20. Approval of new SAS chair and vice-chair**

### **20.1. STP chair and vice-chair**

The committee briefly discussed the STP recommendation of Saneatsu Saito as new chair, and Douglas Schmitt as new vice chair of the STP. Neal noted that Schmitt was involved in ICDP more than IODP. STP expected his expertise from ICDP. With no further discussion the committee approved the two appointments by consensus.

**SPC Consensus 1008-13:** The SPC appoints Saneatsu Saito and Douglas Schmitt as chair and vice-chair of the Scientific Technology Panel (STP) respectively, effective immediately.

### **20.2. SSP chair and vice-chair**

The committee briefly discussed the SSP recommendation of Gilles Lericolais as new chair and David Mallinson as new vice chair of the SSP. Früh-Green asked what Lericolais expertise is. Filippelli replied that he is a sedimentologist. Mével added he is also a seismologist. With no further discussion the committee approved the two appointments by consensus.

**SPC Consensus 1008-14:** The SPC appoints Gilles Lericolais and David Mallinson as chair and vice-chair of the Site Survey Panel (SSP) respectively, effective immediately.

## **21. Other business**

No other business.

## 22. Future meetings

### 22.1. Liaisons to other panels and programs

The committee decided on the following liaison assignments for upcoming SAS meetings:

SSEP November 2010 -- Gabriel Filippelli

EDP January 2011 -- Gretchen Früh-Green

SSP February 2011 -- Junzo Kasahara

STP March 2011 -- TBD

EPSP June 2011 -- TBD

### 22.2. 17<sup>th</sup> SPC meetings

#### 22.2.1. March 2011 (Europe)

Hugh Jenkyns volunteered to host the next SPC meeting in Edinburgh, UK. The dates will be 28-31 March 2011.

## 23. Review of motions and consensus statements

Tributes to members were presented by Ben van der Pluijm for departing member David Feary, by Gretchen Früh-Green for departing member Hugh Jenkyns, by Junzo Kasahara for departing member Naohiko Ohkouchi, by Richard Murray for departing member Larry Peterson and by Barbara John for the meeting host Donna Blackman.

**SPC Consensus -15:** The SPC greatly thanks to Ohkuochi's deep knowledge of the program, especially the paleoclimate aspect of carbon in black shale from the mantle origin. He is always so cool. He acted as nice interpreter of Japanese. He explained the culture of Japanese and the status of Japanese government in the relation to scientific view point, and why Chikyu' operation has not been so easy. His comments were critical in SPC decision making. Thank you Ohkuochi and we will miss your enthusiastic contributions.

**SPC Consensus 1008-16:** The SPC thanks Hugh Jenkyns for his service on SPC. He is recognized for his careful evaluation and presentations of proposals and his insight on scientific issues related to stratigraphy, climate and tectonics.

**SPC Consensus 1008-17:** The SPC thanks David Feary for his service, commitment and enthusiasm as a member of the panel. A New Zealander with Australian pedigree serving as a US representative demonstrates how serious we take national interests. Capitalizing on a



long experience in ocean drilling, Dave complemented regular member duties with informative get-togethers for new and returning US members, and encouraged informal meetings with a range of stakeholders in support of the program’s current and future goals. Dave demonstrated a firm commitment to diversity in research targets and a keen sense of likely success. Importantly, he served the IODP with an ever-present smile and healthy sense of humor that often served us well.

Thank you, Dave.

**SPC Consensus 1008-18:** The SPC thanks Gilbert Camoin for his dedicated and highly effective service within SPC. His deep knowledge in all aspects of paleoclimate/paleoceanography, especially those related to sea-level change, played always a crucial role in SPC decision making. The SPC will miss his experience, enthusiastic contributions, and humor, and wishes Gilbert every success in his future activities – inside and outside of IODP.

**SPC Consensus 1008-19:** Larry Peterson served IODP community wonderfully. His always reliable and his substantive participation will be solely missed. A man with a few words, but when Larry speaks people listens. He provide insights always with dignity, sensitiveness and concerns for what is the best for the program. His gracefully intellect will be difficult to replace. Thank you very much for your great contribution. IODP is better because of it.

**SPC Consensus 1008-20:** The SPC thanks Donna Blackman, the University of California San Diego, and Ocean Leadership for hosting the 16<sup>th</sup> IODP Science Planning Committee Meeting, held at Scripps Institution of Oceanography. The meeting venue was incredible, enhanced by the exceptional weather, making it even more difficult to remain in the beautiful Forum, and not on the beach. The SPC thanks Neil Driscoll for a tremendous beach walk/field excursion through the Eocene fan system exposed in cliffs north of Scripps. Finally, the SPC thanks ICP10 for the opening night reception.

Filippelli adjourned the meeting at 16:55.

**SPC 1008 Minutes, Appendix A**  
**STP Consensus Statement 1008-01, 02, 05, 09, 12**

**STP Consensus Statement 1008-02: Role of STP in the new SAS**

The STP responds to the questions posed by SPC Chair Gabe Filippelli in his presentation to the panel at the 11<sup>th</sup> STP meeting.

*1. How are current projects progressing, and how to complete them?*

STP has a number of long-term projects that will not be resolved before implementation of the new SAS: STP Roadmap implementation; Cross platform QA/QC issues and consistency in methodologies (e.g., Cross Platform Formation Factor measurements - see STP Action Item 1008-39; Core contamination issues for microbiological studies - see STP Action Item 1008-33.

*2. What are friction points in current interactions that need to be improved?*

STP has developed a fast and efficient communication structure. This has reduced and eliminated many friction points. The STP recommends that the current three-year term of STP (or its successor) membership be increased to four years in the new structure in order to increase efficiency and corporate memory. [See STP Consensus Statement 1003-10 Determination of Formation Factor]

*3. What are the key aspects that need to carry forward, and how best can they be carried forward?*

The STP deals with many different facets of IODP including measurements, curation, and drilling technologies. These include both long-term items (see the answer to question 1 above) and quick decision items (e.g., Curation of Cuttings issue in Consensus Statement 0908-02). The STP's efficient communication structure and flexible approach to delivering advice to the IOs, IODP-MI, and other SAS panels must be carried forward to the new program. Other items that must be continued are:

- Direct science community input on emerging issues and long-term program guidance to the IOs and IODP-MI;
- Overview of QA/QC and data management on all platforms;
- Overview of expedition measurement plans;
- Overview of curation issues;
- Overview of publication issues;
- Assessment of third party tool deployment and development.

The panel recommends that the STP continues in the new Science Advisory Structure. We further recommend that the roadmaps developed by EDP and STP be provided to the committee writing the new Science/Implementation Plan.

**STP Consensus Statement 1008-01: IODP Depth Scale Document**

The STP recommends that IODP-MI convene a Taskforce to optimize the current Depth Scale document. The product from this Taskforce should address the following items:

- Uniformity of depth scales for IODP publications;
- Reduction of confusion amongst scientists with the implementation of the IODP depth scale document;
- Tracing/managing depth scale modifications due to changing section lengths, evolving investigations, etc.;
- Write an introduction and create useful illustrations that would be included in the depth scale document;
- Give recommendations on training and education of shipboard scientists on the use of the

depth scale document prior to expeditions.

The STP further recommends that the taskforce be formed as soon as possible and deliver the revised depth scale document no later than 6 months after its formation. Taskforce members should be a mixture of people who have sailed recently, have industry experience, are from outside the IODP community, and have knowledge of the problems with the current IODP Depth Scale document. The IOs, STP, and IODP-MI should each be represented in an ex-officio capacity. The STP requests an update on the progress of this taskforce at the next STP meeting.

**STP Consensus Statement 1008-05: CDEX Data Error Report**

The STP thanks Shigemi Matsuda and CDEX for the presentation of the errors in Chikyu shipboard data that were found for Expeditions 315, 316, 319, and 322. The STP was impressed by the honest and open presentation as well as the efforts that CDEX has gone to in order to recover as much data as possible and the measures that have been taken to ensure that this does not happen in the future. STP recommends that CDEX issue errata in the expedition publications that contain the correct data (where available) or a warning that the published data are incorrect with the reason why.

**STP Consensus Statement 1008-9: Inclusion of the Scientific Technology Roadmap as Appendix to the new Science Plan**

The STP recommends the Scientific Technology Roadmap, which has been developed over the past 3 years to improve the IODP science, be included as an Appendix in the new science/implementation plan, due for release in early 2011.

**STP Consensus Statement 1008-12: Approval of measurement plan for IODP Exp. 329.**

The STP approves the Expedition Measurement Plan for the South Pacific Gyre Microbiology Expedition (329) as presented by the USIO. However, the STP recognizes that the information given to the USIO is insufficient to ensure adequate support of the non-standard measurements. The STP highly recommends improved communication between the Co-Chiefs, Science Party, Staff Scientist and USIO to ensure a successful expedition.

**SPC 1008 Minutes, Appendix B**

**EDP Consensus Statement 1007-01, 04, 05, 06, 07, 08, 09, 10, 23**

**EDP Consensus 1007-04: Unfinished EDP Business**

The EDP has identified the following tasks as unfinished business that require a face-to-face meeting January 12-14, 2011 in Grenoble, France:

(1) Review and comment on an implementation plan for engineering development during the remainder of the IODP and in the post-2013 drilling program, as requested in Consensus

1007-19;

- (2) Provide follow-up and comments on active engineering development scoping studies including Ultra-Deep Drilling and Core Quality and Quantity being conducted by IODP-MI;
- (3) Assess potential improvements of the methodology and data selection used in the IODP-MI Coring Scoping Study Report Core Quality and Recovery Compared to Operational and Environmental Parameters: An Analysis of Selected Cores from IODP Expedition 316;
- (4) Receive a preliminary project review and assess status of the FY12 engineering development proposal Wireline Hydraulic Testing and Borehole Imaging Tool for Stress Measurements (EDP-2012-1B);
- (5) Review and endorse the FY12 engineering development plan submitted by IODP-MI;
- (6) Review and comment on status of engineering development by the IOs, and especially test results for the USIO Drilling Sensor Sub development project;
- (7) Receive and comment, at Greg Myers (USIO) request, on a formal report by Greg Myers on the outcome of the two IODP-related conferences on deep drilling that addressed Mohole drilling and the establishment of a Deep Carbon Observatory (EDP Consensus 1001-16);
- (8) Based on the report on the Moho drilling workshops, provide a final response to the SPC Consensus 0708-30 that requested the EDP to initiate discussions concerning technological needs required for achieving ultra-deep drilling targets such as the Moho;
- (9) Review the new science plan with respect to engineering development issues;
- (10) Provide input as to how to integrate engineering into the new science advisory structure; and
- (11) Meet with representatives of the European Union coordination project Deep Sea and Sub Seafloor Frontier (DS<sup>3</sup>F)

Routing: IODP-MI, IWG+, SPC, STP, PMOs

Priority: High

Background: DS<sup>3</sup>F meeting – The technology planning group (Work Package 7 – Mission-specific sub-seafloor sampling) from the EU coordination project Deep Sea and Sub Seafloor Frontier (DS<sup>3</sup>F) has proposed to meet with the EDP at its January 2011 meeting in Grenoble, France. The EDP sees great potential for synergies between the future drilling program and DS<sup>3</sup>F, and potentially a new type of capitalization for engineering development within the new scientific drilling program by ECORD in addition to ESO. This would be a source of new funding, outside of that contributed by ECORD to the ocean drilling program.

**EDP Consensus 1007-05: Offer of an Engineering Contribution to the SPWC for Inclusion in the New Science Plan**

With reference to EDP Action Item 1001-01 and STP Consensus Statement 1003-01, the EDP restates its offer to summarize the critical engineering issues integral to the future scientific drilling program for inclusion in the new science plan. Should the offer be accepted, the EDP would appreciate guidance as to the length and timing of the contribution.

Routing: IODP-MI, SPWC, IWG+, SPC, STP

Priority: High

**EDP Action Item 1007-01: Technical Review of Draft Science Plan**

The EDP will provide a technical review of the new science plan when it is publicly released in late summer of 2010. Contact person for this is Maria Ask.

Routing: IODP-MI, SPWC, IWG+, SPC, STP  
 Priority: High

**EDP Consensus 1007-06: Preliminary EDP Response to SAS Transition Questions Posed by the SPC Chair – Part 1**

The EDP responds to the first of three SAS transition questions posed by SPC Chair Gabriel Filippelli:

1. How are current projects progressing, and how to complete them?

The EDP has identified ten items of unfinished business and one new item of business that have significant implications for engineering development that require an additional face-to-face EDP meeting. These eleven items are listed in EDP Consensus 1007-04.

Routing: SPC, IODP-MI  
 Priority: High

**EDP Consensus 1007-07: Preliminary EDP Response to SAS Transition Questions Posed by the SPC Chair – Part 2**

The EDP responds to the second of three SAS transition questions posed by SPC Chair Gabriel Filippelli:

2. What are friction points in current interactions that need to be improved?

- (1) Inadequate communication among SAS panels. Sending one liaison to each panel meeting is insufficient to create an effective means of communication;
- (2) Some scientists view engineering development as a competitor for scant resources;
- (3) EDP is not permitted to do a technical review of scientific drilling proposals early enough in the proposal review process; the consequence is that proposals with inadequate scoping create an unnecessary and avoidable burden to the SSEP and SPC panels, and potentially compromise the scientific objectives;
- (4) EDP has been unable to access drilling proposals so it can fulfill its mandate of providing a Technology Roadmap based on active drilling proposals;
- (5) An history of ad hoc engineering in the drilling program; and
- (6) Reorganization of the IODP-MI offices and associated reduction in staff resulted in loss of continuity and corporate memory. This has hampered implementation of an engineering development plan and slowed forward momentum towards integrating engineering development into the current and future drilling programs.

Routing: SPC, IODP-MI  
 Priority: High

**EDP Consensus 1007-08: Preliminary EDP Response to SAS Transition Questions Posed by the SPC Chair – Part 3**

The EDP responds to the third of three SAS transition questions posed by SPC Chair Gabriel

Filippelli:

3. What are the key aspects that need to carry forward, and how best can they be carried forward?

- (1) The forward-looking and proactive function of the EDP should continue in the new structure within the entity that reports directly to IODP-MI;
- (2) Collection of engineering and technical information outside of IODP from industry, academic colleagues and professional contacts;
- (3) Unbiased review of the engineering and technical requirements of IODP, assessment of technical requirements of science proposals, review of engineering and engineering development by the Implementing Organizations and provision of advice to the IOs by an independent standing committee with institutional memory
- (4) Provision of independent, overarching long-term thinking towards the coupling of engineering development to the science plan;
- (5) Regularly scheduled face-to-face meeting of engineers with backgrounds and experience appropriate to IODP engineering and technical requirements; there is no substitute for face-to-face meetings;
- (6) Continued improvement of the visibility of the Technology Roadmap, the engineering development proposal process, and stimulation of high-quality Engineering Development proposals that address critical project-based and long-term infrastructural needs of the drilling program;
- (7) Maintenance and improvement of the Technology Roadmap and its prioritization; the Technology Roadmap is a living and evolving document;
- (8) Continued development of an implementation plan for the Technology Roadmap;
- (9) Perpetuation of corporate memory with respect to engineering and technology development – especially what has been attempted, what has succeeded and why, and what has failed and why

#### **How to carry forward?**

- (1) Ensure continuity and increased funding to maintain progress towards creating a robust engineering development component within the IODP and the new scientific drilling program;
- (2) Insist that proponents of drilling proposals take responsibility for assessing technical and operational feasibility of their research before submission of the proposal;
- (3) Engineering should have a more formal and constitutionally established role in the new scientific drilling program to ensure that the needed support of engineering to achieve new science goals and improve cost- and time efficiency.

Routing: SPC, IODP-MI

Priority: High

#### **Consensus 1007-09: Critical Importance of Engineering Development for Achieving Scientific Drilling Goals**

The EDP recognizes that engineering advancements have the potential for providing new and improved ways to achieve the science goals of the IODP and future scientific ocean drilling, such as investigation of the deep biosphere, obtaining improved core quality and quantity, and exploring the seismogenic zone and other deep drilling targets. In addition,

technological advancements may lead to more cost- and time-effective, safer, and environmentally friendlier operations.

The new program will be more effective in reaching its science goals engineering development is on par with science within the new program. The EDP is concerned that the importance of the engineering is not fully appreciated because engineering development has not been included explicitly in the planning efforts for the new program. For example, engineering expertise was not included in the Second Triennium review, IWG+ or the SPWC. New science proposals have *always followed* the introduction of new capabilities - e.g., APC, CORKS

Routing: SPC, IODP-MI, SASEC, IWG+, SPWC, STP

Priority: High

**EDP Consensus 1007-10: Sustained Funding and the Potential for Expanded Collaboration and Partnerships for Support of Engineering Development**

In order to achieve some of the critical scientific breakthroughs that require advances in engineering and technology, a long-term commitment by the IODP and its successor for sustained funding and management of engineering development projects is required. Establishing partnerships with other science programs, governmental agencies, and industry can enhance this commitment to long-term engineering development.

Routing: IODP-MI, SPWC, IWG+, Lead Agencies

Priority: High

Background: DS<sup>3</sup>F meeting is an example

**EDP Consensus 1007-23: IODP-MI Allocation of at-sea Engineering Testing Time to Active Engineering Development Projects**

The EDP strongly endorses allocation of at-sea engineering testing time to the SCIMPI and MDHDS engineering development projects prior to the end of the current drilling program in order to adequately test and qualify these 3<sup>rd</sup> party tools for future use on IODP platforms.

Routing: IODP-MI, IOs, SPC, STP

Priority: High