# **IODP Science Planning Committee**

# 17<sup>th</sup> Meeting, 28-31 March 2011 BGS, Edinburgh, Great Britain

#### Science Planning Committee - SPC

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Donna Blackman Scripps Institution of Oceanography, USA
Javier Escartin CNRS Institut de Physique du Globe
Baekyo Cheong (non-voting) Kangwon National University, Korea

Robert Dunbar Stanford University

David Feary <sup>a</sup> National Academy of Sciences, USA

Gabriel Filippelli (Chair) Indiana University-Purdue University Indianapolis, USA

Gretchen Früh-Green ETH Zurich, Switzerland
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

Heiko Pälike National Oceanography Center, Southampton

Ashok Singhvi Physical Research Laboratory, India

David Smith University of Rhode Island

Ruediger Stein Alfred-Wegener-Institute for Polar and Marine Research, Germany

Ryuji Tada University of Tokyo

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 Robert Dunbar

# Liaisons, Guests, and Observers

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Jamie Allan National Science Foundation (NSF), USA

Henk Brinkhuis (SSEP Co-Chair) Utrecht University
Peter Clift (SSP liaison) University of Aberdeen

David Divins (USIO) Ocean Drilling, The Consortium for Ocean Leadership, USA
Nobuhisa Eguchi Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan

Kevin Johnson IODP Management International Issa Kagaya IODP Management International Barry Katz (EPSP Chair) Chevron Corporation, USA

Shin'ichi Kuramoto Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Hans Christian Larsen IODP Management International 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, Consortium for Ocean Leadership, USA

Marc Reichow University of Leicester

Ian Ridley National Science Foundation (NSF), USA

Jeff Schuffert
U.S. Science Support Program, Consortium for Ocean Leadership, USA
Shigo Shibata
Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Sean Toczko Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan

Shouting Tuo (IODP-China) Tongji University, China

William Ussler (EDP Chair) Monterey Bay Aquarium Research Institute, USA

Thomas Wiersberg International Continental Scientific Drilling Program (ICDP)

Michiko Yamamoto IODP Management International

# **IODP Science Planning Committee**

17<sup>th</sup> Meeting, 28-31 March 2011 BGS, Edinburgh, Great Britain

# **Executive Summary (Ver. 2.0)**

Monday 28 March 2011 08:30-17:30

#### 1. Introduction

1.3. Approve SPC meeting agenda – highlight action items

**SPC Consensus 1103-01**: The SPC approves the agenda for its 17<sup>th</sup> meeting on 28-31 March 2011 in Edinburgh, UK.

1.4. Approve last SPC meeting minutes

**SPC Consensus 1103-02:** The SPC approves the minutes for its  $16^{th}$  meeting on 30 August - 1 September 2010 in La Jolla, USA .

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

#### SPC Consensus 1103-03:

The IODP community is deeply saddened by the devastating effects of the March 11, 2011 Tohoku earthquake and resulting tsunami in Japan, and expresses its deepest concerns for the well being of all affected by this natural disaster.

The SPC recognizes the scientific challenges and responsibilities that this earthquake has created regarding the understanding about the nucleation of great earthquakes, associated tsunami, and submarine slide generation, to contribute to geohazard mitigation. Spearheaded by ICDP, past workshops have addressed the scientific rationale for rapid response drilling into large slip fault zones that have recently ruptured. The existing deliberations through international workshops to determine the time frame for rapid response drilling suggests that planning for this must be initiated immediately. Based on this scientific framework, the SPC therefore recommends that IODP in conjunction with colleagues from ICDP, contribute intellectual capacity by forming a detailed planning group (DPG) to provide a scientific assessment of the

viability, strategy, and time period for a potential rapid response drilling effort within the region affected by the Tohoku mega-earthquake.

The DPG will be populated and supported by IODP as per IODP policies, recognizing the especially strong knowledge base, ongoing activities, and interest held by Japanese researchers and institutions.

The DPG will follow these term of reference:

- 1) Evaluate the overall scientific merits and feasibility of a rapid response drilling project
- 2) Assuming (1) suggests a strong scientific case can be made, outline a research and drilling plan including required pre-drilling survey data, draft locations and depths of drilling, and hole and observatory design.

To accomplish this in a timely manner, the DPG needs to be formed by April 15, 2011 and submit a first, interim report to IODP-MI by June 8, 2011. If justified by the interim report, a full proposal for drilling will be requested for submission with a tentative deadline of August 1, 2011. The DPG can work in part through electronic means, but at least one planning DPG meeting is anticipated to take place as per general IODP policies.

#### 6. IODP SAS panel reports

6.5. EDP

**SPC Consensus 1103-04:** SPC would like to acknowledge and thank the EDP for their efforts and accomplishments in engineering development and for providing a long-term perspective for the new program.

**SPC Consensus 1103-05:** SPC endorses the EDP's efforts to foster industry involvement in the new program and is particularly enthusiastic about the suggestion to facilitate industry training through IODP platforms and operations.

# 7. International Continental Scientific Drilling Program

7.1. ICDP report and discussion of co-reviewed science

**SPC Consensus 1103-06:** The Science Planning Committee (SPC) of the IODP recognizes significant potential synergy in research goals of IODP and ICDP. The SPC seeks to improve collaboration between these scientific drilling programs and minimize any potential roadblocks to future research collaborations, particularly for onshore-offshore transects. Thus, a short meeting of a task force is proposed, to include representatives of IODP-SPC (Chair and one member) and IODP's management and representatives of ICDP-SAG/EC and ICDP management. The goal of this task force will be to develop a structure to promote collaboration on projects with common goals, and to improve communication on relevant proposals under consideration. The ultimate goal will be joint project development, coordination of proposal actions, and joint funding as appropriate.

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#### 9. Proposal Transfer Approach

**SPC consensus 1103-07:** SPC forwards SSEP proposals in Tier1 to the new program.

#### **10. SSEP Proposal Summaries**

10.1 Deep Biosphere and Subsurface Ocean

**SPC Motion 1103-08:** The SPC does not forward Proposal 701-Pre2 Great Australian Bight Deep Biosphere to the new program.

Murray moved, Früh-Green seconded, 15 in Favor (Blackman, Escartin, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 1 abstained (Feary), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-09:** The SPC does not forward Proposal 743-Full Gulf of Mexico Hydrate Dynamics to the new program.

John moved, Escartin seconded, 12 in Favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Maekawa, Murray, Smith, Stein, Umino, van der Pluijm), 3 opposed (Kasahara, Takada, Yamazaki), 1 abstained (Tada), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-10:** The SPC does not forward Proposal 764-Pre TAG II Hydrothermal

System to the new program.

Murray moved, Blackman seconded, 10 in favor (Blackman, Escartin, Maekawa, Murray, Smith, Stein, Tada, Takada, Umino, Yamazaki), 6 opposed (Feary, Filippelli, Früh-Green, John, Kasahara, van der Pluijm), 0 abstained, 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-11:** The SPC does not forward Proposal 685-Full Ligurian Margin Borehole Observatory to the new program.

Murray moved, Smith seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-12:** The SPC does not forward Proposal 715-Full Mediterranean Landslides to the new program.

Murray moved, Früh-Green seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

10.2 Environmental Change, Processes and Effects

**SPC Motion 1103-13:** The SPC does not forward Proposal 645-Full3 North Atlantic Gateway to the new program.

Blackman moved, Murray seconded, 13 in favor (Blackman, Escartin, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Tada, Takada, Umino, Yamazaki), 0 opposed, 3 abstained (Feary, Pälike, van der Pluijm), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-14:** The SPC does not forward Proposal 702-Full Southern African Climates to the new program.

Blackman moved, Escartin seconded, 9 in favor (Blackman, Escartin, Früh-Green, John, Maekawa, Tada, Takada, Umino, Yamazaki), 6 opposed (Feary, Filippelli, Kasahara, Murray, Pälike, Smith), 1 abstained (van der Pluijm), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-15:** The SPC does not forward Proposal 771-Full Iberian Margin Paleoclimate 2 to the new program.

Blackman moved, John seconded, 8 in favor (Blackman, Escartin, Früh-Green, John, Kasahara, Tada, Umino, Yamazaki), 7 opposed (Feary, Filippelli, Murray, Pälike, Smith, Takada, van der Pluijm), 1 abstained (Maekawa), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-16:** The SPC does not forward Proposal 656-Full4 Belize Margin Paleoclimate and Tectonics to the new program.

Murray moved, Escartin seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-17:** The SPC does not forward Proposal 683-Full East Asia Topography and Monsoon to the new program.

Blackman moved, John seconded, 15 in Favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Takada, Umino, van der Pluijm, Yamazaki), 1 abstained (Tada), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-18:** The SPC does not forward Proposal 710-Pre2 Gulf of Corinth Rift to the new program.

John moved, Escartin seconded, 16 in Favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-19:** The SPC does not forward Proposal 737-Full2 North Sea Cenozoic Climate Change to the new program.

Smith moved, Früh-Green seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-20:** The SPC does not forward Proposal 746-Pre Arctic Mesozoic Climate to the new program.

Smith moved, Escartin seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-21:** The SPC does not forward Proposal 615-Full2 NW Pacific Coral Reefs to the new program.

Escartin moved, Blackman seconded, 4 in favor (Blackman, Escartin, Murray, Smith), 11 opposed (Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Pälike, Tada, Takada, Umino, van der Pluijm), 1 abstained (Yamazaki), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-22:** The SPC does not forward Proposal 730-Pre2 Sabine Bank Sea Level to the new program.

Früh-Green moved, John seconded, 3 in favor (Blackman, Escartin, Früh-Green), 13 opposed (Feary, Filippelli, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-23:** The SPC does not forward Proposal 667-Full NW Australian Shelf Eustasy to the new program.

Früh-Green moved, Escartin seconded, 4 in favor (Escartin, Früh-Green, Kasahara, Yamazaki), 9 opposed (Feary, Filippelli, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino), 3 abstained (Blackman, John, van der Pluijm), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-24:** The SPC does not forward Proposal 750-Pre Beringia Sea Level History to the new program.

Blackman moved, Escartin seconded, 6 in favor (Blackman, Escartin, Maekawa, Tada, Umino, Yamazaki), 8 opposed (Feary, Filippelli, Kasahara, Murray, Pälike, Smith, Takada, van der Pluijm), 2 abstained (Früh-Green, John), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-25:** The SPC does not forward Proposal 760-Pre SW Australia Margin Cretaceous Climate to the new program.

Blackman moved, Früh-Green seconded, 6 in favor (Blackman, Escartin, Früh-Green, Tada, Takada, Yamazaki), 10 opposed (Feary, Filippelli, John, Kasahara, Maekawa, Murray, Pälike, Smith, Umino, van der Pluijm), 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

#### 10.3 Solid Earth Cycles and Geodynamics

**SPC Motion 1103-26:** The SPC does not forward Proposal 623-Full4 Ontong Java Plateau to the new program.

Früh-Green moved, Blackman seconded, 14 in favor (Blackman, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, Yamazaki), 1 opposed (van der Pluijm), 1 abstained (Feary), 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-27:** The SPC does not forward Proposal 640-Full Godzilla Mullion to the new program.

Blackman moved, Smith seconded, 9 in favor (Blackman, John, Kasahara, Maekawa, Murray, Smith, Tada, Takada, Umino), 5 opposed (Filippelli, Früh-Green, Stein, van der Pluijm, Yamazaki), 2 abstained (Feary, Pälike), 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-28:** The SPC does not forward Proposal 718-Pre Pacific Plate Petit Spot Volcanism to the new program.

Blackman moved, Smith seconded, 11 in favor (Blackman, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, Yamazaki), 5 opposed (Feary, Filippelli, Früh-Green, John, van der Pluijm), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-29:** The SPC does not forward Proposal 725-Full NE Atlantic Volcanic Rifted Margin to the new program.

Blackman moved, John seconded, 14 in favor (Blackman, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, Yamazaki), 2 opposed (Feary, van der Pluijm), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li,

Singhvi, Webster).

The motion passed.

**SPC Motion 1103-30:** The SPC does not forward Proposal 727-APL Afar Mantle Plume Dispersion to the new program.

van der Pluijm moved, Früh-Green seconded, 15 in favor (Blackman, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 1 opposed (Feary), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-31:** The SPC does not forward Proposal 729-Pre Western Lord Howe Rise Extension to the new program.

Kasahara moved, Murray seconded, 9 in favor (Früh-Green, Kasahara, Maekawa, Murray, Smith, Tada, Takada, Umino, Yamazaki), 7 opposed (Blackman, Feary, Filippelli, John, Pälike, Stein, van der Pluijm), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-32:** The SPC does not forward Proposal 766-APL Essaouira Seamount Hotspot to the new program.

John moved, van der Pluijm seconded, 15 in favor (Blackman, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 1 opposed (Feary), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-33:** The SPC does not forward Proposal 735-Full South China Sea Tectonic Evolution to the new program.

Kasahara moved, Pälike seconded, 4 in favor (Kasahara, Maekawa, Umino, Yamazaki), 12 opposed (Blackman, Feary, Filippelli, Früh-Green, John, Murray, Pälike, Smith, Stein, Tada, Takada, van der Pluijm), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Consensus 1103-34**: SPC adopts "not forward" for the wording of the motions related to SSEP proposals.

## 13. Global ranking of proposals I

#### 13.1 Select proposal pool to rank

**SPC Consensus 1103-35**: The SPC will include in the MSP ranking pool 3 of the proposals reviewed at this meeting.

**SPC Consensus 1103-36:** The SPC will not consider proposal 698-Full3 Izu-Bonin-Mariana Arc Middle Crust for platform-based ranking during this meeting, because it is the only one Riser proposal in the SPC pool. Instead, SPC will decide to forward or not to forward it to the Operations Task Force (OTF).

**SPC Consensus 1103-37:** The SPC will include in the Non-Riser ranking pool 5 of the proposals reviewed at this meeting.

#### 14. Presentation and discussion of APLs

**SPC Consensus 1103-38:** The SPC deactivates proposal 757-APL South Pacific Eocene-Oligocene and 775-APL West Pacific Warm Pool Paleoceanography.

**SPC Motion 1103-39:** The SPC deactivates proposal 772-APL2 North Atlantic Crustal Architecture.

John moved, Kasahara seconded, 7 in favor (Früh-Green, John, Kasahara, Maekawa, Stein, van der Pluijm, Yamazaki), 8 opposed (Blackman, Escartin, Feary, Filippelli, Murray, Smith, Takada, Umino), 1 abstained (Tada), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion failed.

**SPC Consensus 1103-40:** The SPC forwards the following APL proposals to the Operations Task Force (OTF) for potential scheduling.

769-APL2 Costa Rica Crustal Architecture

779-APL Atlantis Massif Lithosphere Hydration

783-APL Indian Monsoon History

785-APL Gulf of Mexico SCIMPI Field Trial

786-APL Alaskan Glacial and Ocean History

Thursday 31 March 2011 08:30-17:30

# 15. Global ranking of proposals II

15.3. Select ranked proposals to forward to OTF

**SPC Motion 1103-41:** The SPC forwards proposal 698-Full3 Izu-Bonin-Mariana Arc Middle Crust to the Operations Task Force (OTF).

Escartin moved, Smith seconded, 9 in favor (Filippelli, Kasahara, Maekawa, Smith, Stein, Tada, Takada, Umino, Yamazaki), 3 opposed (Blackman, Feary, van der Pluijm), 4 abstained (Escartin, Früh-Green, John, Murray), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-42:** The SPC forwards the top two ranked Non-Riser proposals, 595-Full4 Indus Fan and Murray Ridge and 697-Full3 Izu-Bonin-Mariana Rear-Arc to the Operations Task Force (OTF).

van der Pluijm moved, Blackman seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki ), 0 opposed, 0 abstained, 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

#### **SPC Motion 1103-43:** The SPC deactivates proposal 669-Full3 Walvis Ridge Hotspot.

Früh-Green moved, John seconded, 15 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein, Takada, Umino, van der Pluijm, Yamazaki ), 0 opposed, 1 abstained (Tada), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

Seafloor Processes and 672-Full3 Baltic Sea Basin Paleoenvironment to the Operations Task Force (OTF).

van der Pluijm moved, Murray seconded, 15 in favor (Blackman, Clift, Feary, Filippelli, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 3 in COI (Escartin, Früh-Green, John), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-45:** The SPC encourages ESO to begin scoping 672-Full3 Baltic Sea Basin Paleoenvironment and 758-Full2 Atlantis Massif Seafloor Processes as soon as viable.

van der Pluijm moved, Murray seconded, 15 in favor (Blackman, Clift, Feary, Filippelli, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 3 in COI (Escartin, Früh-Green, John), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

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#### 18. Review of motions and consensus items

**SPC Consensus 1103-46:** The SPC expresses their enthusiastic appreciation to Mike Browne, Bob Gatliffe, and David McInroy for suggesting, organizing, implementing, and leading the terrific field trip to the world famous Dunbar beach and Siccar Point geologic locations. The organizers even coordinated the weather, delivering 50 degree (Fahrenheit!) temperatures and predominantly sunny skies. In addition to channeling the spirit and voices of Hutton, Playfair, and Hall, our guides Mike, Bob, and David provided their own scientific, social, and historical context to the thoroughly enjoyable excursion (and lunch).

**SPC Consensus 1103-47**: SPC very much appreciates the excellent job that David, Robert, Eileen and others have done in planning and carrying out this meeting. Your skilled and cheerful execution of the job as well as your influence with the weather gods have made our days here bonnie. The ambience in the lunch room and opportunity to explore of local cuisine have been wonderful.

# **IODP Science Planning Committee**

17<sup>th</sup> Meeting, 28-31 March 2011 BGS, Edinburgh, Great Britain

**DRAFT** minutes (Ver. 2.0)

Monday 28 March 2011 08:30-17:30

#### 1. Introduction

## 1.1. Call to order and self-introductions

The Science Planning Committee (SPC) chair Gabriel Filippelli called the meeting to order at 08:30. All meeting participants introduced themselves.

# 1.2. Welcome and meeting logistics

Local meeting host David McInroy welcomed the meeting participants to British Geological Survey. He outlined the logistics for the meeting.

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

Filippelli summarized the major agenda items for the meeting: (1) Review and ranking the last set of proposals in this SAS structure by platform, (2) Discussion and consideration of SSEP proposals to determine those that will transfer to the new SAS, (3) Regular agency, IODP-MI, and IO reports, (4) OTF discussion, (5) Potential rapid response proposals. Filippelli asked if there were any changes to the agenda. No changes were suggested.

**SPC Consensus 1103-01**: The SPC approves the agenda for its 17<sup>th</sup> meeting on 28-31 March 2011 in Edinburgh, UK.

# 1.4. Approve last SPC meeting minutes

Filippelli asked for comments or clarifications/changes to the draft minutes from the 16th SPC meeting (August 2010; La Jolla, USA). Blackman commented that she found minor typographical errors and she would send it to MI. No other comments were received. The committee approved the minutes by consensus.

**SPC Consensus 1103-02:** The SPC approves the minutes for its 16<sup>th</sup> meeting on 30 August - 1 September 2010 in La Jolla, USA.

### 1.5. Items approved since August 2010 meeting

No item was approved since the last SPC meeting.

## 1.6. SPC procedures and protocol

## 1.6.1. Terms of reference, Robert's Rules, ranking/voting procedures

Filippelli referred to the SPC terms of reference and noted that a SPC decision requires either a consensus or an affirmative vote of at least two-thirds of the committee. He also pointed out that a quorum comprises two-thirds of the committee. He explained that SPC meetings are conducted according to Robert's Rules of Order and listed some of salient points from this set of rules.

## 1.6.2. Meeting organization and design of discussions

No discussion on this topic.

# 1.6.3. Conflict-of-interest policy and participants' declarations

Filippelli reviewed the conflict-of-interest (COI) procedures for the meeting. The SPC members and other meeting participants declared the direct or potential indirect COIs regarding potential discussions; the chair's ruling follows each member's declaration(s):

Name	Declaration	Ruling by Filippelli	
Blackman	779-APL Atlantis Massif Lithosphere Hydration	Conflict for agendum 14	
Escartin	640-Full Godzilla Mullion	Conflict for agendum 10.3	
		Conflict for agendum 11.1	
		and MSP discussion at	
	758-Full2 Atlantis Massif Seafloor Processes	15.3	
		Conflict for agendum 11.1	
Früh-		and MSP discussion at	
Green	758-Full2 Atlantis Massif Seafloor Processes	15.3	
	551-Full Hess Deep Plutonic Crust	Conflict for agendum 12	
John	551-Full Hess Deep Plutonic Crust	Conflict for agendum 12	
		Conflict for agendum 11.1	
		and MSP discussion at	
	758-Full2 Atlantis Massif Seafloor Processes	15.3	
	659-Full Newfoundland Rifted Margin	Conflict for agendum 12	
Kasahara	640-Full Godzilla Mullion	No conflict	
Maekawa	505-Full5 Mariana Convergent Margin	Conflict for agendum 12	
Pälike	661-Full2 Newfoundland Sediment Drifts	Conflict for agendum 12	
Smith	698-Full3 Izu-Bonin-Mariana Arc Middle Crust	No conflict	
Stein	645-Full North Atlantic Gateway	Conflict for agendum 10.2	
	708-Full2 Central Arctic Paleoceanography	Conflict for agendum 10.2	
	746-pre Arctic Mesozoic Climate	Conflict for agendum 10.2	
Tada	605-Full2 Asian Monsoon	Conflict for agendum 12	
	705-Full2 Santa Barbara Basin Climate Change	Conflict for agendum 12	
	783-APL Indian Monsoon history	Conflict for agendum 12	
Umino	522-Full5 Superfast Spreading Crust	Conflict for agendum 12	
Webster	716-Full2 Hawaiian Drowned Reefs	Conflict for agendum 12	

Yamazaki	695-Full2 Izu-Bonin-Mariana Pre-Arc Crust	No conflict		
Brinkhuis	658-Full2 North Atlantic Volcanism and Paleoclimate	Conflict for agendum 10.2		
	708-Pre2 Central Arctic Paleoceanography	Conflict for agendum 10.2		
	549-Full6 Northern Arabian Sea Monsoon	No conflict		
Clift	537-CDP Costa Rica Seismogenesis Project Overview	Conflict for agendum 12		
	537A-Full5 Costa Rica Seismogenesis Project Phase A	Conflict for agendum 12		
	595-Full3 Indus Fan and Murray Ridge	Conflict for agendum 11.3		
	618-Full3 East Asia Margin	Conflict for agendum 12		
	695-Full2 Izu-Bonin-Mariana Pre-Arc Crust	Conflict for agendum 12		
	783-APL Indian Monsoon history	Conflict for agendum 14		
Kuramoto	537B-Full4 Costa Rica Seismogenesis	No conflict		
Malone	567-Full4 South Pacific Paleogene	No conflict		
Ussler	635-Full3 Hydrate Ridge Observatory	Conflict for agendum 10.1		

## 2. Agency reports

#### 2.1. IWG+

Catherine Mével provided IWG+ report. IWG+ is tasked with planning post-2013 drilling program. The members are 3 co-chairs (R. Batiza (NSF), S. Shibata (MEXT), C. Mével (ECORD)), representatives from all funding agencies currently participating in IODP or interested in participating in the future program, and observers from IODP-MI, IOs, scientific community (SASEC chair and vice-chair). Meeting is held every six months in association with SASEC meetings. Its first meeting was in Washington DC, June 2009. The last meeting was in Miami, January 2011. IWG+ develops a list of "points of agreement" that will be the basis for the new MOU among the program partners. Most decisions have been made. She explained on each item of the agreement.

- 1. Multinational Program Architecture and Financial Contribution (position paper 1)
- The POC/SOC distinction will be abolished.
- Platform Providers will cover all costs associated with operating their platforms. Money for integrative activities will go to CMO. Comingled funds will need to pay for integrative activities plus a minimum of \$10M to secure riser operations of Chikyu for the new program.
- Lead Agencies (> US\$ 50 M, including 1 M to the commingled funds) / Platform Providers (> US\$ 20 M, including 6 M to the commingled funds / Members (> US\$1 M)
- 1/3 rights to each of the Lead Agencies, 1/3 to others
- 2. Program Management and Money Flow (position paper 2)
- IODP-MI will continue as CMO through the transition to the new program. NSF will remain the banker during that period. Cooperative agreement to be signed for 5 years with IODP-MI. After that period, CMO will be open for competition
- The CMO will continue to conduct the following integrative activities: (1) core activities: planning (including support of the SAS), core sample curation, data management,

publication and outreach; (2) other activities: recruitment of new members, linkages to other programs, seeking new partnership, engineering development.

- The program will be managed by a Program Governing Board (PGB). The PGB will be the executive body of the new program management structure. The PGB will be responsible for the effective delivery of the Program's Implementation Plan with the available resources. Members of the PGB will be the LAs and the other funding agencies. The PGB also will have liaisons from the two major science committees (PEP and SIPCOM), the Implementing Organizations (IO) and the CMO.
- 3. SAS structure and transition plan (position papers 3 and 4)
- The current three-tier system of SSEP, SPC and SASEC will be simplified into a two-tier system (PEP and SIPCOM) with essential service panels. SIPCOM, in coordination with the CMO, is to report directly to the PGB. The details of the SAS and the ToRs of the SAS panels are being finalized by IODP-MI and SASEC.
- The current SAS structure is to be replaced by the new SAS structure in order of precedence from around June 2011.
- Overall principles of the TORs for the new SAS structure have been approved by SASEC and finally approved by IWG+.
- The current IWG+ structure is to approve the new MOU, accordingly the IWG+ and the Council need to be in place until September 2013, along with the pilot PGB and new SAS structure. The PGB will replace the IODP Council in the new program.

Mével showed the timeline for New Science Plan.

Sep 2009: INVEST

Fall 2009: SPWC appointed by IWG+ on SASEC recommendation

Jun 2010: First draft submitted to SASEC/IODP-MI

Sep 2010: Posted on the IODP website for comments/ Science editor appointed

Jan 2011: Second draft submitted to SASEC/IWG+

Feb 2011: Third draft goes to "blue ribbon committee"

Apr 2011: Response from "blue ribbon committee"

May 2011: Final draft

Mével noted that the new SAS needs to start working as soon as possible to be ready for the first expeditions in October 2013. Currently the new SAS panels are planned to be appointed this summer/fall.

Richard Murray asked if the SIPCom would be the executive community of SAS, not the executive authority. Mével replied that it was correct and she added that the authority means PGB and that it deals with money. The PGB communicates with the Central Management Office about money and gives them budget guidelines, while the two science panels and OTF develop the annual plan. The SIPCom reports to the PGB and the PGB

makes the final approval of the annual science plan. Jamie Allan commented that there need to be legal means of getting the money to the Central Management Office and likely it will be under cooperative agreement overseen by NSF. The important point is that all the major key players are at the table when annual science plan is discussed. Mével added that CMO would have to interact directly with SIPCom and PEP.

Hans Christian Larsen asked if CMO develops the program plan to submit to PGB. Mével answered that CMO and SIPCom work together. Allan commented that there was a lot of discussion whether SIPCOM should report directly to the PGB instead of reporting through the CMO to the PGB, with the opinion of the funding agencies being that SIPCOM should report directly to the PGB.

Heiko Pälike commented that the new structure does not sound simpler, because Mével said SASEC would go into PGB, so it means that the current SSEP—SPC—SASEC system will be just the same three tiers PEP-SIPCom-PGB system. Mével replied that PGB is not a new panel, but it is just giving more executive authority to the funding agencies. Filippelli explained that the executive authority function of SASEC will move into PGB, the scientific function of PEP and half of SPC will move into PEP, and the rest of SPC and SASEC scientific function will move into SIPCom. Allan commented that a problem with the current system is the complication in roles. It is hard to see who is the authority, IODP-MI Board of Governors or SASEC or funding agencies. There was a wish to bring as much scientific representation at the top level. And this was the reason why the formation of the PGB, so that the operators, the scientist, the people who provide the money, they all sit at the same table and collectively look at the program.

Larsen commented that the change in the structure sounds like the executive scientific authorities have just moved out of SAS and is now with the funding agencies. Allan commented that the executive authority was never in SAS. Mével commented PGB is not supposed to make scientific decisions. Allan replied that SIPCom makes the science decisions.

Donna Blackman commented that the flow diagram for annual science plan showed that CMO's input comes in OTF. She was concerned that the current broad representation of OTF could be lost. Allan agreed with Blackman and pointed out that the figure was missing very big arrows (to show intense communication) between SIPCom and CMO. Blackman was also concerned about PGB's input from SIPCom and CMO's role. Allan replied that CMO serves as an operator communicating with other entities. Mével noted that whole SAS depends on CMO as Allan indicated, but it is only for the development of science plan.

Ruiji Tada asked if PEP will inherit the function of nurturing proposals. Mével replied yes, but it will be limited. Filippelli added that SIPCom would be encouraging the workshops so that any nurturing occurs in community-based workshops.

Ruediger Stein commented that he heard that a major difference between PEP and SSEP is that PEP will give only one chance to revise proposal. Larsen replied that Stein was basically right and said he would address this in his presentation later.

## 2.2. MEXT (Japan)

Shinichi Kuramoto provided the MEXT report. He first reported on the damage in Japan from Tohoku Earthquake and Tsunami. The number of death or missing was 27048 as of 27<sup>th</sup> March. He showed the figures of the seismic observation and analysis from Tokyo

University.

Kuramoto reported on four Chikyu expeditions that were implemented June 2010 – March2011.

- 1. NanTroSEIZE Stage 3: Plate Boundary Deep Riser 1 (Exp.326)
- 2. Deep Hot Biosphere (Exp.331)
- 3. NanTroSEIZE Stage 2: Riserless Observatory (Exp.332)
- 4. NanTroSEIZE Stage 2: Subduction inputs 2 and Heat Flow (Exp.333)

He also reported that DONET (Dense Oceanfloor Network System for Earthquakes and Tsunamis) would be fully running from the next Japanese fiscal year (April 2011).

Kuramoto introduced MEXT activities regarding IODP promotion and science support. For IODP promotion, JAMSTEC established the team to facilitate feasibility study for IODP and they will fund post cruise research for Japanese scientists. For science support, JAMSTEC hosts three core schools for young scientists including non-Japanese. The schools are 1) Basic logging course 18-20 Feb. at British Geological Survey, 2) Basic core analysis course 10-13 Mar., 2011 at Kochi Core Center, 3) Isotope analysis course 14-16 Mar. at Kochi Core Center (6 participants).

There are two Japanese review committees (JAMSTEC and MEXT committee) to support and plan the future program. A JAMSTEC committee had three meetings in Jan., Feb. and Mar., and will have 2 meetings and one workshop by June 2011. This committee will discuss Chikyu drilling plans and an outreach strategy for Mohole Project. The MEXT committee will continue after June 2011. A Chikyu international workshop is planned in 2012.

Kuramoto explained a possible model for Chikyu operation, which is that funds could also come from industry and time commitment could change from the current 5 month per year to 50 months per 10 years allowing more flexibility.

Filippelli thanked Kuramoto for the extra report regarding the Tohoku-earthquake and the damage level in Japan.

## 2.3. NSF (U.S.)

Ian Ridley presented NSF report. He showed the organization chart of NSF and explained that the "Ocean Drilling Program" was under Marine Geoscience Section, and introduced people; Subra Suresh (NSF director), Tim Killeen (Geoscience Assistant Director), David Conover (Division Director) and Rodey Batiza (Section Head).

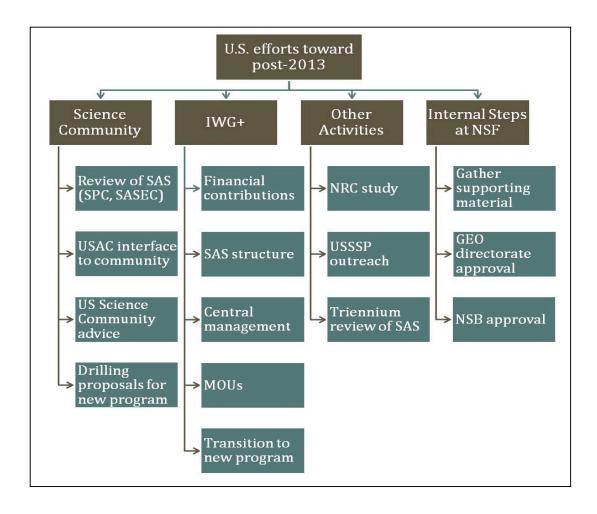
Ridley explained that NSF funds "JOIDES Resolution Operations and Integrated Activities", "Research Grants Program" and "Program Renewal" at NSF. In the 2010-11 Research Grants Program, NSF funded the following research; NantroSEIZE, Canterbury Basin, Wilkes Land, Bering Sea, North Pond, Godzilla Megamullion, RAPIDS. The following proposals are under review; South Pacific Gyre, Cascadia Hydrates, Canterbury Basin, Wilkes Land, NantroSEIZE, Great Barrier Reef, Mohole, Site Surveys.

Jamie Allan continued the NSF report, focusing on the budget. NSF is still operating under Continuing Resolution (CR) and CR funding runs through April 8. GEO Assistant Director

Killeen has assured that no program will receive greater than 3% cut. President's budget for fiscal year 2011 could have a \$3 million increase. There is a modest increase from fiscal year 2010 for JR operations.

Allan moved to the next subject, IODP renewal. The GEO front office determined that additional NSF control review is needed. Review will be overseen by GEO AD Killeen and OCE Division Director Conover. A subcommittee of GEO Advisory Committee will conduct review with mostly external membership. The uppermost NSF management wishes to have strongest possible presentation to National Science Board (NSB) and Tim Killeen will do presentation to NSB from an US perspective with US interest. Allan sees the additional review as a positive development because Tim Killeen and David Conover see this program as valuable.

Allan showed a slide of efforts and activities as a timeline to prepare for post 2013 scientific ocean drilling.



Allan listed the reviews of current IODP; Two Triennium reviews, External review of JR scientific operations, Yearly Evaluations of Service and Financial Performance, Facility

Ratings of JOIDES Resolution, Business Systems Reviews by NSF Large Facilities Office, and Operational and Scientific Review of each IODP expedition. The business system reviews is a part of a movement towards developing best practices within the entire national science foundation. There is a large facilities office that is examining the business practices of first IODP-MI and then also USIO. Allan participated in the site visit to the Tokyo office and the large facilities team was exceptionally impressed with the diligence and the efforts of the Tokyo office.

Allan showed the NSF renewal timeline;

June 2011: New science plan published

July 2011: NRC Report published

Fall 2011: New SAS in place

Dec. 2011: AG-GEO subcommittee report

May 2012: Information item to NSB

Aug. 2012: Request for NSB approval

This time line will reflect IODP contract and legacy needs. NSF is aware of the needs to preserve the core, data and publications.

David Feary asked if the short-term shutdown of the government would have any effect on JR activities. Allan replied no. Feary asked what the modest increase in the JR budget would equate to in term of time and sea. Allan replied that it was hard to answer because JR burns about 10 tons of fuel in port, 20 tons on site, and 35 tons a day in transit, so more money equals more operations but it is not straightforward.

Gretchen Fruh-Green asked about the amount NSF pays for science support in IODP. Allan replied that the United States Science Support Program, which funds U.S. scientific participation in IODP, is funded at a rate of about \$7.5M/year. IODP research grants are supported by NSF at a rate varying from \$3-14M/year, depending on available funds and the amount of operations (current funding is closer to \$3M/year).

William Ussler asked what advantage the use of a Cooperative Agreement provides. Allan replied that the major advantage is the elimination of the contracting officer in between the NSF Program Officer and the organization providing services, allowing a closer working relationship.

Larsen asked if the operation efficiency is assessed based on the scientific perspectives. Allan replied that it is based on the program plan and an annual number.

#### **2.4. EMA (ECORD)**

Catherine Mével presented ECORD report. She introduced new ECORD chair, Mireille Perrin, and new ESSAC office in Granada from October in 2011 with new chair, Carlota Escutia.

Mével explained that ECORD funds will allow only one major MSP expedition before the end of the program.

As outreach activities in Europe, ECORD loaned core replicas, held IODP booths during national Earth Science meetings and organized the Victoria port call of the JOIDES Resolution. Joint IODP-ICDP booth in EGU 4-8 April 2011 was also planned.

Mével introduced ESSAC support activities: 1. Distinguished Lecturer Programme 2011 features Dominique Weiss (Univ. Vancouver, Canada), Helmut Weissert (ETH, Switzerland) and Kai-Uwe Hinrichs (MARUM, Germany), 2. Two ECORD summer Schools were held in 2011 (Urbino summer school in paleoclimatology, Bremen summer school on "Subseafloor fluid flow and gas hydrates"), and 3. ECORD grants for young scientists.

European Science Foundation (ESF) funds the Magellan workshop program, and two workshops were co-funded since the last SPC meeting:

- "GOLD (Gulf of Lion Drilling)" (October 20-22, 2010, Banyuls, France)
- "Geological carbon capture & storage in mafic and ultramafic rocks: Role of oceanic and continental scientific drilling" (January 08-12, /2011, Muscat, Sultanate of Oman)

The last co-funded workshop will be held this fall:

-"Arctic Ocean drilling and the site survey challenge" (November, 1-3, 2011, Copenhagen, Denmark)

The Magellan program ends this year and the future of ESF is under debate at the funding agency level. ECORD council is willing to find a way to continue supporting workshops at the ECORD level

"Deep sea and subseafloor frontier (DS3F)" coordinated by Achim Kopf is now to fund workshops and develop a road map for the next 15 years, but it needs to increase its visibility with respect to the EC. One of the DS3F workshops was "Improving technologies for subseafloor sampling and implementation" which was held in Grenoble, February 21-23, 2011. The agenda was the technological needs to address the DS3F science objectives, where Europe can play a leading role in technological development and possible avenues of funding.

In order to insure a smooth transition to the new program, CNRS will continue to host ESO during the first three years of the new program (2014-2016). No disruption in the current management system is expected. A business plan is being developed by EMA/ESO.

ECORD evaluation committee had the first meeting in Paris Feb 1-3 and visited the Bremen core repository, March 4. They will submit report by June 2011. ECORD evaluation report and the business plan will be handed to the funding agencies next summer.

ECORD is preparing for Arctic drilling that is a major theme of the NSP. There are currently ~8 proposals in the system. A workshop "Arctic Ocean drilling and the site survey challenge" will be held in Nov 1-3, Copenhagen.

Larsen commented that there would be a workshop in Fairbanks in June as well. Mével

replied that was news to her. Stein informed that it is a national conference on active margin research.

#### 2.5. MOST (China)

Shouting Tuo provided MOST report. He introduced the following 11 Chinese scientists who participated in expeditions.

318: S. Tuo, Tongji University

325: H. Jiang, Chinese University of Geosciences (Beijing)

327: F. Ji, Tongji University

329: X. Zhang, Ocean University of China; G. Zhang, Chinese Academy of Sciences

330: L. Chen, Nanjing University

331: S. Yang, Tongji University

333: S. Gao, Nanjing University

334: J. Zhu, Chinese Academy of Sciences

337: C. Liu, Nanjing University;

336: F. Wang: Shanghai Jiaotong University

There are two Chinese IODP proposals. One is 638-Full Carving the History of East Asia: East-Tilting Topography and East Asian Monsoon. The other is 735-Full Opening of the South China Sea and its implications for Southeast Asian tectonics since the late Mesozoic.

Shouting reported on the trend of National Natural Science Foundation of China, explaining that they are focusing on the South China Sea basin evolution, sediment response and deep biosphere. The total budget is 150 Million CNY (about 22 Million US\$). China feels that there should be more expeditions of interest to China to continue their involvement in IODP.

Ben van der Pluijm asked if there is any update on the Chinese ship. Shouting replied that the discussion has already started and most responses from high ranked people in MOST were positive, but not concluded yet.

Gretchen Früh-Green asked if the Chinese membership level could change in future. Shouting replied that China has the idea of increasing the contribution to IODP, but there are many objections in MOST, because they feel that IODP could not benefit China because there has been no expedition in Chinese waters except for the first two expeditions that were implemented just after China joined IODP. This is the reason why Chinese IODP needs more expedition in Chinese seas. Larsen asked if Shouting mentioned a university new to IODP. Shouting replied no and it was just an old member university but with a new name.

#### 2.6. KIGAM (KIGAM)

No KIGAM representative. No report.

#### 2.7. ANZIC (Australia/ New Zealand)

Jody Webster provided the ANZIC report. He explained that the ANZIC contribution consists of 25% = \$US1.4M from Australian IODP consortium (14 Universities and 3 Government agencies) and 5% =\$US0.28M from New Zealand IODP Consortium (5 universities and 1 Government agency). The Australian program will end in 2012 and New Zealand will end 2011. He also referred the instability of the exchange rate of AUS\$ to US\$, which also influence ANZIC contribution rate.

Webster introduced the following ANZIC activities.

- SW Pacific IODP Workshop (July 9, 2010, Canberra)
- Port call (December 2010, Auckland)
- Port call (February 2011, Auckland)

Webster showed ANZIC participation in expeditions. Chris Yeats (CSIRO) on the Chikyu Okinawa Trough (331) deep hot biosphere expedition as a petrologist (Sept-Oct 2010), Jill Lynch (Melbourne University) on the JR South Pacific Gyre Microbiology expedition (329) as a microbiologist (Oct-Dec 2010), Ben Cohen (Queensland University - igneous petrologist and David Buchs (Australian National University - volcaniclastic sedimentologist) on the JR Louisville Seamount Trail expedition (330) (Dec 2010-Feb 2011). Australians are accepted on three forthcoming JR expeditions (334, 335 and 336). IODP keeps Australians participation recently and in future, but no New Zealanders are involved.

ANZIC will host two workshops. One is Hikurangi Margin Workshop (at GNS Science in Gisborne, NZ, 1-5 August 2011), aiming to use ocean drilling to unlock the secrets of slow slip events off North Island of NZ in trench region, which was approved by IODP-MI at the last January SASEC meeting. The other is Indian Ocean Workshop (in Goa, 17-18 October 2011) aiming to build international scientific alliances and generating new ideas to provide wide exposure of IODP to the Indian science community.

Webster introduced a newcomer to ANZIC, Denise Kulhanek. She worked for IODP-MI and an oil industry in the Gulf of Mexico, and she also has experience in ODP expeditions. She will be involved in public relations and interactions with the media. Her background is in micropaleontology as a nannofossil specialist.

David Smith commented that he was surprised at the lack of New Zealander participation. He wondered whether ANZIC had considered doing a lecture series like the ECORD does in US. Webster replied that ANZIC had lectures trying to pick up someone from NZ for expeditions. Henk Brinkhuis agreed with Smith and added that whether involving New Zealanders or not depends on the scientific fields needed. Webster agreed with Brinkhuis.

# 2.7. MoES (India)

Ashok Singhvi provided the MoES report. He summarized new programs in India, which focus on climate change, paleoclimate, ocean technologies, tsunami early warning system, fisheries, and Antarctic Drilling. India sent scientists to IODP expeditions (Exp. 323, 322, 321, 318) and plans to send the future expeditions (Exp. 334, 335, 336). An IODP booth at AOGS-Hyderabad (July 2010) offered information on IODP-India and IODP-MI.

He presented the Indian IODP science plan and drilling themes in the Indian Ocean. He

summarized potential targets for India: Andaman Sea Barren island, Carlsberg, Rodriguez triple junction, Afanasy Nikitin Seamount, Laxmi ridge, Chagos-Laccadive ridge.

A workshop on Indian Ocean proposals is scheduled for Goa in October 2011 along with ANZIC and IODP-MI. The workshop proposal was submitted to IODP-MI in December 2010 and approved by SASEC in January 2011. Program details are being finalized now.

The Ministry of Earth Science India re-invites an SPC/PMO meeting in Goa during 2011-2012 at the National Centre for Antarctic and Ocean Research, with a field excursion in Deccan Plateau.

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

Hans Christian Larsen introduced Kevin Johnson as a new Science Director. Johnson is an Igneous Petrologist and geochemist. He spent two years at NSF overseeing the grants program. Larsen also introduced Noriko Olson who newly joined the IODP-MI Washington DC office from JAMSTEC. She takes care of travel and meeting coordination and communication between Tokyo and DC.

Larsen reported on the status of New Science plan. The deadline for comments from Blueribbon panel and from the community was March 26. The editorial meeting will start from 4<sup>th</sup> April in DC to implement the changes and prepare the final draft of the science plan. In the meeting, the science writer/editor Ellen Kappel, also participates. The final draft will be ready in May. SASEC and IWG+ would have to electronically review before printing by late May or early June. Another deadline is in mid-June when the US National Academy Science reviews the final version of the new science plan.

Ruediger Stein asked about the progress in preparing the short version (3-5 pages) of science plan. Larsen replied that the short version would be a 12-page document and the process would start after the current editorial work is done.

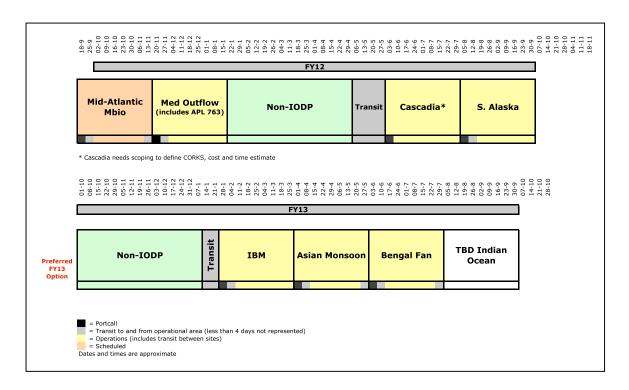
David Feary commented that the NRC report is due in July and he asked if it is achievable. Larsen replied that they would review the new science plan at their meeting in June and they have four weeks to write the final report. Feary noted that they also have an external review process that is conducted before they make it public. Ian Ridley added that the NRC contract was extended but he did not know when the extension finishes. Larsen pointed out that according to Feary and Ridley's information, the final NRC report may be delayed to August, but it would not impact the other timelines.

Donna Blackman asked if Larsen had an idea of the range of comments that came in. Larsen replied that he had not seen very radical criticism but only comments on the balances in themes. Writing of the new science plan is now at the stage of fine-tuning. For the implementation chapter, there have been some comments that attention to the associate members should be paid as they can be growing sources of funding and scientific community.

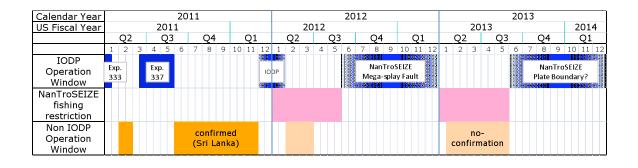
Larsen showed the current proposal status. 26 proposals including 14 new proposals were submitted for the deadline of 1<sup>st</sup> Oct. 2010. The breakdown by Initial Science Plan theme is 6 for "Deep Biosphere and Subseafloor Ocean", 11 for "Environment" and 9 for "Solid

Earth". The total number of proponents of all proposals in the system is 1120, including 8 from very recent member, India. The geographical target distribution shows 44 proposals for Pacific, 29 for Atlantic, 14 for Indian, 7 for Arctic, 5 for Mediterranean and 4 for Southern ocean. Larsen noted that long transit time and drilling in Southern Ocean is hard to be justified because it has only 4 proposals. The Pacific has many proposals, so we can form an efficient drilling plan by selecting drillable proposals from them.

Larsen showed the long-range plan of JR. He explained the plan would change because of fuel cost going up recently.



Larsen moved to the Chikyu schedule. He pointed out that Expedition 337 was canceled because of the damage to Chikyu due to Tohoku earthquake and tsunami.



Nobuhisa Eguchi pointed out that Exp.337 was not canceled but rescheduled. Richard Murray asked for a clarification to the wording. Larsen recommended "canceled for this time window". Eguchi and Filippelli agreed with Larsen on this terminology.

Larsen explained that whether or not the contract work off shore Sri Lanka could be done is an open question. The operation windows for NantroSEIZE should be secured. SPC will be more informed at the summer meeting, after OTF discussions in June.

Larsen showed the MSP schedule.

	Option L	Option M	Option N
FY11	Hawaii	Hazard site survey for Chixculub	Coralgal Banks
FY12	Hazard site survey for Chixculub	Chixculub	Hazard site survey for Chixculub
FY13	Chixculub OR Coralgal Banks OR Other	Hawaii <b>OR</b> Coralgal Banks <b>OR</b> Other	Chixculub OR Hawaii OR Other
Pros	Ambitious end to program if Chixculub in FY13	-Will allow time for MSP funds to build for FY12 Expedition -Leaves choice of Expeditions (of varying expense) for FY13 -More time to explore coring method, inc. seabed drills, for Hawaii if chosen for FY13	-May be cheapest option by committing to Coralgal Banks
Cons	-Not much time for appraisal of coring technique in light of GBR if Hawaii done in FY11 -Possibly too expensive to do both Hawaii and then Chixculub in FY13 (decision needed in FY11 for hazard survey)	-No flexibility if platform unavailable in FY12	-May be least ambitious option by committing to Coralgal Banks

The MSP diagram above had not been updated since the last meeting in August 2010. ESO is fairly successfully scoping and preparing for Chixculub. The hazard survey can be carried out, perhaps in early 2012. Coralgal Banks and Hawaii remain as backup plans, and there is also the Baltic Sea drilling proposal that could be moved up to OTF based on voting later in this meeting. ESO had scoping meetings and will report on that.

Ben van der Pluijm asked if there is one more slot for MSP. Larsen replied that the thinking now is for one expensive and one inexpensive MSP. Mével commented that if SPC sticks to Chixculub, SPC should consider another one as well. Thomas Wiersberg informed that ICDP is considering \$1.5 million contribution to Chixculub and their decision would come up before June.

Larsen showed the table of Co-chief national balance, which is US:Japan:ECORD:ANZIC = 24:26:22:1, and commented that it is very good balance between US-Japan as two lead agencies and ECORD and ANZIC.

Larsen moved to OTF report with three OTF consensuses.

- OTF based on SPC ranking on during March 2011 SPC meeting will meet in June 2011 to discuss scheduling to end of program. This will involve review of the feasibility SASEC long range plan as well as changes caused by damage to Chikyu and possible scientific opportunity of cause by M9.0 earthquake of March 11.
- OTF recognize the need to start operational planning for FY14+ and request SPC to address long range planning at SPC summer 2011 meeting.
- OTF asks that SPC reviews proposals currently residing at OTF at the summer 2011 meeting, provides short updates on science and operational realities, and forwards these reviews to the proponents, the new SAS, and the new OTF.

OTF was informed from NSF that transits have cost more money than expected because of high fuel cost. OTF have to await SPC's suggestion before they continue on future planning with APLs and engineering test.

Blackman asked why SPC reviews OTF proposals at the next meeting and why the new SAS will not cover that activity. Filippelli replied because the future OTF has PEP members but PEP will have no access to OTF. Blackman asked if SIPCom would have access to OTF. Filippelli replied he was not sure. Larsen replied that OTF wants advice from this functional SPC so they can consider that input in their decisions.

Larsen explained the new SAS structure. STP or TP will have the same responsibilities as the STP has now. He stressed that TP is not an engineering panel but a scientific panel. The Site Characterization Panel is equated with the current site survey panel. EPSP will stay for another 10 years.

How the new program acquires advice on long-term and short-term engineering is under debate. SASEC has formed a subcommittee to look into that issue. They will hopefully come up with a resolution at the June meeting.

Murray asked if the technology panel will review proposals and if so, how review process could be expedited with only once per year STP meetings. Larsen replied that STP meetings could be held more than once a year, depending on the need.

Filippelli asked for clarification of the wording of "shall" in STP's terms of reference. He pointed out that 'shall' means that STP will be charged with seeing proposals at early stages if there is an issue. Murray commented that STP chair could do a quick pass through of all (full) proposals to see if there is something that the chair identifies and could help the proposal. If it is only the chair not whole committee, it should not onerous. Larsen agreed with Murray.

Larsen explained that the SIPCom chair and the PEP chair are nominated openly regardless of national balance, at least not for the PEP chair. The PEP chair would be helped by four sub-chairs; one sub chair for each of the four themes in the new science plan.

Kasahara asked if PEP does only one review per proposal. Larsen explained that a proponent could submit a pre-proposal or full proposal. If it is a pre-proposal, the proponent can go for a full proposal or get 'rejected.' Another possibility is that PEP recommends submitting a workshop proposal if PEP sees some missing dimensions or proponent members. Full proposal can either be accepted for external review or asked for revision. If the proposal is not strong enough after revision, it is rejected. Kasahara asked how much time can be given to the proponent for revision and commented that site surveys can take a long time. Larsen replied that a time limit has not been set and the proposal can go into the holding bin if the full set of data is not yet present. Kasahara commented that it sounds like the future holding bin will function in a different way from the current one. Filippelli noted that the current holding bin is for the proposals with pending review by site survey panel or EPSP, and it could be a trigger to appeal to the funding agency that you should get site survey. The problem is that there is no way to move the proposal back down to PEP. Javier Escartin commented that proposals might become obsolete if they stay in the holding bin for a long time. So there has to be a way from OTF back to PEP. Mével commented that she cannot understand why the holding bin is at SIPCom level and it should be at PEP level because PEP evaluates its readiness and the site survey panel has to evaluate the site survey data. Larsen replied that where the holding bin is is not important, but who releases the proposals from holding bin is important. Murray disagreed with Larsen and commented that proposals cannot get out of PEP without SSP information, because SSP reviews its science. Barbara John agreed on having the holding bin at PEP level. David Divins commented that if it is not drillable, it should stay down at the PEP level.

David Smith commented that the holding bin concept fits well with a regional approach. You can hold the proposals until you get enough proposals targeting the same ocean. Murray disagreed with Smith because it is OTF type matter.

Ridley commented that proposals that are missing only site survey data should be

standalone, because NSF does not fund site survey for proposal that will not be drilled. Larsen commented that there was no need for more discussion and the holding bin can go down at the PEP level. But he was concerned about how to highlight the proposal to get it funded. Filippelli replied that ranking and recommendation could work for it. Larsen confirmed that he would move the holding bin down to PEP level.

Larsen explained that PEP does not rank. Each proposal that is forwarded will be described with its pros and cons. It is up to SIPCom and OTF to put together the best possible portfolio of proposals. This was a strong recommendation by the Tri-eniumm Review Committee.

Feary asked which panel, PEP or SIPCom, encourages amalgamating or splitting proposals if it is needed. Larsen replied that it has not been discussed but he thought it must be PEP. Stein commented that it might be SIPCom, considering a situation where SIPcom has older and newer proposals with similar targets, then SIPcom could combine them. Larsen replied that the PEP chair would be a full member of SIPCom, so that is a connection between the two panels, though there could be a track from SIPCom to PEP.

William Ussler asked if there would be more flexibility in the expedition time. Larsen replied that it has not been really discussed as part of the SAS structure, but he thinks it depends on the situation.

Murray referred that term of reference for SIPCom that says they meet annually, and he asked if that is to emphasize that the annual operation plan is very rigid so that it cannot change in the middle. Larsen replied that he thinks that "annually" is the minimum.

van der Pluijm pointed that the advertisement for SIPCom chair was published under the old name, Integrated Ocean Drilling Program. Larsen replied that is because the new SAS will start under the current program. van der Pluijm asked why the first SIPCom chair already has to be defined as European. Mével replied that was SASEC decision.

Larsen showed the timeline for the new SAS. PEP and SIPCom chairs are to be determined by June 2011. The new SAS will start on October 1st. The current SAS is active either electronically or in meetings until the end of September. PEP meets for the first time during the week of November 14 to 18. IODP-MI has an urgent job to work with the PMOs to populate these panels. SIPCom meets early 2012, probably in February.

Larsen explained the OTF term of references. They meet once a year. The membership includes the PEP Chair and the 4 PEP sub chairs, SCP chair, IO senior managers (One from each IO) and 2 CMO representatives. The SCP chair was recently included to emphasize the importance of site survey review. The function is simply to formulate the most efficient annual expedition schedule. OTF will receive input from SIPCom on what could be an efficient long-range plan, but it is all up to SIPCom to decide.

Allan commented that he hoped the PEP meeting schedule (November 14 to 18) is flexible because representation by NSF at the meeting would be difficult because of regular NSF panel schedules. Larsen replied that there is little flexibility with these dates because the week after is Thanksgiving and the week before is too early to get everything ready after a proposal deadline of October 1st.

Feary commented that he thought that SCP would be a component of PEP, but actually SCP is separated from PEP, so it sounds that it will be a bigger structure than the current one. Larsen replied that there will be one super panel meeting with SCP, but there need to be a separate rule with separate expertise that can assist the site survey data. The reduction will be done by having fewer layers, not fewer people.

Ussler asked who would be the leader of OTF. Larsen replied that the IODP-MI president asked the new operations manger to chair, but he did not know if that model continues to the new program.

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Larsen moved to Rapid Response Fault Drilling and presented the slides made by Jim Mori. The Tohoku earthquake is a very rare event on a global scale and a unique opportunity to drill, as ICDP clarified its importance in their 2008 workshop. The timeframe is 12-18 months after earthquake.

# Opportunity for IODP;

- As the leading organization in international seafloor research, IODP can promote a timely science investigation of this devastating submarine earthquake and tsunami.
- IODP can show that its scientists respond to important natural events that have large impacts on the world's societies.

# Scientific objectives;

- Physical properties of fresh sample from fault of a large subduction earthquake (never been done before)
- Strength of dynamic fault friction by measuring temperature profile across fault
- Possibly identify splay faults as source of tsunamis (analog to Nankai)
- Investigate large submarine landslides

The drilling should be done within a year because of the transience of the thermal signal, at most 18 months with 1-4 sites, 1000 to 2000m drilling depth (3000 to 5000m water depth). Both Chikyu and JR can achieve these operational targets. JAMSTEC has already redirected research to this area. Co-organizers have started communicating on this project. IODP also should consider our response. One approach is to rapidly form a Detailed Planning Group, including both Japanese and international members, to assess the feasibility of an IODP-led effort.

Kasahara commented that studying how the asperities occurred one after another is an important contribution to geohazard studies, but he was not sure if this is the right time to

start the project because Japan was still in the middle of disaster. Larsen replied that he did not see any point in postponing the scientific preparations. Tada agreed with Kasahara and he pointed out that the Japanese tsunami research team has not started their fieldwork because of the same reason. He also noted that SPC should have a clear vision of what kind of result IODP can provide to Japanese society, because action at this time brings attention and raises people's hopes.

Filippelli commented that SPC had to consider if there need for a special call for proposals for rapid response. If so, it needs time for other communities to hear that we are willing to receive such proposal. Larsen replied that forming a DPG could achieve it, because it is open to all, and the proposal should not compete with other normal proposals. Filippelli summarized that there are two models, performing a detailed planning group or a call for proposals. Escartin commented that SPC has to facilitate the project but should not say that we really do it until we have final proposal. Murray agreed with Larsen, and he suggested acknowledging some individuals who have been pre-identified, but that there also has to be an open component for participation.

Blackman suggested bringing in people from SSEP who can well evaluate how useful these data are going to be. Kasahara commented that no one would have this rapid-response related specialty. Filippelli agreed with the idea of having SSEP members in the group and he asked if anyone has other alternatives to the idea of forming DPG. Früh-Green suggested a workshop-type meeting. Filippelli replied that a DPG is a kind of small workshop. Murray commented that the DPG perhaps could convene a rapid workshop and it is a way of bringing in external participation. Tada suggested a workshop before assigning the DPG members, and then SPC selects the members based on the workshop results. Filippelli replied that funding for the workshop might be an issue. He added that the one advantage of having a DPG is speed, because it is a small group. Van der Pluijm asked what the impact to the program is if we do this rapid response drilling. Filippelli commented that it has to be in 18 months from March, so it has to be conducted in fiscal year 2012. Murray commented that it is premature to see the schedule because we do not know what the DPG would come up with. Van der Pluijm replied that discussion on impact should come first because if no time or no money is available to implement the product of this rapid response drilling, then this whole discussion is for nothing. Larsen replied that there is a high likelihood that Chikyu can implement this, but if Chikyu is not available, then JR is the only platform that could drill the rapid response. But this then impacts the JR schedule, of course. John suggested discussing this again after reading the rapid response article. Filippelli agreed with John.

Barry Katz commented that the timeline is important because there is a lot of discussion for such a deep hole, and the first thing to consider is what the potential timeline is, and whether IODP can really respond to anything rapidly if there is no package in hand to move forward with. Pälike agreed with Katz and he added that the DPG could conclude, for example, that the hole needs to be initiated within six months after the earthquake to reach 2 km depth within 18 months, which is a very difficult timeline.

Feary asked if ICDP formed a standing committee on fault drilling as the workshop recommended and if it could overlap with the DPG. Wiersberg replied that the committee does not exist yet and there was no proposal related to it. Larsen suggested involving the key persons from ICDP workshop.

Filippelli suggested forming a small sub-committee to act in the next two days, working with Katz and Larsen on timeline issues and to provide the timeline and recommendation of DPG members. Filippelli assigned John (as chair), Kasahara, and Escartin to the subcommittee.

#### SPC Consensus 1103-03:

The IODP community is deeply saddened by the devastating effects of the March 11, 2011 Tohoku earthquake and resulting tsunami in Japan, and expresses its deepest concerns for the well being of all affected by this natural disaster.

The SPC recognizes the scientific challenges and responsibilities that this earthquake has created regarding the understanding about the nucleation of great earthquakes, associated tsunami, and submarine slide generation, to contribute to geohazard mitigation. Spearheaded by ICDP, past workshops have addressed the scientific rationale for rapid response drilling into large slip fault zones that have recently ruptured. The existing deliberations through international workshops to determine the time frame for rapid response drilling suggests that planning for this must be initiated immediately. Based on this scientific framework, the SPC therefore recommends that IODP in conjunction with colleagues from ICDP, contribute intellectual capacity by forming a detailed planning group (DPG) to provide a scientific assessment of the viability, strategy, and time period for a potential rapid response drilling effort within the region affected by the Tohoku megaearthquake.

The DPG will be populated and supported by IODP as per IODP policies, recognizing the especially strong knowledge base, ongoing activities, and interest held by Japanese researchers and institutions.

The DPG will follow these Terms of Reference:

- 1) Evaluate the overall scientific merits and feasibility of a rapid response drilling project
- 2) Assuming (1) suggests a strong scientific case can be made, outline a research and drilling plan including required pre-drilling survey data, draft locations and depths of drilling, and hole and observatory design.

To accomplish this in a timely manner, the DPG needs to be formed by April 15, 2011 and submit a first, interim report to IODP-MI by June 8, 2011. If justified by the interim report, a full proposal for drilling will be requested for submission with a tentative deadline of August 1, 2011. The DPG can work in part through electronic means, but at least one planning DPG meeting is anticipated to take place as per general IODP policies.

# 4. Implementing Organization (IO) reports

#### 4.1. CDEX

Sean Toczko represented CDEX. Before the regular CDEX report, he reported the damage in Japan and showed a video that was shot from Chikyu's deck and recorded the moment of the tsunami striking Tohoku, Japan, on March 11, 2011. The tsunami also struck Chikyu and took out a azimuth thruster.

Toczko reported on the recent expeditions (exp. 326, 331, 332). Their preliminary reports are available from the CDEX web page.

- Expedition 326 - NanTroSEIZE Stage 3 "Plate Boundary Deep Riser 1" (15 July -20 August, 2010)

This expedition drilled as the 1st stage of ultra deep riser hole at Site C0002, eventually to reach 6000 – 7000 mbsf and cased to 860 mbsf.

- Expedition 331 - "DEEP HOT BIOSPHERE" (1 Sept. -3 Oct. 2010, Okinawa Trough)

This expedition succeeded in coring at 5 sites 24 holes, installation of high-Cr casing suspended from guidebases at three holes, installation of a third guide base with a 3-m guiding casing pipe at one site, setting up three "artificial vents" in the Iheya North hydrothermal system, and recovering uncontaminated samples for microbiological studies. Extensive porewater sampling, in conjunction with APCT-3 downhole temperature profiles, is facilitating research of fluid compositions and pathways in a complex hydrothermal system. Artificial vents will allow researchers to return with ROVs to sample deeper and minimally contaminated hydrothermal fluids flowing from the new vents.

- Expedition 332 - NanTroSEIZE Stage 2 "Riserless Observatory" (25 Oct. -12 Dec. 2010)

This expedition succeeded in recovering the temporary observatory (SmartPlug), replacing it with an upgraded version (GeniusPlug) at C0010 and deploying the first permanent observatory in NanTroSEIZE at C0002.

SmartPlug data show signals of Pacific region earthquakes and tsunamis (M 8.8 Maule earthquake in Chile). GeniusPlug extensions include biological (FLOCS) & geochemical (osmosampler) samplers. The permanent observatory comprises of pressure ports (3), strainmeter, BB seismometer, geophone, tiltmeter, pressure and temperature sensors. The data will be be available through web interface after connecting to the undersea data/power network in March 2011 (DONET).

- Expedition 333 - "Subduction Inputs 2 and Heat Flow" (13 Dec. 2010 -10 Jan. 2011) Preliminary report will be published soon.

Toczko reported on CDEX outreach activities this year. The open ship tours have been a great success,s and welcomed the 100,000th guest. CHIKYU TV was nominated as the Best 25 Podcast, Top 7<sup>th</sup> in iTunes Video Podcast ranking in Japan No. 1 in Science category (Oct, 2010).

Filippelli asked if IODP could have more operation time in the case that Chikyu might not be able to accomplish the contract work with five thrusters. Eguchi replied that CDEX would not be able to do that under the current situation.

Filippelli asked how long it would take to repair hull damage to Chikyu. Toczko replied that he thought it should not be difficult to repair. Eguchi added that it should be within a month. Filippelli asked if thruster assemblies are interchangeable. Eguchi replied that if the plug inside the ship was not broken, it can be easily changed.

#### 4.2. USIO

David Divins provided the USIO report. He showed the following revised JR schedule.

			Total Days (port/at-	
Expedition	Exp#	Dates	sea)	Co-chief
Transit		12 Feb15 March 11	31 (6/25)	
CRISP	334	15 March-13 April 11	29 (2/27)	P. Vannucchi
Superfast	335	13 April-3 June 11	51 (4/47)	D. Teagle B. Ildefonse
Non-IODP		3 June-16 Sept. 11		
Mid-Atlantic Mbio	336	16 Sept17 Nov. 11	62 (2/60)	K. Edwards W. Bach
Mediterranean Outflow	339	17 Nov. 11–17 Jan, 12	61 (5/56)	J. Hernandez D. Stow
Lesser Antilles	340	17 Jan, –18 March 12	61 (5/56)	A. Le Friant O. Ishizuka
Non-IODP		18 March-15 July 12		
South Alaska Margin	341	15 July-14 Sept. 12	61 (5/56)	J. Jaeger S. Gulick

Divins reported the details of the recent expeditions.

- JUAN DE FUCA HYDROGEOLOGY (5 JULY - 5 SEPTEMBER 2010)

Expedition Highlights: (1) CORKs were installed in basement Holes U1362A and U1362B. Both CORK observatories include pressure and temperature monitoring and downhole fluid and microbiology sampling, (2) conducted hydrogeologic packer testing in Hole U1362A and a 24-hour tracer injection experiment in Hole U1362B, (3) recovered 375 m of stuck instrument from Hole 1301B, and (4) deployed new instrument string with 3 temperature loggers.

#### - CASCADIA ACORK OBSERVATORY (5 - 19 SEPTEMBER 2010)

Expedition Highlights: (1) ACORK successfully installed, (2) a new configuration will facilitate pressure monitoring at multiple formation levels on the outside of a 10¾-inch casing string, (3) ACORK to be connected in the future to the NEPTUNE Canada fiber-optic cable for power and real-time communications from land

- SOUTH PACIFIC GYRE MICROBIOLOGY (8 OCTOBER - 13 DECEMBER 2010)

Expedition Highlights: (1) documented many fundamental aspects of subseafloor

sedimentary habitats, metabolic activities, and biomass in this very low activity sedimentary ecosystem, (2) significantly improved understanding of how oceanographic factors control variation in subseafloor sedimentary habitats, activities, and biomass from gyre center to gyre margin, (3) quantified the availability of dissolved hydrogen throughout the sediment column, and (4) documented first-order patterns of basement habitability and potential microbial activities.

Expedition Operational Highlights: (1) 42 holes were drilled at 7 sites (U1365-U1371), water depths 3749-5708 mbsf, 12,325 km transited, (2) extensive reconfiguring/repurposing laboratory and support areas for unprecedented geochemistry and microbiology program and deployment of 3rd party tools, (3) approximately 25 successful educational video broadcasts, (4) downhole logging at site U1368, (5) installed radioisotope and auxiliary van for rate studies and clean area processing, respectively.

## - LOUISVILLE SEAMOUNT TRAIL (13 DECEMBER 2010 - 12 FEBRUARY 2011)

Expedition Highlights: (1) recovered igneous rocks generally well-preserved (including fresh volcanic glass and fresh olivine minerals) suitable to address all scientific objections (e.g., high quality radiometric dating, geochemistry) and beyond, (2) collected large quantities of high-quality, consistent paleomagnetic data with the shipboard magnetometers, (3) two holes (U1374A and U1376A) successfully logged with 394 m and 102 m open hole respectively including two successful runs of the third-party Göttingen Borehole Magnetometer (GBM), (4) 1114 m of sediment and igneous basement cored at 8 holes at 6 sites located on 5 different seamounts, (5) 806 m of core recovered corresponding to 72% recovery, (6) verage recovery between 28% and 91% was achieved in basement rocks.

# - COSTA RICA SEISMOGENESIS PROJECT (15 MARCH - 13 APRIL 2011)

Primary science goal: understand the seismogenesis along an erosional subduction zone.

Divins introduced the new database, LIMS. It is similar to those provided for the Janus database. It reports summaries, samples, physical properties, magnetism, chemistry and images. He showed the pictures of its user interface, summary example and GRA data example.

He noted that that the recent high fuel cost badly impacts JR operation, showing the graph of 10 years fluctuation in fuel cost.

He introduced USIO's education and outreach activities.

- Auckland, New Zealand Port Call Events: 14-15 February, 2011
- Call for Applications for Scientific Illustrator to sail on IODP
- Video Broadcasts (Exp.329- 25 video broadcasts / Exp.330-26 video broadcasts)
- New Diversity Initiative: IODP-USIO Diversity Internship. (Open to full-time minority students at a U.S. university or college)

Divins shows an animation movie of CORK and introduced the Ocean Leadership YouTube page.

Murray commented that USIO has been doing a very good job with the education and outreach. Johnson agreed with Murray and noted that CDEX effort is also huge as Chikyu had 100,000 visitors. He asked what made the success. Toczko replied that CDEX HP links to videos, and that the Japanese Otaku culture also helps.

#### 4.3. ESO

David McInroy provided ESO report. There are 7 MSP proposals in the system (4 in OTF, 3 in SPC) and ESO is scoping two OTF proposals, Chicxulub Impact Crater and Hawaii Drowned Reefs.

- Chicxulub Impact Crater (Proposal 548)

ESO had a PMT meeting in Edinburgh in Oct 2010 and found no concerns with technical or scientific requirements. Jaime Fucugauchi (local proponent) approached the following permitting authorities;

National Institute of Ecology (INE)

National Council on Science and Technology (CONACYT)

Ministry of Environment and Natural Resources (SEMARNAT)

Federal Attorney for Environmental Protection (PROFEPA)

Yucatan Government

ESO see no reason to dismiss Chicxulub over permitting. Feedback from contacts indicates that the permitting process is bureaucratic, but not necessarily difficult. There are no show stoppers so far.

Joanna Morgan and Sean Gulick submitted an ICDP proposal in February 2011, applying for up to US\$1.45M to co-fund this proposal. A decision by ICDP is expected in July.

- Hawaiian Drowned Reefs (Proposal 716)

ESO had a PMT meeting in Edinburgh, Nov 2010. The penetration depths revised and in many cases reduced. Majority of sites may be completed with 85-100m holes. Exposures of the reef sequences in canyons suggest that the limestones are well cemented (algal material). ESO interpreted that these limestone may be suitable for standard API/JR-type drilling, and recovery may be improved by using a motorised core barrel (MCB).

Four operation scenarios can be considered;

- 1. Build a drill ship MSP with an API string and MCB capability.
- 2. Use the JR with its API string and MDCB or other compatible MCB.
- 3. Use a seabed drill operating from a local research vessel.
- 4. A mixture of options 2 and 3.

Regarding scenario 3, seabed drill penetration is improving, but it's currently not enough.

Full logging from seabed drills not ready at this moment in time.

A summary of the Hawaii proposal was sent to the Hawaiian authorities in December 2010 and official responses received from 2 authorities, The Office of Conservation and Coastal Lands, Department of Land and Natural Resources and The U.S. Army Corps of Engineers. Both agencies have given a clear permitting route for ESO to follow, which includes filing an environmental assessment. ESO is preparing comprehensive permit applications.

#### - Coralgal Banks GoM (Proposal 581)

ESO has not been scoping this proposal. If proponent Andre Droxler is successful in securing external funds, he may approach IODP to turn his proposal into a CPP. FUGRO offered less than \$1M US dollars to core 5 boreholes up to 100m deep through Southern and Baker Banks and indicated that they would drill test boreholes to test various coring methods for free. ESO cannot confirm this estimate, but if true it is cheaper than contracting PROD for example.

Kasahara asked if Chicxulub has any gravity measurement or density model of the crater. Filippelli replied that he was a watchdog and he knew it has.

David Feary asked how much extra cost would be required from IODP for Coralgal Banks to be implemented. McInroy replied that it is probably about \$2 to \$2.5 million. Feary commented that it is considerably less than some of the other operations and asked how much the proponent would get from industry. McInroy replied that he was hoping to have 70% to make his proposal a CPP.

Thomas Wiersberg commented that ICDP would make decision on Chicxulub by June but ICDP need more information before their decision. Tada asked if Chicxulub will be conducted with ICDP. McInroy replied that it would be the IODP umbrella with financial contribution from ICDP. Tada asked where the samples would be stored. McInroy replied that that will be stored in the IODP. Mével commented that New Jersey Expedition had the same situation, in which IODP received \$500,000 from ICDP, but everything was carried out under IODP rules. Wiersberg noted that ICDP-IODP communication was only between a single ICDP and IODP member on the New Jersey Expedition and he suggested building a formal communication mechanism for ICDP/IODP joint proposals. Filippelli suggested discussing on this topic at ICDP report.

#### 5. SASEC report

Gabe Filippelli reported on the last January SASEC in Miami. He attended as non-voting member. He showed SASEC consensuses that are related to this SPC meeting.

- SASEC Motion 1101-03: SASEC accepts the SPC Chair's proposal for handling conflict of interest at the March 2011 SPC meeting.
- SASEC Motion 1101-10: SASEC approves in principle the draft Terms of Reference as

prepared by the SASEC SAS Terms of Reference subcommittee and forwards them to the IWG+.

Filippelli added that the ToRs are now available from the IODP-MI web page.

- SASEC consensus 1101-11: The current IODP Memorandum specifies that the SAS Executive Authority Chair should initially rotate between US and Japan. SASEC suggests to IWG+ that the first SIPCOM chair during the FY2012-2013 transitional period should be from long-term contributing IODP member ECORD.

Filippelli explained that ECORD contributed for many years but had no possibility to occupy a chair position on SPC or SASEC, therefore SASEC considered that the SIPCom chair position should also be open to Europe.

- SASEC Consensus 1101-12: SASEC recommends that the two year term of Chair of SIPCOM be rotated, with the position to be held twice by Japanese scientists, twice by US scientists and once opened to all members during the ten year duration of the new program (2014-2023). Additionally, SASEC considers that each Chair should be selected by an international panel, in the spirit of the program, rather than nominated by National program offices.
- SASEC Consensus 1101-13: SASEC forms a subcommittee to assess structural models in the post-2013 IODP for (a) advising on engineering development and industry-IODP technology transfer, and (b) ensuring adequate long-term engineering advice to the new SAS. The subcommittee should consult with the IODP agencies, CMO, and IO's and provide its report at the June 2011 SASEC meeting.

Filippelli added that this subcommittee would report to SASEC at their June meeting.

- SASEC Consensus 1101-15: SASEC nominates Gabriel Filippelli (Chair), Jan De Leeuw, Chris Yeats and one of the SSEP co-chairs as members of a subcommittee to work with IODP-MI to develop proposal guidelines prior to the next Call for Proposal.

Filippelli explained that SASEC decided to have this subcommittee because the current guidelines are difficult for new proponent from outside of IODP. It may be more assessable to a newer community if it had a flow chart diagram and less acronyms, for example.

- SASEC Consensus 1101-16: SASEC reviewed four workshop proposals (No. 5, Indian Ocean Drilling, No. 3, Continental Transform Boundaries, No. 4, Slow Slip Events, and No. 6, Gulf of Lion Drilling) and recommends funding for the first three and resubmission of a revised proposal based on the recently held workshop of the Gulf of Lion community. SASEC strongly suggests urgent development of a guideline for workshop proposals.

David Smith asked what the level of funding on workshops is. Filippelli replied that he did not remember the exact number. Larsen commented that IODP-MI keeps some funding for new or revised proposal that will be considered at next SASEC meeting.

### 6. IODP SAS panel reports

#### 6.1. SSEP

Henk Brinkhuis provided the SSEP report. The last SSEP meeting was held in Portland,

Oregon, USA, 9-12 November 2010. Co-chairs were M. E. Torres, Y. Iryu and J. Backman (alternate for Brinkhuis). He introduced the new and retired members. SSEP reviewed 26 proposals that were submitted for the last October deadline of proposal submission and 40 old proposals in SSEP stage responding to SPC request. As a result, 7 proposals are identified tier 1, 17 tier2 and 16 tiers 3.

Brinkhuis reported on SSEP consensus statements.

- SSEP Consensus 1011-03: The SSEP recommends that SPC consider forming a Detailed Planning Group that will be responsible for organizing and prioritizing existing proposals dealing with drilling the Antarctic realm, e.g., proposals 625-Full, 732-Full2, 751-Full, 784-Pre, and, likewise, to advocate development of and coordination with new drilling initiatives.
- SSEP Consensus 1011- 04: SSEP notes the importance of history and continuity in evaluating drilling proposals. As the terms of reference for the new program get developed, we strongly recommend that the new proposal cover sheet includes a check box for new proposals whose main objectives have been the topic of previously submitted proposals, the previous proposal number(s) and a letter detailing how the new submission differs and improves from previous ones.

Kasahara asked if the old proposals meant the proposals that had been staying in SSEP for long time. Brinkhuis replied yes and added that many of them did not make it yet to external review. Kasahara asked why SSEP sorted the proposals into three tiers although they already reviewed them. Filippelli replied that they had no choice because we (SPC) asked them to do that. They recommended that SPC deactivate some proposals but the proponents always have a chance to take that input and submit again in October.

Tuesday	29 March 2011	08:30-17:30

#### 6.2. SSP

Peter Clift provided SSP report. The last SSP meeting was held in Hayama, Japan, 2-4 January 2011. Clift introduced the new members Mikiya Yamashita (JAMSTEC) and Peter Clift himself.

The last SSP reviewed 12 Full proposals, 3 pre-proposals and 9 APLs. He reported the site classifications of each proposal.

Full Proposal #	Title	classification(site#)
633-Full2	Costa Rica Mud Mounds	1Aa(8)/1Ab(1)
637-Full2	New England Shelf Hydrogeology	1Aa(8)
644-Full2	Mediterranean Outflow	1Ba(1)/1Bd(4)/1Cd(1)
677-Full	Mid-Atlantic Ridge Microbiology	2Cc(15)
681-Full2	Lesser Antilles Volcanic Landslides	1Aa(3)/1Ba(5)/1Bb(2)
686-Full	Southern Alaska Margin 1: Climate-Tectonics	1Aa(6)/1Bc(1)

595-Full4	Indus Fan and Murray Ridge	1Ba(1)
704-Full2	Sumatra Seismogenic Zone	2Cc(2)/2Cb(1)
770-Full2	Kanto Asperity Project: Observatories	1Ba(1)/2Cb(3)/2Cc(2)
771-Full	Iberian Margin Paleoclimate	1Aa(1)/2Cb(1)/2Cc(3)/2Cd(1)
776-Full	Deep sea drilling in the Arabian Sea	3a(5)
778-Full	Tanzania Margin Paleoclimate Transect	2Aa(4)

APL Proposal#	Title	classification(site#)
769-APL2	Costa Rica Crustal Architecture	1Bd(1)
772-APL2	North Atlantic Crustal Architecture	2Ad(1)
774-APL	Costa Rica Subseafloor Microbial Mats	3A(1)
775-APL	West Pacific Warm Pool Paleoceanography	3B(1)
777-APL	Okinawa Trough Quaternary Paleoceanography	3B(1)
779-APL	Atlantis Massif Lithosphere Hydration	1Aa(1)
783-APL	Indian Monsoon history	1Ba(1)
785-APL	Gulf of Mexico SCIMPI field trial	3A(1)
786-APL	South Alaska	2Cc(1)/1Ac(1)

SSP were seriously concerned about 644-Full2 Mediterranean Outflow because the submitted data showed the wrong location, kilometers off the drilling sites, and map annotations did not match the seismic data. SSP downgraded its classification.

Murray noted that 644-Full2 was already on the drilling schedule. Clift commented that he did not know how it got to OTF because he was new to the panel and thus wasn't aware of the proposal history. Allan noted that SSP had concerns when they looked at the data first, so they asked the proponents for additional data, but their concern became greater when they looked at the additional data. He asked if it was because of more errors on the additional data. Clift replied yes. Yamamoto noted that the proponents uploaded the new data after the last SSP meeting and SSP was electronically reviewing the data.

Clift explained that 677-Full Mid-Atlantic Ridge Microbiology does not have a very good rating. They need careful reprocessing to migrate the seismic data properly, and to get rid of all diffractions. John pointed that this proposal was also already on the drilling schedule.

Katz commented that the difference between the data for science evaluation and the data for safety evaluation should be clarified. Regarding 677-Full, the submitted data were enough to say it is safe to drill, while it not enough to evaluate its science.

Blackman asked if their scientific objective would be worthwhile, so that it is still OK to complete the migration afterward. Clift replied that the objectives in the sediment core may be compromised if it is much thinner or thicker than they think it is or if they have

improperly located it.

Jody Webster noted that OTF proposals should have been already given endorsement from SSP. Clift agreed with Webster and asked when the expedition is scheduled. John replied September. Filippelli suggested that OTF or SPC urge the proponents to move very quickly on this, and provide some kind of update before the next SPC meeting. Webster commented that the Mediterranean Outflow was more problematic on the point of how it escaped from the holding bin, which is designed to hold such proposals.

Mitch Malone commented that the Microbiology can drill to basement but Mediterranean outflow cannot because you do not know what they drill. Larsen agreed with Malone and commented that he did not see any problem with leaving Microbiology on the schedule but the Mediterranean Outflow is totally different. Katz commented that EPSP would review Mediterranean Outflow at the next meeting and EPSP would not recommend it to go forward if they cannot see where and what they will drill.

Filippelli suggested sending a short message to the proponents of the Mediterranean Outflow to encourage them to be extremely responsive to the SSP comments. Yamamoto commented that the proponents already submitted the new data responding to the latest SSP comment and now are waiting for the response from the watchdog, not from proponents. Clift agreed with Yamamoto and commented that the unfinished business was at SSP side at the moment. Webster suggested crafting plan B in the case that Mediterranean Outflow cannot be conducted. Van der Pluijm commented that this is an OTF issue, not an SPC one. Filippelli suggested discussing this on Thursday after determining what proposals are now at OTF.

(At the day 4 (31 March), Filippelli reported that he confirmed with SSP vice-chair David Mallinson that newly submitted data were reviewed by SSP watchdogs and found sufficient for expedition.)

Clift reported the following SSP consensus.

- -- The lack of alternates from USAC for watchdogs, even though USAC was informed well in advance of the meeting, had a serious negative impact on the effectiveness of the meeting.
- SSP Consensus 1102-2 SSP notes that there are a number of scheduled (at least four) and soon-to-be scheduled expeditions with outstanding SSDB issues that require the ongoing involvement of SSP. SSP proposes that, to address those issues, any data submitted to SSDB can be reviewed by the standing watchdogs as assigned during SSP #14. Waiting until after the August SSDB deadline is too late to address many of these issues in a timely manner before implementation. Data needs to be in SSDB and reviewed and approved by SSP before the pre-cruise meetings. We feel it is premature to discontinue the SSP meetings.

Feary suggested that SPC acknowledges that SSP will be called up to carry on with their duties. Murray commented that SSP asked specifically for another meeting and carrying on their duties does not include having a meeting. Filippelli suggested producing a consensus statement that SPC recognizes the site survey panel might need an additional meeting

before the transitional program depending on the information they receive. But later he preferred not to be a consensus statement and SPC simply acknowledged the concensus by the minutes.

#### 6.3. EPSP

Barry Katz provided the EPSP report. EPSP reviewed the following expeditions since the last SPC meeting.

Expedition 336 – Mid-Atlantic Ridge Microbiology

Expedition 337 - Shimokita Coalbed Biosphere Expedition

Expedition 334 - CRISP LWD Protocol and Abandonment

#### - Expedition 336 Mid-Atlantic Ridge Microbiology

EPSP conducted an electronic review of 15 sites. Maximum penetration requested was 565 meters. Because all of the holes are planned to terminate in basement the panel accepts the request of the proponents and recommends the approval to deepen any of the holes as scientific or operational needs require

## - Expedition 337 Shimokita Coalbed Biosphere Expedition

EPSP recommends approval of contingency site C9001-1A located at 41 10.5983'N and 142 12.0328'E to a depth of 365 meters. Concerning the request to be able to position the site within a 100 meter radius circle from the proposed location, the panel requests that the positioning be limited to either the northeast or southeast of the center point because of concerns about possible gas west and south of the center point. The panel also requests that careful hydrocarbon monitoring be conducted between 350 and 365 meters. The plan for non-riser deep penetration associated with this expedition was withdrawn

#### - Expedition 334 CRISP LWD Monitoring

EPSP recommends proceeding with the proposed MWD/LWD monitoring program for Expedition 334 as described in original request. This recommendation assumes that the operator will continue to follow practices of testing and calibration of logging tools and clearly identifying the individuals responsible for any decisions that may need to be made during drilling. If the sediments encountered appear sandier than projected, the operational team is requested to re-examine the operational protocol to determine whether any modifications need to be considered.

Any changes to the operational plan should be provided to the Chair and Vice Chair of EPSP.

# - Expedition 334 CRISP Abandonment

The panel's opinions on abandonment were less definitive, with several panel members recommending that the hole be cemented if consolidated sediments are encountered. A majority felt that the proposed use of heavy mud rather than cement is an acceptable option as long as no anomalous levels of hydrocarbons are encountered and/or there is no

shallow water flow. Under emergency well control conditions there should be an attempt to plug the hole with cement after killing the hole. The panel agrees with the operator assessment that stress and hole conditions would most likely further result in the sealing of the hole through collapse after abandonment.

The next EPSP is in Edinburgh, UK. The following proposals will be reviewed;

Proposal 705 - Santa Barbara

Proposal 644 - Mediterranean Outflow

Proposal 553 - Cascadia Gas Hydrates 2

Proposal 686 – South Alaska Margin

Proposal 637-New England Margin Hydrogeology

#### 6.4. STP

Marc Reichow provided STP report. The last STP meeting was held in Auckland, NZ, on 13 – 16 February, 2011. The agenda included a JR visit for the assessment of JR onboard measurement tools. The meeting produced 22 consensus items and 6 action items. Reichow reported on the following SPC and IODP related consensuses and action items.

-STP Consensus statement 1102-01: Hands on Excursion to the JOIDES

STP has provided a number of observations and recommendations for continued improvement.

- STP Consensus statement 1102-02: Responses of the STP on the proposed terms of reference for the 'Technology Panel'
- 1) Only one face to face meeting per year is insufficient and STP recommends that the current cycle of two meetings per year continue. In this interim period, STP urges IODP-MI to provide leadership in facilitating an effective communication strategy to maintain continuity of STP activities.
- 2) The role of the vice chair is important and should be retained within the panel structure.
- 3) The name 'Technology Panel' does not accurately capture the overall tasks of the proposed panel and STP recommends a different name that would also include the science aspects be retained.
- 4) Publication activities of the program should be included within the mandate of the proposed Technology Panel as within the current STP mandate.
- STP Consensus statement 1102-05: Approval of Expedition Measurement Plans for IODP Expeditions 334 and 335
- STP Consensus statement 1102-09: IODP Depth Scale documents

STP endorses the release of the document but recommends that the following actions be taken following the results of the Depth Scale Task Force meeting in Fall 2010 and subsequent review by the STP at the current meeting.

IOs should ensure that co-chiefs receive appropriate education and training in the use of appropriate depth scales for a specific expedition during the pre-expedition meeting. The co-chiefs and EPM will then be responsible for disseminating this information to the remainder of the science party prior to sailing.

- STP Consensus statement 1102-17: Joint activities on Technology Roadmaps of the EDP and STP towards program completion

Both EDP and STP have developed technology roadmaps over the last five years. STP supports additional linkage between these two roadmaps to ensure continuity of this work into the new program and to facilitate a more public dissemination of the roadmaps' priorities. These documents need to be properly archived for future drilling programs.

STP supports development of an integrated executive summary and publication of the major recommendations of the roadmaps. STP does not believe a full merge is necessary because it is not yet clear how the two complementary mandates of the EDP and STP will be handled in the new program.

Each team for assessment of JR onboard measurement tool submitted the following review.

- Data: DESClogik demo software and/or pre-cruise physical training are necessary
- Core Description (Hard Rock): Set of basic igneous sample description templates could be established
- Micropaleontology: Advances in digital imaging system, DESClogic could be made more user friendly.
- Paleomagnetism Laboratory: New laboratory configuration resulted in separation of operator from pass-through magnetometer
- Physical Properties Measurements: Proper standards are missing (e.g. no Uranium for NGR logger); to remove data entry errors require help of a developer
- Inorganic Geochemistry Assessment: Equipment upgrades and replacement was a much needed improvement

Heiko Pälike asked if SPC has access to the JR evaluation report. Reichow replied that it is in the STP minutes. Johnson informed the committee that the report includes two separate sections, summary and details. Reichow added that the minutes were now circulating among members and would be soon available from IODP-MI website.

Murray commented that TAMU should work on core water measurement on JR because it is vital for microbiology. Smith asked how much sample curation costs. Reichow replied that he did not know, but he could ask and answer later. Smith asked if they considered liquid nitrogen or minus 80 freezers. Reichow replied that they had considered freezers.

Filippelli asked about what exact action STP will take on the action item "New Publication Format." Johnson replied that Angie Miller provided statistics that the DVDs are not heavily used and she asked STP to investigate if there the demand for the DVDs still exists. Reichow commented that they need justification for \$50,000 to make DVDs. Larsen noted that the

SPOC requested to have DVDs seven years ago. Murray commented that he was part of an external review team of the publication department at TAMU, and one of the recommendations was that careful surveys should be conducted to determine the desirability of continuing with the production and distribution of the DVD. If this product is not strongly desired, it should be discontinued.

Filippelli asked which consensus are specifically addressed to SPC. Reichow noted that STP consensus 1102-05 and 1102-09 are to SPC. SPC received these consensus statements.

#### 6.5. EDP

William Ussler provided EDP report. The last EDP meeting was held in Grenoble, France, February 22-24, 2011. EDP would have email discussion until the panel is disbanded September 30, 2011. EDP was requested by SASEC subcommittee chair Keir Becker to provide input to the SASEC sub-committee examining potential models. The possible models are: (1) an EDP-like standing panel, (2) a hybrid CMO/IO/SAS task force, (3) an individual non-SAS task force under each IO, and (4) periodic, finite-term engineering working groups within SAS. EDP indicated a preference for model #3 in the EDP consensus 1102-15 and will respond to the SASEC by sending aletter to the SASEC sub-committee no later than April 1, 2011. The EDP proposes to send an EDP liaison to the June 2011 SASEC meeting to make a formal presentation of EDP recommendations. The EDP chair will circulate drafts of the letter for internal review by EDP.

Ussler report the new program-related consensuses.

- EDP Consensus 1102-12: Funding Platform-Independent Engineering Development in the New Drilling Program

The EDP endorses the continued use of co-mingled funds by the CMO to support new Engineering Developments within the drilling program. The funding structure proposed for the new drilling program will make it even more difficult for IOs to initiate new engineering developments. A platform-independent source of funding is necessary for support of high-risk engineering developments to achieve new science goals and improve cost and time efficiencies.

- EDP Consensus 1102-13: Maintaining and Fostering Industry Involvement in the new IODP

A primary motivation for industry to participate in the EDP or in a future engineering panel is that their employees will have the opportunity to evaluate new technologies and instruments that may become important for their respective industry, e.g. hydrocarbon, geothermal, mining, and geotechnical industries. However, from an industrial point of view, it is becoming increasingly difficult to justify participation in such a panel because of the general decrease in emphasis and focus on development and application of new technologies and instruments within the current and especially the future drilling program.

To maintain industry participation, EDP recommended joint industry-academic partnerships under the following conditions: (1) regular meetings, (2) participation not viewed as free consulting, (3) take into account national interests, (4) train and recruit young engineering talent for industry.

Ussler reported the other EDP consensuses related to the current program.

- EDP Consensus 1102-10: Stress Measurement Tool

The EDP endorses further development of the wireline hydraulic testing and borehole imaging tool.

- EDP Consensus 1102-05: IODP-MI Allocation of At-sea Engineering Testing Time to Active Engineering Development Projects

The EDP continues to strongly endorse allocation of at-sea engineering testing time to the SCIMPI and MDHDS engineering development projects prior to the end of the current drilling program.

- EDP Consensus 1102-06: Publication of Engineering Development Project Results

The EDP recommends that IODP-MI summarize the output of all the Engineering Development (ED) projects supported by funding from IODP-MI and publish this information so that scientists and engineers interested in these technological developments can build on this knowledge. This information should include rationale for the engineering development, the accomplishments and limitations of the technology, and unresolved technical issues and future prospects for continued development of the technology.

- EDP Consensus 1102-14: Merger of the EDP and STP Roadmaps

The EDP supports STP Consensus Statement 1102-18. The EDP recognizes the benefit for the future program to have a long-term vision regarding technology development. The mechanism to continue this endeavor should be maintained into the new program.

- EDP Consensus 1102-04: DS3F Initiative

The EDP strongly endorses the ongoing efforts by Work Package 7 (WP 7), Mission-specific sub-seafloor sampling within the European Union coordination project - "Deep Sea and Sub-Seafloor Frontier" (DS3F).

Filippelli asked if most of the consensuses go to IODP-MI. Ussler replied that all consensuses go to IODP-MI to ask their endorsement EDP's efforts.

David Smith commented that he was interested in the industry and academic partnership and the industry supporting some technical graduate student or funding engineering projects. He asked how that will actually be implemented. Ussler replied that he did not know, and added that a person from industry was very enthusiastic about the idea because companies want to recruit young talented engineers. Blackman asked if they support only certain nationalities. Ussler replied that the national distinction would not be a concern.

Filippelli asked Früh-Green to write a consensus statement acknowledging the actions of EDP over these years for us to consider.

**SPC Consensus 1103-04**: SPC would like to acknowledge and thank the EDP for their efforts and accomplishments in engineering development and for providing a long-term perspective for the new program.

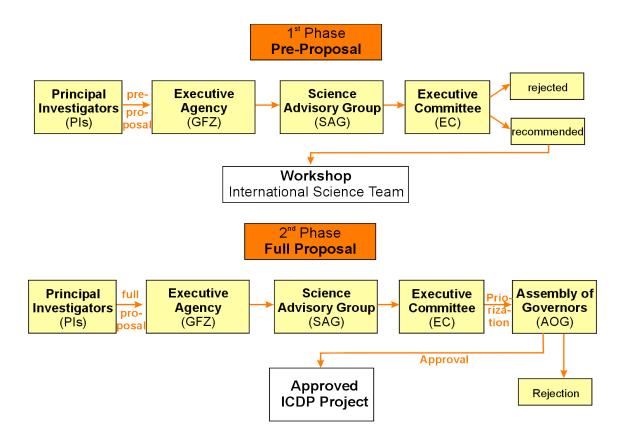
**SPC Consensus 1103-05**: SPC endorses the EDP's efforts to foster industry involvement in the new program and is particularly enthusiastic about the suggestion to facilitate industry training through IODP platforms and operations.

### 7. International Continental Scientific Drilling Program

#### 7.1. ICDP report and discussion of co-reviewed science

Thomas Wiersberg represented ICDP. The ICDP provides funding to international science teams with a proven need for land-based scientific drilling. Proponents can request ICDP partial financial support or operational support through ICDP's Operational Support Group (OSG). The OSG also supports ICDP panels and the EC chairman, helps to organize ICDP workshops, maintains the ICDP equipment pool, and conducts training of on-site scientists before drilling.

He explained the ICDP project development procedure with the following flow chart.



ICDP research theme has a wide range. The current key themes are: (1) Paleoclimate and Paleoenvironmental Dynamics, (2) Volcanism, Volcanic Risk and Thermal Resources, and (3) Faulting and Earthquake Processes.

ICDP members are 17 countries (Austria, Czech Republic, Canada, China, Finland, Germany, Iceland, Italy, Japan, Norway, New Zealand, Poland, South Africa, Spain, Sweden, Switzerland, USA) and 4 new countries (France, India, Israel, The Netherlands), as of March 2011.

Wiersberg introduced ICDP activities in the past (249 proposals, 55 workshops, 28 Drilling

projects) and in the future (11 workshops, 6 drilling projects). ICDP had the following 3 drillings in 2010-2011.

- Lake Van Drilling: Anatolian Plateau, Turkey. Sediment record and lake level changes will serve to interpret past climate changes, especially significant shifts in the mean position of the Polar Front and continental/marine air masses influencing the Mediterranean region.
- HOTSPOT: The Snake River Scientific Drilling Project. Tracking the Yellowstone Plume Through Space and Time.
- Dead Sea Drilling: The Dead Sea as a Global Paleoenvironmental, Tectonic and Seismic Archive

The following ICDP projects are planned in near future.

- Scientific Collaboration On Past Speciation Conditions in Lake Ohrid (SCOPSCO): Development of a lake chronology to understand evolution of this biodiversity.
- Continental Scientific Drilling Project of Cretaceous Songliao Basin: Continuous Highresolution Terrestrial Archives and Greenhouse Climate Change
- Colorado Plateau Drilling Project: A Continuous Cored Record of Continental Environmental Change in Western North America
- Continental scientific drilling into coral reefs near the northern limit (COREF): Quaternary and Pleistocene reef deposits along the Ryukyu Islands, Japan.
- Campi Flegrei Caldera Deep Drilling Project: A natural laboratory to understand mechanisms of caldera dynamics and to develop techniques for eruption forecast and effective risk mitigation
- Scientific Drilling in the Barberton Belt: Peering into the Cradle of Life

Wiersberg introduced the IODP-ICDP joint activities at 2011 EGU (ICDP-IODP Session on Scientific Drilling / ICDP-IODP Town Hall Meeting / IODP-ICDP booth). He stressed the importance of establishing a communication platform between ICDP and IODP also for ICDP-IODP joint proposals.

Kasahara asked how ICDP decides how much they fund a project for. Wiersberg replied that it depends on the project and how much the proponents can pull attention from industry.

Mével commented that there is a similarity between ICDP and Mission Specific Platform Project in terms of different platforms each time and the cost of the project.

Feary commented that "how to establish a communication platform" was a good question and he wondered if ICDP is really interested because nothing happened after SPC passed the motion to invite ICDP to a joint program planning last year. Wiersberg commented that ICDP is a very small program and the operational support group has only seven or eight

people, so it might be too much work for them.

Fillipelli informed that IODP and IODP member nations approved the funding of a joint IODP-ICDP activity, but it had been on hold for about a year waiting for response from ICDP in spite of the enthusiasm from IODP side. Wiersberg replied that he did not know the situation.

Rudy Stein commented that the plan was for the first IODP-ICDP meeting to be held in Lamont in this winter and they continue email communication and the last meeting will be in the beginning of 2012. So, he thought that the plan was fixed. Feary noted that the plan was not implemented, as far as he knew. The people that would populate this joint DPG had been identified and are ready to go, but some sort of trigger is required from the ICDP side to implement this activity. Wiersberg commented that he did not know about the plan. Murray commented that this is really initial planning for discussions and asked Wiersberg to get back with ICDP's response to help IODP to see what directions to go.

Javier Escartin commented that the communication between ICDP and IODP should come at a very early stage for joint proposal. Mével agreed with Escartin and pointed out that ICDP and IODP have very different review process that don't talk to each other, and they do not share the result of the evaluations. So, it joint planning should start at the earlier stage to make sure that the two programs work together on the merit of joint proposal. Feary agreed with Mével.

Stein commented that if Chicxulub will not be implemented within the current IODP, a joint IODP-ICDP planning group makes more sense because the proposal might be submitted as a big future joint proposal. Mével agreed with Stein and commented that we need a pragmatic approach with actual proposals. Pälike gave the example of 615-Full2 North West Pacific coral reef which has been approved by ICDP, but SSEP concluded that it does not fit well in IODP and ranked it in teir3.

Van der Pluijm commented that IODP saw a huge future in joint proposals, and IODP should keep trying to communicate with ICDP. But now it is ICDP who should come to IODP and say they want to have a communication.

Blackman commented that SPC thought a DPG along IODP culture, but the equivalent is a workshop in their culture. Feary replied that they already had a workshop on this topic and there were a lot of suggestions, but the problem is that these were not coordinated and there was no thought to how these specific suggestions are going to feed in to the big picture.

Filippelli commented that the problem is that ICDP cannot release the funds easily until the proposal becomes an approved project, and at that point it is too late to engage IODP. He stressed the need for communication between high-level advisory groups of ICDP and IODP. Ashok Singhvi suggested a meeting with SPC chair and the chair of ICDP executive committee.

Tada suggested having a model for joint proposals, and the model could be a CDP type proposal with an umbrella. ICDP and IODP share the umbrella part and the component part can be reviewed separately in each program, for example. Larsen agreed with Tada.

Filippelli suggested forming a small group with 3 people (himself, one from SPC, one from

MI) to talk to a higher level on ICDP at a one-day meeting and leaving this decision as a consensus.

**SPC Consensus 1103-06:** The Science Planning Committee (SPC) of the IODP recognizes significant potential synergy in research goals of IODP and ICDP. The SPC seeks to improve collaboration between these scientific drilling programs and minimize any potential roadblocks to future research collaborations, particularly for onshore-offshore transects. Thus, a short meeting of a task force is proposed, to include representatives of IODP-SPC (Chair and one member) and IODP's management and representatives of ICDP-SAG/EC and ICDP management. The goal of this task force will be to develop a structure to promote collaboration on projects with common goals, and to improve communication on relevant proposals under consideration. The ultimate goal will be joint project development, coordination of proposal actions, and joint funding as appropriate.

# 8. Engineering development issues

# 8.1. Engineering development update

Issa Kagaya provided the engineering development report. He introduced three engineering development projects and their status.

- SCIMPI (Simple Cable Instruments for Measuring Parameters In-situ) by URI is a new seafloor observatory system to make subsurface time series measurements of temperature, pressure, and resistivity. 2011 is the final year of the project. System modules bench test, calibration and verification of resistivity sensors and sea test were done by March 2011. The proponent has requested at-sea test with JR. IODP-MI, USIO, CDEX and proponents will discuss the schedule and at next OTF meeting on June 10 11, 2011 at BGS.
- MDHDS (Motion Decoupled Hydraulic Delivery System) by UT Austin, USIO and Mohr is to remove tool dislodgement problem and to allow real-time communication with the downhole tool. 2011 is the final year of this project. Full bench test and pressure test of ERS and MFTM are done. Full module land field test is planned at Sugarland in Jun. The proponent has requested at-sea test with SCIMPI. IODP-MI, USIO, CDEX and proponents will discuss the schedule and at next OTF meeting on June 10 11, 2011 at BGS.
- Wireline Hydraulic Testing and Borehole Imaging Tool for Stress Measurements by JAMSTEC and CNRS-IPGS is a downhole pumping system with packers and sensors for fracture imaging. EDP reviewed and requested an operational risk assessment and design reviews by experts. Feasibility study starts from April, 2011

There are three ongoing scoping studies.

- Ultra Deep Drilling Scoping Study

Workshop1 < Mohole: A Crustal Journey and Mantle Quest> was held on 3-5 June 2010, Kanazawa, and workshop2 < Reaching Mantle Frontier: Moho and Beyond > was on 9-11 September 2010, Washington DC.

Mohole initial feasible study group will submit the first report by April 2011, which would address the new technologies to be implemented on the IODP drill ships, related cost, and

the most efficient operational implementation plan.

- Coring Quality Control Scoping Study

The scoping group submitted the final report in Dec 2010 and John Tauxe (EDP) will review and suggest on improvements of the methodology and data selection for consideration.

- IODP Drilling and Coring Technology

This scoping group reviews the drillings and coring technologies and will post the Phase 2 final report on IODP website.

All IODP SOC Engineering Projects above will be complete by the end of FY2013.

#### 9. Proposal Transfer Approach

Filippelli explained the background of SSEP-proposal review requested by SPC. SASEC asked SPC to develop a plan for reviewing the pool of proposals currently within SAS and identifying those high priority proposals, with respect to the current ISP and the Science Plan for the new program. The high priority proposals will be considered for the first phase of scientific ocean drilling in the new program. As a consensus of the 2010 August SPC meeting, SPC decided to ask SSEP to analyze proposals within their pool in November 2010. SSEP reviewed the proposals based on the guideline from SPC and sorted the proposals into three tires with short summary of justification for individual proposal. At this SPC meeting, SPC may decide to transfer top tier proposals to the new program, return bottom tier proposals for potential resubmission as new proposals, and review middle tier proposals with new Science Plan and operational factors.

The panel members agreed that they forward the SSEP proposals in tier 1 to the new program.

**SPC consensus 1103-07:** SPC forwards SSEP proposals in Tier1 to the new program.

Filippelli asked the panels to take into consideration differences in the development stages of the proposals. The result of this SPC review should quickly go to the proponent along with recommendations on how to proceed in advance of Oct. 1 deadline.

Jeff Schuffert asked why certain people should be excluded from the discussion. Filippelli replied that is because SPC does not compare proposals but they review individual proposal, so that the conflict of interest should be considered. Murray commented that there are conflicts because SPC does implicitly rank even though they do not give each a number. Singhvi and Feary agree with Murray.

Pälike asked about the expectations from this review process. Filippelli explained that SPC will likely deactivate proposals that have not risen to any higher level in the long nurturing process, in order for the community to feel that this really is a new structure and potentially a new program that is in alignment with the new science plan.

#### **10. SSEP Proposal Summaries**

#### 10.1 Deep Biosphere and Subsurface Ocean

The list below shows the SSEP proposals reviewed at this meeting as "Deep Biosphere and Subsurface Ocean" category.

Proposal	SSEP Tier	Short title
759-Pre	1	EPR Fast spread Crust
761-Pre	1	South Atlantic Bight Hydrogeology
635-Full3	2	Hydrate Ridge Observatory
701-Pre2	2	Great Australian Bight Deep Biosphere
743-Full	2	Gulf of Mexico Hydrate Dynamics
764-Pre	2	TAG II Hydrothermal System
685-Full	3	Ligurian Margin Borehole Observatory
715-Full	3	Mediterranean Landslides

Ussler left the room because of his COI.

Murray presented each proposal in Deep Biosphere and Subsurface Ocean category and explained the review results from SSEP, and his recommendation. After the presentation of the proposals, panel members were asked if there was a motion, and if there was, they voted. The voting results were the following:

(SPC motions pass by an affirmative vote of at least two-thirds of the committee.)

**SPC Motion 1103-08:** The SPC does not forward Proposal 701-Pre2 Great Australian Bight Deep Biosphere to the new program.

Murray moved, Früh-Green seconded, 15 in Favor (Blackman, Escartin, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 1 abstained (Feary), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-09:** The SPC does not forward Proposal 743-Full Gulf of Mexico Hydrate Dynamics to the new program.

John moved, Escartin seconded, 12 in Favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Maekawa, Murray, Smith, Stein, Umino, van der Pluijm), 3 opposed (Kasahara, Takada, Yamazaki), 1 abstained (Tada), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-10:** The SPC does not forward Proposal 764-Pre TAG II Hydrothermal System to the new program.

Murray moved, Blackman seconded, 10 in favor (Blackman, Escartin, Maekawa, Murray, Smith, Stein, Tada, Takada, Umino, Yamazaki), 6 opposed (Feary, Filippelli, Früh-Green, John, Kasahara, van der Pluijm), 0 abstained, 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-11:** The SPC does not forward Proposal 685-Full Ligurian Margin Borehole Observatory to the new program.

Murray moved, Smith seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-12:** The SPC does not forward Proposal 715-Full Mediterranean Landslides to the new program.

Murray moved, Früh-Green seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

# 10.2 Environmental Change, Processes and Effects

The list below shows the SSEP proposals reviewed at this meeting as "Environmental Change, Processes and Effects" category.

Proposal	SSEP	
Number	tier	Short title
625-Full	1	Pleistocene Pacific Southern Ocean
		North Atlantic Volcanism and
658-Full2	1	Paleoclimate
708-Pre2	1	Central Arctic Paleoceanography
761-Pre	1	South Atlantic Bight Hydrogeology
645-Full3	2	North Atlantic Gateway
667-Full	2	NW Australian Shelf Eustasy
680-Full	2	Bering Strait Climate Change
702-Full	2	Southern African Climates
730-Pre2	2	Sabine Bank Sea Level
750-Pre	2	Beringia Sea Level History
751-Full	2	West Antarctic Ice Sheet Climate
756-Pre	2	Arctic Ocean Exit Gateway
760-Pre	2	SW Australia Margin Cretaceous Climate
771-Full	2	Iberian Margin Paleoclimate 2
615-Full2	3	NW Pacific Coral Reefs
656-Full4	3	Belize Margin Paleoclimate and Tectonics

683-Full	3	East Asia Topography and Monsoon
710-Pre2	3	Gulf of Corinth Rift
737-Full2	3	North Sea Cenozoic Climate Change
746-Pre	3	Arctic Mesozoic Climate

Stein and Brinkhuis left the room because of COI.

Webster presented each proposal in Environmental Change, Processes and Effects category and explained the review result from SSEP and his recommendation. After the presentation of each proposal, panel members were asked if there was a motion, and if there was, they voted. The voting results were the following:

(SPC motions pass by an affirmative vote of at least two-thirds of the committee.)

**SPC Motion 1103-13:** The SPC does not forward Proposal 645-Full3 North Atlantic Gateway to the new program.

Blackman moved, Murray seconded, 13 in favor (Blackman, Escartin, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Tada, Takada, Umino, Yamazaki), 0 opposed, 3 abstained (Feary, Pälike, van der Pluijm), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-14:** The SPC does not forward Proposal 702-Full Southern African Climates to the new program.

Blackman moved, Escartin seconded, 9 in favor (Blackman, Escartin, Früh-Green, John, Maekawa, Tada, Takada, Umino, Yamazaki), 6 opposed (Feary, Filippelli, Kasahara, Murray, Pälike, Smith), 1 abstained (van der Pluijm), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-15:** The SPC does not forward Proposal 771-Full Iberian Margin Paleoclimate 2 to the new program.

Blackman moved, John seconded, 8 in favor (Blackman, Escartin, Früh-Green, John, Kasahara, Tada, Umino, Yamazaki), 7 opposed (Feary, Filippelli, Murray, Pälike, Smith, Takada, van der Pluijm), 1 abstained (Maekawa), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-16:** The SPC does not forward Proposal 656-Full4 Belize Margin Paleoclimate and Tectonics to the new program.

Murray moved, Escartin seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-17:** The SPC does not forward Proposal 683-Full East Asia Topography and Monsoon to the new program.

Blackman moved, John seconded, 15 in Favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Takada, Umino, van der Pluijm, Yamazaki), 1 abstained (Tada), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-18:** The SPC does not forward Proposal 710-Pre2 Gulf of Corinth Rift to the new program.

John moved, Escartin seconded, 16 in Favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-19:** The SPC does not forward Proposal 737-Full2 North Sea Cenozoic Climate Change to the new program.

Smith moved, Früh-Green seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-20:** The SPC does not forward Proposal 746-Pre Arctic Mesozoic Climate to the new program.

Smith moved, Escartin seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-21:** The SPC does not forward Proposal 615-Full2 NW Pacific Coral Reefs to the new program.

Escartin moved, Blackman seconded, 4 in favor (Blackman, Escartin, Murray, Smith), 11

opposed (Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Pälike, Tada, Takada, Umino, van der Pluijm), 1 abstained (Yamazaki), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-22:** The SPC does not forward Proposal 730-Pre2 Sabine Bank Sea Level to the new program.

Früh-Green moved, John seconded, 3 in favor (Blackman, Escartin, Früh-Green), 13 opposed (Feary, Filippelli, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-23:** The SPC does not forward Proposal 667-Full NW Australian Shelf Eustasy to the new program.

Früh-Green moved, Escartin seconded, 4 in favor (Escartin, Früh-Green, Kasahara, Yamazaki), 9 opposed (Feary, Filippelli, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino), 3 abstained (Blackman, John, van der Pluijm), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-24:** The SPC does not forward Proposal 750-Pre Beringia Sea Level History to the new program.

Blackman moved, Escartin seconded, 6 in favor (Blackman, Escartin, Maekawa, Tada, Umino, Yamazaki), 8 opposed (Feary, Filippelli, Kasahara, Murray, Pälike, Smith, Takada, van der Pluijm), 2 abstained (Früh-Green, John), 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-25:** The SPC does not forward Proposal 760-Pre SW Australia Margin Cretaceous Climate to the new program.

Blackman moved, Früh-Green seconded, 6 in favor (Blackman, Escartin, Früh-Green, Tada, Takada, Yamazaki), 10 opposed (Feary, Filippelli, John, Kasahara, Maekawa, Murray, Pälike, Smith, Umino, van der Pluijm), 0 abstained, 1 in COI (Stein), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

#### 10.3 Solid Earth Cycles and Geodynamics

The list below shows the SSEP proposals reviewed at this meeting as "Solid Earth Cycles and Geodynamics" category.

Proposal		
Number	SSEP tier	Short title
740-Full	1	Galicia Margin Rift History
749-Pre	1	Gulf of California Rifting & Microbiology
692-Full	2	Flemish Cap Rifted Margin
731-Pre	2	Papua New Guinea Orogenic Lifecycle
754-Full2	2	Norwegian Sea Silica Diagenesis
623-Full4	3	Ontong Java Plateau
640-Full	3	Godzilla Mullion
718-Pre	3	Pacific Plate Petit Spot Volcanism
725-Full2	3	NE Atlantic Volcanic Rifted Margin
727-APL	3	Afar Mantle Plume Dispersion
729-Pre	3	Western Lord Howe Rise Extension
735-Full	3	South China Sea Tectonic Evolution
766-APL	3	Essaouira Seamount Hotspot

Escartin left the room because of his COI.

Kasahara presented the each proposal in Environmental Change, Processes and Effects category and explained the review result from SSEP and his recommendation. After the presentation of each proposal, panel members were asked if there was a motion, and if there was, they voted. The voting results were the following:

(SPC motions pass by an affirmative vote of at least two-thirds of the committee.)

**SPC Motion 1103-26:** The SPC does not forward Proposal 623-Full4 Ontong Java Plateau to the new program.

Früh-Green moved, Blackman seconded, 14 in favor (Blackman, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Tada, Takada, Umino, Yamazaki), 1 opposed (van der Pluijm), 1 abstained (Feary), 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-27:** The SPC does not forward Proposal 640-Full Godzilla Mullion to the new program.

Blackman moved, Smith seconded, 9 in favor (Blackman, John, Kasahara, Maekawa,

Murray, Smith, Tada, Takada, Umino), 5 opposed (Filippelli, Früh-Green, Stein, van der Pluijm, Yamazaki), 2 abstained (Feary, Pälike), 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-28:** The SPC does not forward Proposal 718-Pre Pacific Plate Petit Spot Volcanism to the new program.

Blackman moved, Smith seconded, 11 in favor (Blackman, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, Yamazaki), 5 opposed (Feary, Filippelli, Früh-Green, John, van der Pluijm), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-29:** The SPC does not forward Proposal 725-Full NE Atlantic Volcanic Rifted Margin to the new program.

Blackman moved, John seconded, 14 in favor (Blackman, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, Yamazaki), 2 opposed (Feary, van der Pluijm), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-30:** The SPC does not forward Proposal 727-APL Afar Mantle Plume Dispersion to the new program.

van der Pluijm moved, Früh-Green seconded, 15 in favor (Blackman, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 1 opposed (Feary), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-31:** The SPC does not forward Proposal 729-Pre Western Lord Howe Rise Extension to the new program.

Kasahara moved, Murray seconded, 9 in favor (Früh-Green, Kasahara, Maekawa, Murray, Smith, Tada, Takada, Umino, Yamazaki), 7 opposed (Blackman, Feary, Filippelli, John, Pälike, Stein, van der Pluijm), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

**SPC Motion 1103-32:** The SPC does not forward Proposal 766-APL Essaouira Seamount Hotspot to the new program.

John moved, van der Pluijm seconded, 15 in favor (Blackman, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 1 opposed (Feary), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

**SPC Motion 1103-33:** The SPC does not forward Proposal 735-Full South China Sea Tectonic Evolution to the new program.

Kasahara moved, Pälike seconded, 4 in favor (Kasahara, Maekawa, Umino, Yamazaki), 12 opposed (Blackman, Feary, Filippelli, Früh-Green, John, Murray, Pälike, Smith, Stein, Tada, Takada, van der Pluijm), 0 abstained, 1 in COI (Escartin), 3 non-voting (Li, Singhvi, Webster).

The motion failed.

The panel discussed on the wording of the all motions above. They concluded that "deactivate" is not appropriate.

**SPC Motion 1103-34**: SPC adopts "not forward" for the wording of the motions related to SSEP proposals.

\_\_\_\_\_

#### **Summary of SPC review for SSEP proposals**

			SSEP		
Proposal#	Theme	Short title	tier	Motion	Result
615-Full2	Е	NW Pacific Coral Reefs	3	1103-21	Forwarded
623-Full4	S	Ontong Java Plateau	3	1103-26	Deactivated
625-Full	Е	Pleistocene Pacific Southern Ocean	1		Forwarded
635-Full3	В	Hydrate Ridge Observatory	2		Forwarded
640-Full	S	Godzilla Mullion	3	1103-27	Forwarded
645-Full3	Е	North Atlantic Gateway	2	1103-13	Deactivated
		Belize Margin Paleoclimate and			
656-Full4	Е	Tectonics	3	1103-16	Deactivated
		North Atlantic Volcanism and			
658-Full2	E	Paleoclimate	1		Forwarded
667-Full	Е	NW Australian Shelf Eustasy	2	1103-23	Forwarded
680-Full	Е	Bering Strait Climate Change	2		Forwarded
683-Full	Е	East Asia Topography and Monsoon	3	1103-17	Deactivated
685-Full	В	Ligurian Margin Borehole Observatory	3	1103-11	Deactivated
692-Full	S	Flemish Cap Rifted Margin	2		Forwarded
701-Pre2	В	Great Australian Bight Deep Biosphere	2	1103-08	Deactivated
702-Full	Е	Southern African Climates	2	1103-14	Forwarded

708-Pre2	Е	Central Arctic Paleoceanography	1		Forwarded
710-Pre2	S	Gulf of Corinth Rift	3	1103-18	Deactivated
715-Full	В	Mediterranean Landslides	3	1103-12	Deactivated
718-Pre	S	Pacific Plate Petit Spot Volcanism	3	1103-28	Deactivated
725-Full2	S	NE Atlantic Volcanic Rifted Margin	3	1103-29	Deactivated
727-APL	S	Afar Mantle Plume Dispersion	3	1103-30	Deactivated
729-Pre	S	Western Lord Howe Rise Extension	3	1103-31	Forwarded
730-Pre2	Е	Sabine Bank Sea Level	2	1103-22	Forwarded
731-Pre	S	Papua New Guinea Orogenic Lifecycle	2		Forwarded
735-Full	S	South China Sea Tectonic Evolution	3	1103-33	Forwarded
737-Full2	Е	North Sea Cenozoic Climate Change	3	1103-19	Deactivated
740-Full	S	Galicia Margin Rift History	1		Forwarded
743-Full	В	Gulf of Mexico Hydrate Dynamics	2	1103-09	Deactivated
746-Pre	Е	Arctic Mesozoic Climate	3	1103-20	Deactivated
749-Pre	S	Gulf of California Rifting & Microbiology	1		Forwarded
750-Pre	Е	Beringia Sea Level History	2	1103-24	Forwarded
751-Full	Е	West Antarctic Ice Sheet Climate	2		Forwarded
754-Full2	S	Norwegian Sea Silica Diagenesis	2		Forwarded
756-Pre	Е	Arctic Ocean Exit Gateway	2		Forwarded
759-Pre	В	EPR Fast spread Crust	1		Forwarded
		SW Australia Margin Cretaceous			
760-Pre	E	Climate	2	1103-25	Forwarded
761-Pre	В	South Atlantic Bight Hydrogeology	1		Forwarded
764-Pre	В	TAG II Hydrothermal System	2	1103-10	Deactivated
766-APL	S	Essaouira Seamount Hotspot	3	1103-32	Deactivated
771-Full	E	Iberian Margin Paleoclimate 2	2	1103-15	Forwarded

B - Deep Biosphere and Subsurface Ocean

# 11. Presentation and discussion of SPC proposals

The SPC reviewed the ten full proposals shown in the table below, organized according to the three platforms (MSP, Riser, Non-riser). For each proposal, the lead watchdog presented the scientific objectives and the second and third watchdogs were given the opportunity to comment. The chairs of the SSEP, the Site Survey Panel (SSP), and the Environmental Protection and Safety Panel (EPSP) were then given the opportunity to comment. This was followed by SPC member discussion, and then the floor was opened for comments from everyone. Members in COI left the room before the proposal presentation starts.

## 11.1 Mission Specific Platform proposals (3)

Proposal	Short title	Watchdogs
748-Full2	Nice Airport Landslide	van der Pluijm/Pälike/Li
758-Full2	Atlantis Massif Seafloor Processes	Takada/Maekawa/Smith
672-Full3	Baltic Sea Basin Paleoenvironment	Stein/Smith/Tada

After the presentations and discussion are finished for the MSP proposals, Filippelli asked

E - Environmental Change, Processes, and Effects

S - Solid Earth Cycles and Geodynamics

the panel to select the proposals that should be in the ranking pool. The panel discussed and concluded to have all proposals in the ranking pool by consensus.

**SPC Consensus 1103-35**: The SPC will include in the MSP ranking pool 3 of the proposals reviewed at this meeting.

Filippelli handed over a ballot sheet to each member, and asked fill in the ranking number and submit it to Yamamoto at the following morning.

#### 11.2 Riser Proposal (1)

Proposal	Short title	Watchdogs
	Izu-Bonin-Mariana Arc Middle	
698-Full3	Crust	Früh-Green/Takada/Blackman

After the presentations and discussion are finished for the Riser proposal, Filippelli asked the panel to discuss whether this proposal can be a candidate for OTF or not. The panel discussed and concluded to consider this proposal as a candidate.

**SPC Consensus 1103-36:** The SPC will not consider proposal 698-Full3 Izu-Bonin-Mariana Arc Middle Crust for platform-based ranking during this meeting, because it is the only one Riser proposal in the SPC pool. Instead, SPC will decide to forward or not to forward it to the Operations Task Force (OTF).

### 11.3 Non-Riser Proposals (8)

Proposal	Short title	Watchdogs
555-Full3	Cretan Margin	Escartin/Yamazaki/van der Pluijm
567-Full4	South Pacific Paleogene	Pälike/ Singhvi/Stein
589-Full3	Gulf of Mexico Overpressure	Li/Feary/van der Pluijm
595-Full4	Indus Fan and Murray Ridge	Tada/ Singhvi /Pälike
697-Full3	Izu-Bonin-Mariana Reararc Crust	Blackman/Yamazaki/Maekawa
669-Full3	Walvis Ridge Hotspot	John/Yamazaki/Umino
703-Full	Costa Rica SEISCork	Takada/van der Pluijm/Feary

After the presentations and discussion are finished for the non-riser proposals, Filippelli asked the panel to select the proposals that should be in the ranking pool. The panel discussed and concluded to have all proposals in the ranking pool by consensus.

**SPC Consensus 1103-37:** The SPC will include in the Non-Riser ranking pool 5 of the proposals reviewed at this meeting.

# 12. Clarify status of proposals remaining at OTF

Früh-Green, John, Maekawa, Pälike, Tada, Umino, Webster and Clift left the room due to their conflict of interest.

Issa Kagaya presented the list of proposals remaining at OTF.

#### 12.1. Scheduled or recommended for FY11-13

Proposal	Short Title
522-Full5	Superfast Spreading Crust
537A-Full5	Costa Rica Seismogenesis Phase A
553-Full2	Cascadia Margin Hydrates
548-Full3	Chixculub K-T Impact Crater
552-Full3	Bengal Fan
603-CDP3	NanTroSEIZE Overview:
603A-Full2	NanTroSEIZE Phase 1: Reference Sites
603B-Full2	NanTroSEIZE Phase 2: Mega-splay Faults
603C-Full	NantroSEIZE Phase 3: Plate Interface
603D-Full2	NanTroSEIZE Observatories
605-Full2	Asian Monsoon
644-Full2	Mediterranean Outflow
677-Full	Mid-Atlantic Ridge Microbiology
686-Full	Southern Alaska Margin 1
695-Full2	Izu-Bonin-Mariana (IBM) Pre-Arc Crust
716-Full2	Hawaiian Drowned Reefs
745-CPP	Shimokita Coal Bed Biosphere
763-APL	Iberian Margin Paleoclimate

Filippelli and the other members put the information together and determined the proposal status for expedition.

- Mediterranean outflow: Co-chiefs are identified. Staffing in process.
- Mid-Atlantic Ridge Microbiology: Co-chiefs are identified. Staffing in process.
- South Alaska Margin: Co-chiefs are identified. No Staffing yet. 786-APL is associated.
- -Lesser Antilles Landslide: Co-chiefs are identified. Staffing in process. 763-APL is associated.
- -Chicxulub and Hawaii: In permission process.

- -Bengal Fan: Approved by EPSP. Ready to go.
- Cascadia Margin Hydrates: High priority target with potential for FY13.
- Asian Monsoon: Need clearance of Russian EEZ.
- IBM Pre-Arc Crust: Not full approval from SSP, not been reviewed by EPSP.
- NanTroSEIZE: No SSP review. FY13 potential expeditions.

Escartin noted that there needs to be more drilling targets between Lesser Antilles and Alaska along the long ship transit and asked if now was the time to discuss on it. Filippelli replied that SPC would need to wait to get some more information. Larsen noted that SPC might need to have some electronic communication. Filippelli agreed with Larsen and commented that waiting until August meeting would be too late. Murray commented that more alternative expeditions would be needed for the ship track. Larsen replied that it depends on funds.

## 12.2. Available for future consideration by OTF

Proposal	Short Title
•	
477-Full4	Okhotsk/Bering Plio-Pleistocene
505-Full5	Mariana Convergent Margin
537B-Full4	Costa Rica Seismogenesis Project Phase B
549-Full6	Northern Arabian Sea Monsoon
551-Full	Hess Deep Plutonic Crust
581-Full2	Late Pleistocene Coralgal Banks
601-Full3	Okinawa Trough Deep Biosphere
633-Full2	Costa Rica Mud Mounds
659-Full	Newfoundland Rifted Margin
661-Full2	Newfoundland Sediment Drifts
693-APL	S. Chamorro Seamount CORK
705-Full2	Santa Barbara Basin Climate Change
724-Full	Gulf of Aden Faunal Evolution
732-Full2	Antarctic Peninsula Sediment Drifts

- Late Pleistocene Coralgal Banks: No review by EPSP
- Costa Rica Seismogenesis Project Phase B: CDEX has not started scoping.
- Gulf of Aden Faunal Evolution: Security issue.

#### 12.3. Holding bin

Proposal	Short Title
618-Full3	East Asia Monsoon
637-Full2	New England Shelf Hydrogeology

Filippelli explained that East Asia Margin is remaining in the holding bin, because the proposal is being significantly revised to be operated by a non-riser vessel so that new sites had to be determined. New England Margin hydrogeology is also remaining in the holding bin because of low SSP score and no EPSP review. Murray noted that there are other proposals without SSP or EPSP review, and asked why only these two was put in the holding bin. Feary commented that the proposals in the similar status also should be in the holding bin. Filippelli replied that he could release it, and then it could be another cheap MSP candidate. But before doing it, he has to be careful of the reason because SPC already had directed the proponents as to the criteria by which the proposal was kept in the holding bin. Filippelli clarified that this exercise was simply to show what proposals are in OTF in advance of actually reviewing them at the next August meeting. SPC will be reviewing every proposal in OTF in August so that SPC can inform the new program of what we would recommend for the holding bin structure.

# 13. Global ranking of proposals I

#### 13.1 Select proposal pool to rank

This agenda item was merged in agenda 11.

#### 14. Presentation and discussion of APLs

The SPC reviewed the eight APL proposals shown in the table below. Members in COI left the room before the proposal presentation starts. For each proposal, the lead watchdog presented the scientific objectives and the second and third watchdogs were given the opportunity to comment. The chairs of the SSEP, the Site Survey Panel (SSP), and the Environmental Protection and Safety Panel (EPSP) were then given the opportunity to comment. This was followed by SPC member discussion, and then the floor was opened for comments from everyone.

Proposal	Short title	Watchdogs	
757-APL	South Pacific Eocene-Oligocene	Tada/ Pälike/Murray	
769-APL2	Costa Rica Crustal Architecture	Takada/Escartin/Yamazaki	
772-APL2	North Atlantic Crustal Architecture	Li/Blackman/Umino	
	West Pacific Warm Pool		
775-APL	Paleoceanography	Stein/ Pälike /Murray	
779-APL	Atlantis Massif Lithosphere Hydration	Maekawa/van der Pluijm/Smith	
783-APL	Indian Monsoon History	Singhvi/ Pälike	
785-APL	Gulf of Mexico SCIMPI Field Trial	Kasahara/Blackman/Früh-Green	
786-APL	Alaskan Glacial and Ocean History	Webster/Tada/Feary	

After every watchdog's presentation, panel members were asked if there was a motion. If

there was no motion, Filippelli summarized the discussion as a consensus. The consensuses and result of motion are the following:

**SPC Consensus 1103-38:** The SPC deactivates proposal 757-APL South Pacific Eocene-Oligocene and 775-APL West Pacific Warm Pool Paleoceanography.

**SPC Motion 1103-39:** The SPC deactivates proposal 772-APL2 North Atlantic Crustal Architecture.

John moved, Kasahara seconded, 7 in favor (Früh-Green, John, Kasahara, Maekawa, Stein, van der Pluijm, Yamazaki), 8 opposed (Blackman, Escartin, Feary, Filippelli, Murray, Smith, Takada, Umino), 1 abstained (Tada), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion failed.

**SPC Consensus 1103-40:** The SPC forwards the following APL proposals to the Operations Task Force (OTF) for potential scheduling.

769-APL2 Costa Rica Crustal Architecture

779-APL Atlantis Massif Lithosphere Hydration

783-APL Indian Monsoon History

785-APL Gulf of Mexico SCIMPI Field Trial

786-APL Alaskan Glacial and Ocean History

#### 15. Global ranking of proposals II

#### 15.1. Balloting by SPC members

SPC members and alternates submitted their rankings on signed ballots to Yamamoto. Li, Singhvi, Webster were the non-voting members present.

#### 15.2. Tabulation of results

Yamamoto collected the ballots and tabulated the following results for the eighteen proposals ranked by the committee:

# Ranking for Non-Riser Proposal

Rank	Proposal	Title	Proponent	Mean	Stdv
1	595-Full4	Indus Fan and Murray Ridge	Clift	1.63	0.62
2	697-Full3	Izu-Bonin-Mariana Rear-Arc Crust	Tamura	2.56	1.59
3	703-Full	Costa Rica SeisCORK	Brown	3.56	1.9
4	589-Full3	Gulf of Mexico Overpressures	Flemings	3.81	1.38
5	555-Full3	Cretan Margin	Kopf	4.5	1.15
6	669-Full3	Walvis Ridge Hotspot	Sager	4.94	0.93

Ranking for MSP proposals

Rank	Proposal	Title	Proponent	Mean	Stdv
1	758-Full2	Atlantis Massif Seafloor Processes	Früh-Green	1.47	0.64
2	672-Full3	Baltic Sea Basin Paleoenvironment	Andrén	1.67	0.62
3	748-Full2	Nice Airport Landslide	Stegmann	2.87	0.35

#### 15.3. Select ranked proposals to forward to OTF

Kasahara and Tada left the meeting. Umino and Takada have proxy-vote for Kasahara and Tada respectively.

Filippelli explained the process to select proposals to forward to OTF. He suggested discussing the proposals by platform, and discussing whether we would like to forward them to OTF or not. Proposals not forwarded to OTF will simply be a part of PEP, unless SPC chooses to deactivate them.

Feary asked if SPC would prioritize OTF proposals. Filippelli replied that SPC members on OTF would solicit advice from SPC on that issue before August. Murray commented that it might be good to have some type of ranking from this SPC meeting, because they have to continue with scoping, otherwise they have to wait until August. Filippelli noted that he had been given the guidance from ESO that holding everything till August would not work for them. He suggested discussing it now. McInroy commented that ESO needs to include the names of the contractors in any application to make progress on Chicxulub, and that process is planned before August. Filippelli commented that it would be the beginning of a real investment. Stein commented that it makes no sense to invest million dollars because it is not clear that this will be an expedition. Larsen commented that the amount would be less than the expectation if ICDP would decide to support Chicxulub. Murray suggested discussing which proposal to forward to OTF, and then when we know the number, we would revisit the issue. Filippelli agreed with Murray.

Filippelli explained that there is only one riser proposal and asked if anyone would move to forward or not to forward it to OTF. Escartin moved that the SPC forwards proposal 698-Full3 Izu-Bonin-Mariana Arc Middle Crust the Operations Task Force (OTF).

Blackman commented that forwarding this to OTF allows it to be considered with other riser proposals to be implemented in the new program. Having one more option could be helpful for the new program. Früh-Green commented that she had the opposite view. Forwarding it now could be a major commitment (500 days) to one scientific topic and it could define the focus of the next program because how much time we can drill with Chikyu is limited. The decision should be in the hands of the new program. Yamazaki commented that it is an OTF matter, not SPC. Blackman commented that she believed that SPC cannot forward it to OTF because it cannot be implemented in this program and no new program exists yet. So SPC cannot forward it to something that does not exist. Filippelli replied that SPC should continue to populate OTF with proposals for FY14 and beyond.

Larsen commented that this expedition would not happen in this program, so SPC basically can leave it to the new SAS. Van der Pluijm replied that Larsen's comment sounded like forwarding and not forwarding have the same effect, but he thought that forwarding or not forwarding sends a different signal for the next group to think about.

Murray asked what is lost by keeping it at the SPC level. Yamazaki replied that we cannot start the feasibility study until it comes up to OTF. Eguchi agreed with Yamazaki and added that the estimation of the expedition time will be done by scoping work.

Escartin asked if not-forwarding can be justified with the reason SPC does not want to see this drilling if we spend 500 days on it.

Blackman suggested postponing the decision until the new science plan is finalized, then SPC can assess how it fits within the plan. Filippelli replied that the final science plan is not much different from the current version, because it is now in final edit phase.

Pälike commented that the new science plan has the challenge #8, "what was the composition structure and dynamics of earth's upper mantle", so if the panel decided not to forward this, the new panel has to evaluate scientifically why it is not the right proposal to address this challenge. Larsen added that there is strong desire for drilling to the mantle in the new science management. It is never too early to try and make out what is possible.

Van der Pluijm commented that the science plan indeed identifies that understanding crust is important, and he added that if SPC does not move this forward, SPC should discuss where the best place to do this science is. Blackman commented that she is aware part of the inter margins community and they have concluded that the IBM is the place to do this science. Feary asked if they said the site is the place to drill or IBM in general. Blackman replied that the community agreement is on IBM in general, not on the specific site. Umino commented that they had several international workshops on IBM with site survey data of the proposed site and concluded that the proposed site would be optimal.

John called the question. Filippelli asked the members to vote on the motion.

**SPC Motion 1103-41:** The SPC forwards proposal 698-Full3 Izu-Bonin-Mariana Arc Middle Crust to the Operations Task Force (OTF).

Escartin moved, Smith seconded, 9 in favor (Filippelli, Kasahara, Maekawa, Smith, Stein, Tada, Takada, Umino, Yamazaki), 3 opposed (Blackman, Feary, van der Pluijm), 4 abstained (Escartin, Früh-Green, John, Murray), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion failed.

Filippelli moved on to non-riser proposal ranking. Peter Clift left the room due to his COI.

Van der Pluijm moved that SPC forward #1 and #2 to OTF. Blackman seconded. No discussion ensued. Filippelli asked the members to vote on the motion.

**SPC Motion 1103-42:** The SPC forwards the top two ranked Non-Riser proposals, 595-Full4 Indus Fan and Murray Ridge and 697-Full3 Izu-Bonin-Mariana Rear-Arc to the Operations Task Force (OTF).

van der Pluijm moved, Blackman seconded, 16 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki ), 0 opposed, 0 abstained, 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

Stein asked if SPC would review the OTF proposals again in August. Filippelli replied yes and SPC would review proposals only at OTF.

Feary asked if SPC would discuss whether to deactivate anything. Murray suggested that the agenda for August includes the discussion of what we would not want to forward, rather than doing it here and now. Filippelli replied that he does not have a direct answer to that.

Früh-Green commented that the panel should discuss the disposition of the Walvis Ridge proposal, because it had been ranked low for over three years.

She moved to deactivate 669-Full3 Walvis Ridge. John seconded. The panel discussed the possibility that the proponents will have more information from site survey in near future and the proposal would be improved dramatically, but they found it would not be before August, could take several years. Filippelli asked the members to vote.

#### **SPC Motion 1103-43:** The SPC deactivates proposal 669-Full3 Walvis Ridge Hotspot.

Früh-Green moved, John seconded, 15 in favor (Blackman, Escartin, Feary, Filippelli, Früh-Green, John, Kasahara, Maekawa, Murray, Smith, Stein, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 1 abstained (Tada), 4 non-voting (Li, Pälike, Singhvi, Webster).

The motion passed.

Filippelli shifted to MSP proposals. Van der Pluijm moved to forward the top 2 proposals to OTF. Murray seconded.

Van der Pluijm explained that he picked the top two not just because of their ranking, but because they are very nice projects and he is glad to see them in the program. Murray and Clift agreed with van der Pluijm. John called the question. Filippelli asked the panel to vote.

**SPC Motion 1103-44:** The SPC forwards the two ranked MSP proposals, 758-Full2 Atlantis Massif Seafloor Processes and 672-Full3 Baltic Sea Basin Paleoenvironment, to the Operations Task Force (OTF).

van der Pluijm moved, Murray seconded, 15 in favor (Blackman, Clift, Feary, Filippelli, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 3 in COI (Escartin, Früh-Green, John), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

Blackman suggested adding an agenda item about the prioritization of MSP proposals at OTF. Filippelli agreed and suggested amending the agenda by including a discussion of All MSPs currently at OTF. No dissent was raised. Filippelli announced that the new item was added.

#### 15.3.1 MSP prioritization

He explained there were five MSP proposals at OTF and one in the holding bin.

Proposal	Short title
548-Full3	Chicxulub impact
716-Full2	Hawaiian Drowned Reefs
581-Full2	Late Pleistocene Coralgal Banks
672-Full3	Baltic Sea Basin Paleoenvironment
758-Full2	Atlantis Massif Seafloor Processes
637-Full2	New England hydrogeology (Holding Bin)

Allan asked if a new MSP can be added to the schedule before the end of 2013. Filippelli replied that it could be for either before 2013 or after. Alan added the New England hydrogeology fiscally does not have a chance before 2013. Filippelli replied that it might trigger some further scoping at least.

Filippelli asked for an open discussion, disregarding for the moment the ranking order. Feary suggested requesting ESO scoping on Coralgal Banks because the proponents are active in developing external funding lines for this, gaining permissions, and getting an inexpensive quotation for drilling. Filippelli asked McInroy if there was any scoping going on by ESO for Coralgal Banks. MacInroy replied no.

Stein commented that the new panel members do not have the information about the first three proposals, and prioritization including those proposals could be difficult for the new members. He asked if June is a good timing to do that because ESO said August is too late. McInroy replied it would not be ideal.

Van der Pluijm asked if two more scoping efforts means breaking ESO's bank. McInroy replied that scoping in ESO does not cost much, but timing is more problematic because for example, the permitted time frame for Chicxulub is 8 months and the window includes hurricane season. ESO needs SPC's decision now. Van der Pluijm noted that SPC would not be prepared to give ESO informed guidance about which one proposal to pursue first. Instead, he preferred that ESO scope two more proposals, because it is unfair to rank all MSP proposals including two proposals that were already scoped and the others that were not scoped. Stein agreed with van der Pluijm and he added that it is important that the

Baltic Sea and Atlantis Massif have the same chance as the other proposals.

Murray moved that ESO continues scoping of Chicxulub and Hawaiian Drowned Reefs, and begin the scoping of Baltic Sea Paleoclimate, and Atlantic Massif. Pälike seconded.

Murray explained that the motion included the first two proposals to continue to scope because he does not want ESO to think that they can switch their scoping to the Baltic Sea Paleoclimate and Atlantic Massif and stop the first two.

Feary commented that this motion could send a bad message to Late Pleistocene Coralgal Banks proponents that SPC is not interested in it, because the proponents are doing all the work themselves.

Van der Pluijm commented that he was not sure how to vote because it actually includes two messages.

Murray withdrew the motion. Pälike seconded to withdraw the motion.

Van der Pluijm moved that SPC encourages ESO to begin scoping Baltic Sea Paleoclimate and Atlantis Massif as soon as viable. Blackman seconded.

Ussler asked if SPC wants ESO to continue developing Chicxulub despite ESO need decision on it now. McInroy added that Chicxulub is in danger of losing the drilling opportunity at the moment if ESO does not continue moving forward on this project. Filippelli replied that the motion simply encourages them to begin scoping and it does not mention about Chicxulub's priority. Van der Pluijm stressed that SPC does not discourage progress in Chicxulub.

Stein asked if Chicxulub would be the first choice if scoping of the Chicxulub indicates that it would be successful. Van der Pluijm replied that SPC is not ranking these MSPs at the moment, and OTF would decide it in June.

Pälike asked what is involved to continue the permitting effort for Chicxulub. McInroy replied that it is not only permitting, but also ESO is committed to sign the contract with companies, because ESO needs to have this detail on the permit. Filippelli asked if the signing would be before SPC August meeting. McInroy replied yes. Van der Pluijm asked if this MSP topic will be discussed at OTF June meeting. McInroy replied no unless there is any update concerning Chicxulub permitting.

Blackman asked McInroy that if the time window closed before June. McInroy replied it is around June. Blackman asked if there is a possibility that June OTF could happen before ESO knows which company will be chosen. McInroy replied possibly no. Van der Pluijm commented that SPC keeps forwarding proposals because SPC sees good science and that is what SPC is supposed to do. OTF just acts on what they receive from SPC. Larsen agreed with van der Pluijm and he added that there is also a possibility that the proponents may find additional funding. Filippelli agreed with van der Pluijm and Larsen.

Filippelli asked the panel to vote.

**SPC Motion 1103-45:** The SPC encourages ESO to begin scoping 672-Full3 Baltic Sea Basin Paleoenvironment and 758-Full2 Atlantis Massif Seafloor Processes as soon as viable.

van der Pluijm moved, Murray seconded, 15 in favor (Blackman, Clift, Feary, Filippelli, Kasahara, Maekawa, Murray, Pälike, Smith, Stein, Tada, Takada, Umino, van der Pluijm, Yamazaki), 0 opposed, 0 abstained, 3 in COI (Escartin, Früh-Green, John), 3 non-voting (Li, Singhvi, Webster).

The motion passed.

#### 18. Review of motions and consensus items

Murray and Blackman drafted the consensus statements thanking the leaders of field trip and the hosts of the 17th SPC meeting held at the BGS respectively.

**SPC Consensus 1103-46:** The SPC expresses their enthusiastic appreciation to Mike Browne, Bob Gatliffe, and David McInroy for suggesting, organizing, implementing, and leading the terrific field trip to the world famous Dunbar beach and Siccar Point geologic locations. The organizers even coordinated the weather, delivering 50 degree (Fahrenheit!) temperatures and predominantly sunny skies. In addition to channeling the spirit and voices of Hutton, Playfair, and Hall, our guides Mike, Bob, and David provided their own scientific, social, and historical context to the thoroughly enjoyable excursion (and lunch).

**SPC Consensus 1103-47**: SPC very much appreciates the excellent job that David, Robert, Eileen and others have done in planning and carrying out this meeting. Your skilled and cheerful execution of the job as well as your influence with the weather gods have made our days here bonnie. The ambience in the lunch room and opportunity to explore local cuisine has been wonderful.

# 19. Future meetings

# 19.1. Liaisons to other panels and programs

There was no discussion on this topic.

# 19.2. 18<sup>th</sup> and final SPC meeting

Host: TBA

Place: TBA (Hawaii or west coast of US)

Date: 22-24 August

Filippelli adjourned the meeting at 16:45.