



18^h Meeting of the ECORD Science Support & Advisory Committee ESSAC

May 30-June 1, 2011, Aarhus, Denmark



Table of contents

Meeting agenda Meeting Logistics List of participants List of acronyms

ESSAC	subcon	amittee procedures	1
1.	Introd	luction	3
1.1	Call to	o order, introductions	5
1.2	Welco	me and meeting logistics	5
1.3	Discu	ssion and approval of the Agenda	5
1.4	Items	since the 17 th ESSAC Meeting and ESSAC Office news	5
2.	IODP	News	6
2.1	IWG+	and Framework of the International Ocean Discovery Program 2013-2023	6
2.2	Repoi	rt of PEP, SIPCOM and OTF Meetings	
3.	ECORI) News	6
3.1	EMA aı	nd ECORD Council	6
3.2	The Fu	ture of ECORD	8
3.3	ESO		8
3.4	ESO-EN	AA-ESSAC Outreach & ECORD publications	9
3.5	ESSAC	representatives and National Office reports (ESSAC Delegates)	10
		highlights	11
4.1 1	ODP Ex	pedition 339 - Mediterranean Outflow Preliminary results	11
5.	Breako	ut sessions	11
5.1	Introdu	actions	
		ut sessions ESSAC Nomination and staffing / Education and Outreach / C working Group	11
6.	ECOR	D highlights	12
6.1		ker Jørgensen "MSP Expedition 347, Baltic Sea Paleoenvironment, and DDP deep biosphere research"	12
7.		nations and Staffing	12
7.1	Staffin		
	7.1.1	Ranking procedures, quotas and statistics	
	7.1.2	Updates on expedition staffing and applications: Deep Coalbed Biosphere of Shimokita (337), NanTroSEIZE Plate Boundary Deep Riser - 2 (338), Newfoun Sediment Drifts (342), JFAST (343), Costa Rica Seismigenesis Project 2 (344), Deep Plutonic Crust (345), Baltic Sea Paleoenvironment (347)	lland

8.	Education and Outreach	12
8.1	Summer Schools 2012 update	
	 8.1.1 USSP: The Urbino Summer School in Paleoclimatology: Past Global Change Reconstruction and Modeling Techniques, July 2012, 8.1.2 ECORD Summer School on Submarine Landslides, MARUM, Bremen, Septemb 2012 	er
	8.1.3 Impacts of the Cryosphere dynamics from Land to Ocean, Montreal, July, 20	12
8.2	ECORD Scholarships 2012, and ECORD Research Grants 2012	13
	ECORD Summer Schools 2013	13
	Distinguished Lecturer Programme 2012/2014	13
	E&O Subcommittee report, discussion and future actions	13
9.	Workshops, Communication and Vision	13
9.1	Magellan Plus Programme: updates	13
9.2	DS3F	13
9.3	EGU - EuroForum 2012	13
9.4	Overcoming barriers to Arctic Ocean scientific drilling: the site Survey challenge	
	Magellan series Workshop, November 2011, Copenhagen	13
9.5	Co-ordinated Scientific Drilling in the Beaufort Sea, February 2012	14
10.	Review of consensus, motions and actions	14
11.	Next meetings	14
	ESSAC #19, October 2012, Perpignan, France	
	ESSAC #20, May 2013, Granada, Spain	
12.	Any Other Business	14
	,	
	nex 1: List of consensus, motions and actions from the 17 th ESSAC meeting (Agenda, item 2: Proposal Evaluation Panel Report (Agenda, item 2.2)	em 1.4)
Anr	nex 3: Science Implementation and Policy Committee Report (Agenda, item 2.2)	
	nex 4: EMA outreach activities, meetings and contacts with industry and potential menntries (Agenda, item 3.3)	ıber
Anr	nex 5: ECORD Memorandum of Understanding (Agenda, item 5.2)	
Anr	nex 6: Schedule of the Urbino Summer School 2012 and list of applicants (Agenda, item	n
8.1.	1)	
Anr	nex 7: DS3F Summary Report (Agenda, item 9.2)	
Anr	nex 8: EGU Abstract of the Future Scientific Drilling in the Arctic Ocean (Agenda, item	9.4)

7.2 Updates on SAS panels

7.3 N&S Subcommittee report, discussion and future actions

Agenda of the 18th ESSAC Meeting

May 30 - June 1, 2012, Aarhus Denmark

Wednesday May 30, 2012

08:00 - 18:00: Field Trip: Eocene Fur Formation

Thursday May 31, 2012, 9:00 - 17:30h

1.	Introduction	
1.1	Call to order, introductions (Escutia)	(5')
1.2	Welcome and meeting logistics (Marit-Solveig)	(5')
1.3	Discussion and approval of the Agenda (Escutia)	(5')
1.4	Items since the 17 th ESSAC Meeting and ESSAC Office	
	news (Escutia)	(20')
2.	IODP News	
2.1	IWG+ and Framework of the International Ocean Discovery Program	
	2013-2023 (Camoin)	(35')
2.2	Report of PEP, SIPCOM and OTF Meetings (Stein)	(45')
3.	ECORD News	
3.1	EMA and ECORD Council (Borissova)	(10')
3.2	The Future of ECORD (Camoin)	(30')
3.3	ESO (Stevenson)	(20')
3.4	ESO-EMA-ESSAC Outreach & ECORD publications (Maruéjol)	(20')
3.5	ESSAC representatives and National Office reports	
	(ESSAC Delegates)	(60')
4.	ECORD highlights	
4.1	IODP Expedition 339 - Mediterranean Outflow Preliminary results:	
	Lourens	(45')
5.	Breakout sessions	
5.1	Introductions (Escutia)	(5')
5.2	Breakout sessions ESSAC Nomination and Staffing / Education	
	and Outreach / AD-HOC Working Group	(90')

Friday June 1, 2012, 9:00 - 16:30h

6. ECORD highlights:

Group dinner

6.1 "MSP Expedition 347, Baltic Sea Paleoenvironment, and the IODP deep

7.	Nominations and Staffing	
7.1	Staffing (Escutia)	(45')
	7.1.1 Ranking procedures, quotas and statistics	
	7.1.2 Updates on expedition staffing and applications:	
	Deep Coalbed Biosphere off Shimokita (337), NanTroSEIZE Plate Deep Riser - 2 (338), Newfounland Sediment Drifts (342), JFAST Rica Seismigenesis Project 2 (344), Hess Deep Plutonic Crust (34 Paleoenvironment (347)	(343), Costa
7.2	Updates on SAS panels (Escutia)	(10')
7.3	N&S Subcommittee report, discussion and future actions (Lourens)	(45')
8.	Education and Outreach	
8.1	Summer Schools 2012 update	
	8.1.1 USSP: The Urbino Summer School in Paleoclimatology: Past Global Change Reconstruction and Modeling Techniques, July 2012, (Lourens)	(10')
	8.1.2 ECORD Summer School on Submarine Landslides, MARUM, Bremen, September 2012, (Stein)	(10')
	8.1.3 Impacts of the Cryosphere dynamics from Land to Ocean, Montreal, July, 2012 (Weis)	(10')
8.2	ECORD Scholarships 2012, and ECORD Research Grants 2012	
	(Gutiérrez-Pastor)	(10')
	ECORD Summer Schools 2013 (Gutiérrez-Pastor)	(5')
	Distinguished Lecturer Programme 2012/2014 (Gutiérrez-Pastor)	(10')
8.5	E&O Subcommittee report, discussion and future actions (Monteys)	(45')
9.	Workshops, communication and vision	
9.1	Magellan Plus Programme: updates (Erbacher)	(10')
9.2	DS3F (Borissova)	(10')
9.3	EGU - EuroForum 2012 (Escutia)	(10')
9.4	Overcoming barriers to Arctic Ocean scientific drilling: the Site Survey challenge Magellan series Workshop, November 2011,	
	Copenhagen (Stein)	(10')
9.5	Co-ordinated Scientific Drilling in the Beaufort Sea,	
	February 2012 (Stein)	(10')
10.	Review of consensus, motions and actions (Escutia)	(15')
11.	Next meetings	
	ESSAC #19, October 2012, Perpignan, France (Berné) ESSAC #20, May 2013, Granada, Spain	(10')

(45')

biosphere research": Bo Barker Jørgensen

12. Any Other Business (Escutia)

End of meeting

Meeting logistics

Wednesday, May 30.

Excursion to Fur to see the famous Fur Formation from the Eocene. The sediment consists of marine diatomite interbedded with more than 100 ash layers depicting the extensive volcanism linked to the opening of the Atlantic. The sediments also contain fantastic fossils. The deposits have been subject to glacier-tectonics causing faults and extensive folding. this is very visible due to the ash horizons.

The sediments and ash layers are well exposed in cliffs along the coast. After wards there will be a possibility of visiting Fur Museum which as a quite exceptional collection of fossils, mainly fish, but also turtles, insects etc. For further information you may visit:

http://www.furmuseum.dk/forside

Departure by bus at 08.00 (presumably from the Hotel). Return approximately at. 18.00. Packed lunch.

Thursday, May 31 and June 1. ESSAC meeting

Venue:

Department of Geoscience, Aarhus University Høegh-Guldbergs Gade 2 DK-8000 Aarhus C Denmark

Email: geologi@au.dk
Phone: (+45) 8715 4500

http://geo.au.dk/

Lunch: sandwiches

Conference dinner - May 31: at AROS, the Aarhus art museum. Prior to the dinner there will be a possibility of taking a walk in the "rain bow panorama" with a view of Aarhus city.

http://www.aros.dk/samlingen/your-rainbow-panorama/

For dinner you will have the opportunity of experiencing the new Nordic Kitchen.

Schedule:

18.15 - Drinks and rainbow walk

19.00 - 22.00 dinner

22.00 Restaurant closes, but there are bars down town.

Accommodation

Radisson Blu http://www.radissonblu.com/hotel-aarhus

Margrethepladsen 1

8000 Aarhus C

Denmark

Tel: (+45) 8612 8665; Fax: (+45) 8612 8675

Reservations: Tel: (+45) 8936 2340; Fax: (+45) 8936 2025

E-mail: Reservations.aarhus@radissonblu.com

The airport bus stops at the hotel to/from Aarhus and Billund airports. The hotel is located 5-7 min walk from the train station.

Distance from the meeting facilities: ca. 20-25 min on foot through down-town.

Other hotels are available: Cabinn, http://www.cabinn.com/hotel-i-aarhus/hotel-cabinn-aarhus.html

Transport

Train: Aarhus train station is located in downtown. 5-7 minutes from Radisson Blu hotel and 15-20 min from the Department (meeting facilities).

Airport: The airport is located 50 minutes by bus from Aarhus. There are regular flights from Copenhagen as well as a few other cities. http://www.aar.dk/default.asp?id=87. The last flight out of Aarhus Friday evening is about 20.35 (to Copenhagen).

Transport from airport: The **airport bus** (blue) waits outside the arrival 'hall'. There is a bus for almost all arriving and departing flight. The bus will wait if the plane is delayed. Should you have the misadventure to lose your luggage, you just go to the bus driver and ask him to wait before registering your delayed luggage.

The bus departs from the train station 80 minutes prior to each departing plane. However, one can check the bus schedule linked to a specific flight on

http://www.midttrafik.dk/k%C3%B8replaner/lufthavnsbus+%C3%A5rhus+lufthavn#FlyBus (unfortunately only in Danish).

This bus stops at the Radisson Blu.

Price: 100 DKK each way.

Taxi: There are a number of taxis waiting outside the airport. The price is however somewhat hefty - ca. 600 DKK for one way.

Contact information in case of problems:

Marit-Solveig Seidenkrantz Department of Geoscience, Aarhus University Høegh-Guldbergs Gade 2

DK-8000 Aarhus C, Denmark

Email: mss@geo.au.dk Phone: (+45) 8715 6441 Mobile: (+45) 2778 2897

Krak.dk - www.krak.dk http://map.krak.dk/print





Spar 1125 kr. på 5 x Resolution 7 slankebehandlinger hos Victorias
Skønhedsklinik.

Din pris 1 125 kr (værdi 2 250 kr)

Køb nu

Dealen lukker
2d 5t 7m 20s

1 of 1 16-03-2012 18:52

List of Participants

ESSAC Office

Carlota Escutia (Chair) ESSAC Delegate Spain
Julia Gutiérrez Pastor ESSAC Science Coordinator

ESSAC Representatives

Serge Berné ESSAC Delegate France Elisabetta Erba ESSAC Delegate Italy

Gretchen Früh-Green

Jean Pierre Henriet

Nalan Koç

ESSAC Delegate Switzerland

ECORD Council Belgium

ESSAC Delegate Norway

ESSAC Delegate Netherlands

Xavier Monteys

ESSAC Delegate Ireland

Werner Piller

ESSAC Delegate Austria

Stuart Robinson

ESSAC Delegate UK

Marit-Solveig Seidenkrantz ESSAC Delegate Denmark (meeting host)

Ian Snowball ESSAC Delegate Sweden

Ruediger Stein ESSAC Delegate Germany (Vice-chair)

Kari Strand ESSAC Delegate Finland Szymon Uscinowicz ESSAC Delegate Poland Antje Voelker ESSAC Delegate Portugal Dominique Weis ESSAC Delegate Canada

Observers/Guests

Thomas Behrendt Klinggaard Danish Research Council

Milena Borissova EMA Gilbert Camoin EMA

Jochen Erbacher ESF Magellan Workshops Markus Kienast Alternate Delegate Canada

Patricia Maruéjol EMA

César Ranero Alternate Delegate, Spain

Alan Stevenson ESO

Apologies

Bryndís Brandsdóttir ESSAC Delegate Iceland Anneleen Foubert ESSAC Delegate Belgium

LIST OF ACRONYMS

ACEX Arctic Coring Expedition (Expedition 302)

APLACON Alternative Platform Conference (Lisbon, May 2001)

AF Academy of Finland
BCR Bremen Core Repository
BGS British Geological Survey (UK)
BOG IODP-MI Board of Governors

CDC Conceptual Design Committee (new riser vessel)

CDEX Center for Deep Earth EXploration (Japan)

Consorzio Nazionale Interuniversitario per le Scienze del Mare (Italy)

CDP Complex Drilling Project

CNR Consiglio Nazionale delle Ricerche (Italy)

CNRS Centre National de la Recherche Scientifique (France)

DASTI Danish Agency for Science, Technology and Innovation

DFG Deutsche ForschungsGemeinschaft (German Research Foundation)

DSDP Deep Sea Drilling Project EC European Commission

ECORD European Consortium for Ocean Research Drilling

EDP Engineering Development Panel
EPC European Petrophysics Consortium

EMA ECORD Managing Agency

ERA-Net European Research Area Network
ESF European Science Foundation

EPSP Environmental Protection & Safety Panel

ESO ECORD Science Operator

ESSAC ECORD Science Support and Advisory Committee
FWO-Vlaanderen Fund for Scientific Research-Flanders (Belgium)

FWF Austrian Science Fund

GRICES Gabineta de Relacoes Internacionais da Ciencias e do Ensino Superior (Portugal)

GSI The Geological Survey of Ireland

ICDP International Continental Scientific Drilling Project
 IIS-PPG Industry IODP Science Program Planning Group
 INGV Istituto Nazionale di Geofisica e Vulcanologia (Italy)
 INSU Institut National des Sciences de l'Univers (France)

IOS Implementing OrganisationsIODP Integrated Ocean Drilling Program

IODP-MI IODP Management International, Inc.
ISP Initial Science Plan for the IODP

JAMSTEC JApan Marine Science & TEchnology Center

J-DESC Japanese Earth Drilling Science Consortium

JEODI Joint European Ocean Drilling Initiative

JOI Joint Oceanographic Institutions

JR JOIDES Resolution

LDEO Lamont Doherty Earth Observatory
MICINN Ministerio de Ciencia e Innovación

MEXT Ministry of Education, Culture, Sports, Science & Technology (Japan)

MoU Memorandum of Understanding

MOST People's Republic of China Ministry Of Science and Technology

MSP Mission-specific platform

NanTroSEIZENankai Trough SEIsmogenic Zone ExperimentNCMRNational Center for Marine Research (Greece)NERCNatural Environment Research Council (UK)

NSF National Science Foundation (USA)

NWO Netherlands Organisation for Scientific Research

OD21 Ocean Drilling in the 21st Century (Japan)

ODP Ocean Drilling Program

OEAW Austrian Academy of Sciences

OGS Istituto Nazionale di Oceanograpfiae di Geofisica Sperimentale (Italy)

OTF Operations Task Force
PEP Proposal Evaluation Panel

RANNIS The Icelandic Centre for Research

SAS Science Advisory Structure

SASEC Science Advisory Structure Executive Committee

SciMP Scientific Measurements Panel SCP Site Characterization Panel

SIPCOM Science Implementation and Policy Committee

SNF Swiss National Science Foundation
 SODV Scientific Ocean Drilling Vessel
 SPC Science Planning Committee

SSEP Science Steering & Evaluation Panel

SSP Site Survey Panel
STP Site Technology Panel
TAMU Texas A & M University
ToR Terms of Reference

USSAC United States Science Advisory Committee
USSSP United States Science Support Program

UVic University of Victoria (Canada)
VR Swedish Research Council

ESSAC subcommittee procedures

ESSAC has been structured in three subcommittees (Staffing and Nominations, Education and Outreach, and ad-hoc working group) to increase the efficiency of ESSAC and the involvement of the ESSAC Delegates in ESSAC life. Subcommittee general tasks and composition are summarized below.

The subcommittees meet electronically to prepare the meetings on general issues and to work on specific issues at the request of the ESSAC Chair. Each subcommittee is coordinated by an ESSAC Delegate, nominated by the ESSAC Chair. The coordinator is in charge of writing a report for the Agenda book and of presenting the activities of the subcommittee at the meetings. A general discussion follows that presentation.

Staffing and Nominations subcommittee

Members: Lucas Lourens (Coordinator, NL), Carlota Escutia (ESSAC Chair, ES), Julia Gutiérrez-Pastor (ESSAC Science Coordinator, ES), Dominique Weis (CDN), Serge Berné (F), Stuart Robinson (UK), Gretchen Früh-Green (CH), Ruediger Stein (D), Kari Strand (FIN), Antje Voelker (P).

General tasks:

- · Suggesting nominations of ECORD representatives (delegates and alternates) on SAS panels, PPGs and DPGs.
- · Co-ordinating applications, reviewing all the applications and suggesting nominations of shipboard participants.
- · Reviewing the quota of shipboard scientists between participating countries.
- Suggesting co-chief nominations for IODP Expeditions.

Immediate actions:

- · Summarize the current ECORD composition of SAS panels, identify future replacements (expertise), and suggest permanent alternates.
- · Summarize the current ESSAC composition, identify future replacements (Delegates and alternates), and make recommendations.
- Summarize the quota balance for ECORD participation to IODP Expeditions.

Education and Outreach subcommittee

Members: Xavier Monteys (Coordinator, IRE), Carlota Escutia (ESSAC Chair, ES), Julia Gutiérrez-Pastor (ESSAC Science Coordinator, ES), Bryndis Brandsdottir (ICE), Elisabetta Erba (I), Nalan Koc (N), Werner Piller (A), Marit-Solveig Seidenkrantz (DK), Ian Snowball (S), Anneleen Foubert (B), Szymon Uscinowicz (POL).

General tasks:

- Developing educational opportunities/programs: Teacher's workshops, Summer Schools etc., especially in non-traditional audiences.
- · Reviewing Summer School proposals.

- · Reviewing applications and suggesting nominations for ECORD scholarships.
- \cdot Initiating applications of speakers for the Distinguished Lecturer Series and suggesting nominations.
- · Providing new ideas regarding new ways to raise funds for E&O activities.
- · Advising on the public outreach (societal relevance of the IODP science).

Immediate actions:

- \cdot Make recommendations for deadlines for submission of Summer School proposals and for applications for ECORD scholarships.
- · Make suggestions of new ideas regarding E&O activities (societal relevance of the IODP science), especially in non-traditional audiences.
- · Make suggestions regarding new ways to raise funds for E&O activities.
- · Monitoring ECORD database (e.g. ECORD publications).

AD-HOC Working Group on relevant themes

1. Introduction

Letter from the Chair

Dear ESSAC Delegates, ESSAC alternates, and attendees of the 18th ESSAC Meeting,

Since its 17th meeting that was held in Dublin on 25-27 October 2010, ESSAC has worked intensively on all aspects of its activities.

Regading Expeditions, we were pleased to issue the call for the Mission Specific Platform (MSP) Expedition 347: Baltic Sea Paleoenvironment. We are also very pleased to report that we have received 76 applications, which is a record! In addition, ESSAC has completed the selection of ECORD scientists for expeditions with the JOIDES Resolution: Expedition 342 (Newfoundland Paleogene and Cretaceous Sediment Drifts: Deep-sea circulation in a Greenhouse World), Expedition 344 (Costa Rica Seismogenesis Project 2 (CRISP), and Expedition 345 (Hess Deep Plutonic Crust): and the Chikivu: Expedition 337 (Deep Coalbed Biosphere off Shimokita). Expedition 338 NanTroSEIZE Plate Boundary Deep Riser 2), and the ongoing Expedition 343 (Japan Trench Fast Drilling Project). For all these expeditions the staffing has been either completed or is in progress. More information about the scientific objectives and precise dates of all these expeditions can be found in the table (below) and on the IODP web http://www.iodp.org/expeditions/. The ECORD science community enthusiasm and strength are demonstrated by the high number of applications to sail on IODP vessels. A special thanks goes to all ESSAC Delegates for their diligent and hard work during the past seven months in evaluating the large number applications for these expeditions.

Within the Science Advisory Structure (SAS), Maryline Moulin and Adélie Delacour have been nominated and approved by the ECORD Council as the new ECORD PEP members replacing Henk Brinkhuis and Julie Carlut, who rotated off. In additon, seven members of the Proposal Evaluation Panel (PEP) and the Site Characterization Panel (SCP) will rotate off by the end of 2012. ESSAC has issued two calls for nominations for ECORD members in the PEP and the SCP, and we will start discussing the applications during this 18th ESSAC meeting.

The second phase of the ECORD Distinguished Lecturer Program is running successfully with the ECORD Distinguished Lecturers Kai-Uwe Hinrichs (MARUM, University of Bremen, Germany, "Benthic archaea - the unseen majority with importance to the global carbon cycle revealed by IODP drilling"), Dominique Weis (PCIGR, University of British Columbia, Canada, "What do we know about mantle plumes and what more can we learn by IODP drilling?"), and Helmut Weissert (ETH Zurich, Switzerland, "Carbon cycle, oceans and climate in the Cretaceous: lessons from Ocean Drilling (DSDP to IODP) and from records on continents").

Two our Distinguished Lecturers, Kai-Uwe Hinrichs and Dominique Weis, myself as ESSAC chair, and representatives from EMA (Gilbert Camoin and Milena Borissova) and ESO (Robert Gatliff) participated in the "Symposium for Ocean Drilling" sponsored by ECORD at the University of Haifa, Israel. This was a very productive workshop and EMA has received a statement of interest from Israel to join ECORD. During our meeting, we will know more details and updates from the EMA Office about this great development.

We continue successfully with the ECORD initiatives to train the next gerenation of ocean drilling scientists. The recent call for ECORD scholarships has been very successful with 79 applications to attend one of the three ECORD-sponsored 2013 summer schools: 1. The Urbino Summer School in Paleoclimatology and ECORD: 1) Past Global Change Reconstruction and Modeling Techniques. University of Urbino, Italy, July 11–31, 2012; 2) ECORD Summer School on Submarine Landslides, Earthquakes and Tsunami, Center for Marine Environmental Sciences (MARUM), University of Bremen, Germany, September 3-14, 2012; and 3) Impacts of the Cryosphere dynamics from Land to Ocean, an ECORD summer school in Canada (Montreal) July 5-21, 2012. In addition, ECORD merit-based awards for outstanding graduate students to conduct research related to the Integrated Ocean Drilling Program, the ECORD Grants, has received 20 highly qualified applications. During this meeting we will review the evaluations of the applicants and move

forward with the funding. ECORD also provided scholarships for three young scientists to attend the workshop Arctic Drilling Workshop in Copenhagen (Nov 01-03, 2011).

The interdivision IODP-ICDP EuroFORUM session during EGU was very successful, with a total of 35 submissions divided in two oral blocks, with 5 talks on "Results from previous drilling", 5 talks on "Outlook to the future" and 2 talks in "Drilling tolos , monitoring and databases", and 23 posters.

All the work conducted by ESSAC could not have been achieved without the hard work of Julia Gutierrez-Pastor, the ESSAC Science Coordinator, and of the ESSAC delegates, as well as the strong support from Gilbert Camoin (EMA) and the ECORD Council members.

I warmly thank Marit-Solveig Seidenkrantz_for hosting the 18th ESSAC Meeting in Aarhus, Denmark, and for her efforts for the outstanding arrangements made for this meeting.

I wish you a successful and pleasant meeting. Carlota Escutia Granada, 15 May 2012

1.1 Call to order, introductions

1.2 Welcome and Meteing Logistics

Marit-Solveig will provide information about the meeting logistics.

1.3 Discussion and approval of the Agenda

At the meeting in Aarhus, Denmark, C. Escutia will summarize the current agenda and remark potential goals of the meeting and/or changes of the agenda.

1.4 Items since the 17th ESSAC Meeting and ESSAC Office news

- C. Escutia will present items since the last ESSAC meeting. The list down-below contains the actions items, which arose at the 17th ESSAC meeting in Dublin. Action items that have been accomplished by the ESSAC Office since then are labelled as "Done". Action items not fulfilled yet, are labelled "in progress". The complete list of consensus, motions and actions from the 17^{th} meeting are listed in *Annex 1*.
- > ESSAC Action Item 1110-01: ESSAC Office to add to the May 2012 meeting Agenda a discussion within the E&O Subcommittee about improving the recording/reporting of IODP science knowing about publications in advance to promote media interest. **Done**
- > ESSAC Action Item 1110-02: ESSAC Office charged to circulate information on DS3F and other meetings of IODP interests (Town Hall AGU 2011, Euroforum, etc) to community/mailing lists. Done
- > ESSAC Action Item 1110-03: R. Stein to contact <u>Dr. Michael Diepenbroek</u> to ask for a potential contribution to the next ECORD Newsletter No 18 about the SEDIS (Scientific Earth Drilling Information Service) database that is developed by IODP to facilitate access to all data and information related to scientific ocean drilling. **Done**
- > ESSAC Action Item 1110-04: ESSAC Office to modify Quota table to reflect participation of scientists representing ECORD (not an specific country) including Russian participation. **Done**
- > ESSAC Action Item 1110-05: ESSAC Office to contact chairs of PEP & SCP to check for required expertise in panels to issue calls for rotation ECORD members in SAS in Nov 12. Done (for Expeditions handled by ESSAC Office in Granada)
- > **ESSAC** Action Item 1110-06: ESSAC Office to issue calls for nominations for the SAS panels to replace members rotating by Nov 2012. **Done**
- > ESSAC Action Item 1110-07: ESSAC Office to circulate among delegates a revised proposal for the handling of the review and selection of applicants for ECORD Scholarships. **Done**
- > **ESSAC Action Item 1110-08:** ESSAC Office to issue calls for organization of summer schools in 2013 during January 2012. **Done**
- > **ESSAC Action Item 1110-09:** ESSAC Office to issue calls for summer schools scholarships 2012 during January 2012. **Done**
- > ESSAC Action Item 1110-10: ESSAC Delegates to propose next DLP nominations during the ESSAC May 2012 meeting. In progress this meeting

> ESSAC Action Item 1110-11: ESSAC Office to elevate ESSAC nominations of the MagellanPlus Program Chair and Vice-Chair for approval during the ECORD Council meeting in November 2011. Done

> ESSAC Action Item 1110-12: Approval of minutes ESSAC 16th meeting will be conducted by mail and minutes will be posted in the ESSAC website. **Done**

2. IODP News

2.1 IWG+ Framework of the International Ocean Discovery Program

G. Camoin will give a summary of the IWG+ and the framework of the International Ocean Discovery Program.

2.2 Report of PEP, SIPCOM and OTF Meetings

R. Stein will present a summary of the PEP (San Francisco, US, December 2011), SIPCOM (Goa, India, January 2012) and OTF meetings (Annexes 2 and 3).

3. ECORD News

3.1 EMA - ECORD Council

M. Borissova will give a summary about the latest news regarding EMA and ECORD Council activities. The detailed information about EMA outreach activities, meetings, contacts with industry, and potential member countries is provided in Annex 4.

ECORD MANAGING AGENCY - WORKING FOR THE FUTURE

The ECORD Managing Agency (EMA) is now based at the CEREGE, Aix-en-Provence (France) with Gilbert Camoin as Director, Milena Borissova as Assistant-Director and Martine Tiercelin as Secretary. Patricia Maruejol, Science Officer for Education and Outreach, is based at the CRPG, Nancy (France).

Over the last months, most of the EMA activities have been focused on building the future of ECORD within the new International Ocean Discovery Program (IODP) "Exploring the Earth beneath the Sea". The new IODP is expected to be launched on October 1st, 2013.

A new architecture - The New Framework of the International Ocean Discovery Program has been developed by the International Working Group+, with inputs from the Science Implementation and Policy Committee (SIPCom); it has been recently approved by all potential IODP partners.

The new programme architecture will maintain an overarching international umbrella (*IODP Forum and Support Office*) and an international scientific evaluation system (*Science Advisory Structure - SAS -*), but will be noticeably streamlined (*fig.)*. This new architecture will bring substantial changes in the ECORD structure and functioning (see the document « The Future of ECORD » - http://www.ecord.org/pub/brochure.html). An ECORD Facility Board, which will be in charge of planning the Mission-Specific Platform (MSP) operations and a new Task Force dedicated to long-term

vision and planning will be created, and the tasks of the ECORD committees redefined, partly based on the recommendations of the ECORD Evaluation Committee (see their report - http://www.ecord.org/pub/brochure.html).

The greater independence of the platform providers will offer a unique opportunity for ECORD to raise its profile as the MSP operator within IODP, while the ECORD scientists will continue having access to the *JOIDES Resolution* and to the *Chikyu*.

The simplified and more flexible funding model of the new programme will allow for the implementation of one MSP expedition per year on average within the next ten years. ECORD will also seek co-funding on a project-by-project basis from research funds (*e.g.* the European Commission), non-ECORD countries and industry, and will seek additional funds from ECORD countries for specific projects.

A new approach to the MSP concept - ECORD plans to expand the MSP concept to include other tools, such as seabed drills and long piston coring. This would be done especially through the development of links with other coring programmes such as ICDP and IMAGES, or the use of European research fleet as MSPs. Whilst sub-seafloor coring will remain a key aspect, the new programme will allow ECORD's work to broaden and include the development of sub-seafloor observatories alongside new technologies. ECORD has begun to work towards the establishment of a "Distributed European Drilling Infrastructure". These tasks include strengthening the co-operation between universities, institutes and SMEs that are developing/operating tools to investigate the sub-seafloor, helping facilitate engineering development and providing a better service to the science community.

New scientific priorities - The 2013-2023 Science Plan "Illuminating Earth's past, present and future" (http://www.iodp.org/Science-Plan-for-2013-2023), has been developed by the international scientific community and will be the guiding document for IODP. Amongst the Science Plan's four major themes—Climate and Ocean Change, Biosphere Frontiers, Earth Connections and Earth in Motion—ECORD, as a MSP operator, plans to focus specifically on issues of particular societal relevance, such as climate change, resources and geohazards. The exploration of the Arctic is also seen as a priority.

The next steps - The next months will be crucial for the future of ECORD and IODP. The 18 ECORD member countries, with Poland as its most recent member, will have to decide on their level of participation within the new programme. EMA has contacted all ECORD funding agencies with the request to send an expression of interest by mid-April 2012. The new ECORD Memorandum of Understanding (MoU) will be developed later this year based on the new programme's funding plan provided by the funding agencies. The MoUs between ECORD and other IODP Partners (the National Science Foundation - NSF - and the Japanese Ministry of Education, Culture, Sports, Science and Technology - MEXT-) should be signed late 2012 or early 2013.

"The Past is a source of knowledge, and the future is a source of hope. Love of the past implies faith in the future" (Stephen Ambrose).

3.2 The future of ECORD

G. Camoin will present the perspective of ECORD in the future.

3.3 ESO

A. Stevenson will report the ESO activity and news.

ESO update to SIPCOM

ESO is currently planning for IODP Expedition 347: Baltic Sea Paleoenvironment, which will be the final MSP Expedition of the current program. ESO is also continuing to scope the highly ranked MSP proposals at OTF, which will provide excellent options for MSP Expeditions in the first years of the International Ocean Discovery Program.

On March 7, a notice of interest for platform and coring services for the Baltic Expedition was issued in the Official Journal of the European Community (OJEC, now recognised as the Official Journal of the European Union, OJEU). Notes of interest were received from six companies, and invites to tender will be sent to those companies which ESO believe can deliver the services required for this expedition.

Assuming final EPSP approval of the sites, and suitable and affordable platforms are offered in the tender responses, the expedition is expected to start in Spring 2013 and last for 60 days. The call for scientists ended on April 30, with assembly of the Science Party by ESO and the Co-chief Scientists, Thomas Andrén and Bo Barker Jørgensen, expected to begin in June. ESO and the Co-chief Scientists are currently planning the expedition science program, which includes a significant microbiology element.

ESO has been scoping Proposal 548 (Chicxulub) for potential implementation in FY14. ESO have solicited potential companies/institutes to do hazard site survey, and will seek approval from ECORD Council in June to proceed with the tendering exercise. Once the preferred contractors are known, ESO will apply for the necessary permits from the Mexican authorities who are aware of the project and have asked ESO to submit survey and drilling permit applications when ready. The aim is to conduct the hazard survey in 2013, ready for the drilling phase in 2014.

ESO has been scoping Proposal 758 (Atlantis Massif) for potential implementation in FY15. ESO Operations staff are continuing to evaluate all available seabed drill options, including the evolving BGS and MeBo (MARUM) seabed drills for this, and potentially other, proposals. BGS, MARUM and the proponents of Proposal 758 have met to discuss how new logging and sampling tools could be developed for the current seabed drills for this proposal. This is part of a potentially wider collaboration between BGS and MARUM that could see joint tool development for their individual seabed drills for future expeditions.

ESO has been pursuing a potential opportunity to conduct a one-day coring test on the Coralgal Banks in the northwest Gulf of Mexico. Lead proponent Andre Droxler brokered a reduced-rate offer from Fugro of 24 hours geotechnical ship time to test the suitability of the coring equipment carried on the *R/V Seaprobe 1* to recover relict coralgal reef material. This would be a technical test only, with no Science Party or minimum measurements. ESO is currently negotiating the contract with Fugro, and is awaiting news of the date for the test. Droxler has obtained a permit for the work, granted by the Bureau of Ocean Energy Management, Regulation and Enforcement.

The Expedition 313 (New Jersey) Science Party has received approval from Geosphere to proceed with submitting Expedition 313-related papers for a special electronic publication under the theme "Results of IODP Expedition 313: The history and impact of sea-level change offshore New Jersey". A number of 313-related papers are expected to be submitted before August 2012.

The Expedition 325 (Great Barrier Reef) 2nd Post-expedition Meeting will take place from July 3–7, 2012, at Heron Island, Queensland, Australia. A special session has been co-organised with scientists associated with Expedition 310 (Tahiti) for the 12th International Coral Reef Symposium (9–13 July, Cairns, Australia).

3.4 ESO-EMA-ESSAC Outreach & ECORD publications

P. Maruejol will provide an update on the Outreach and ECORD activities and publications. Since February 2012, the ECORD outreach activities are run by the ECORD Outreach Task Force (previously EMA-ESO-ESSAC), which welcomed four new members: Carlota Escutia, ESSAC Chair, Julia Gutierrez, ESSAC Science Co-ordinator, Gilbert Camoin, EMA Director and M. Borissova, EMA Assistant Director. ECORD Outreach Task Force (TF) met in Granada on February 14-15, 2012.

Since November 2011, the following activities/publications have been carried out:

- *JOIDES Resolution* portcall activities in Lisbon, January, 18-19, 2012, in collaboration with the USIO team, members of IODP-Portugal and scientists and educator of Expedition 339 (See reports in the ECORD Newsletter #18).
- **Future of ECORD 2013-2023**, a 24-page document released on February 2012, outlining proposals for ECORD's new phase as part of IODP 2013-2023.
- ECORD Newsletter #18 April 2012, 20-page issue released at EGU 2012 (late April) and available online at: http://www.ecord.org/pub/nl.html. This issue is made up of ECORD news and updates from November 2011 to early April 2012, reports on the many activities held at JR port calls in Portugal, reports of Arctic workshops and DS3F conference, "a Letter from Austria" (W. Piller, M. Wagreich and R. Belocky), a presentation of SEDIS (M. Dipenbroek et al.) and of the challenging Japan Trench Fast Drilling Project (J-FAST) Expedition 343.

- **ECORD-IODP** at EGU 2012, Vienna, April 22-27: joint IODP-ICDP booth and townhall meeting with highlights on IODP expeditions and ICDP projects. Also J-FAST Exp. was presented at a press conference on Tohoku earthquake.
- IODP booth attendance at AGU 2011 (A. Gerdes and P. Maruéjol),
- ECORD materials/information provided to:
 - o IODP-MI and CDEX for booths at Earth science conferences (OTC, JPGU),
 - o IODP-Canada booth organised at GAC-MAC 2012 (St John's),
 - ECORD members for national IODP meetings (Journées IODP-France, Swiss IODP, etc.)
 - o Core replicas to port calls, courses at high school and university.

Future activities/publications

- Publication of the ECORD Annual Report 2011,
- Organisation of IODP-ECORD booth at Goldschmidt 2012, Montréal, in collaboration with IODP-Canada,
- Participating in JR portcall in St John's, August 1, 2012 when the ship returns from Exp. 342 with Anne de Vernal, Diane Hanano (IODP-Canada) in support to Matthew Wright (USIO).
- Preparing ECORD Newsletter #19 October 2013 to be finalised during the next Outreach meeting and assembled according to the following deadlines:
 - o Call for contributions to be issued on late August to early September 2012,
 - o Author's deadline October 1, 2012
 - o Date of release late October 2011 at EGU 2012
- Updating ECORD online

Next ECORD Outreach TF meeting is scheduled on September 4-5, 2012 in Aix en Provence, France

3.5 ESSAC representatives and National Office reports

Each ESSAC delegate will give a short summary about the latest national activities regarding IODP and ECORD issues. The current ESSAC delegates and alternates are given in the table down below:

ESSAC Delegates and Alternates		
Austria	Werner E. Piller	Michael Wagreich
	werner.piller@uni-graz.at	michael.wagreich@univie.ac.at
Belgium	Anneleen Foubert	Stephen Lowye
	Anneleen.Foubert@ees.kuleuven.be	stephen.lowye@ugent.be
Canada	Dominique Weis	Markus Kienast
	dweis@eos.ubc.ca	markus.kienast@dal.ca
Denmark	Marit-Solveig Seidenkrantz	Paul Cornils Knutz

	mss@geo.au.dk	pkn@geus.dk
Finland	Kari Strand	Annakaisa Korja
	kari.strand@oulu.fi	annakaisa.korja@helsinki.fi
France	Serge Berné	Georges Ceulener
	serge.berne@univ-perp.fr	georges.ceuleneer@get.obs-mip.fr
Germany (Vice-Chair)	Ruediger Stein	Jochen Erbacher
	Ruediger.Stein@awi.de	j_erbacher@bgr.de
Iceland	Bryndís Brandsdóttir	Gudrún Helgadóttir
	bryndis@raunvis.hi.is	gudrun@hafro.is
Ireland	Xavier Monteys	David Hardy
	Xavier.Monteys@gsi.ie	david.hardy@gsi.ie
Italy	Elisabetta Erba	Leonardo Sagnotti
	elisabetta.erba@unimi.it	leonardo.sagnotti@ingv.it
The	Lucas Lourens	Stefan Schouten
Netherlands	llourens@geo.uu.nl	schouten@nioz.nl
Norway	Nalan Koç	Helga F. Kleiven
	Nalan.Koc@npolar.no	kikki@uib.no
Poland	Szymon Uscinowicz	Piotr Przezdziecki
	szymon.uscinowicz@pgi.gov.pl	piotr.przezdziecki@pgi.gov.pl
Portugal	Antje Voelker	Luiz F. Menezes Pinheiro
	antje.voelker@lneg.pt	Imp@geo.ua.pt
Spain (Chair)	Carlota Escutia Dotti	César Ranero
	cescutia@ugr.es	cranero@icm.csic.es
Sweden	Ian Snowball	Eve Arnold
	lan.Snowball@geol.lu.se	eve.arnold@geo.su.se
Switzerland	Gretchen Früh-Green	Judith McKenzie
	frueh-green@erdw.ethz.ch	judy.mckenzie@erdw.ethz.ch
U.K.	Stuart Robinson	Ros Rickaby
	stuart.robinson@ucl.ac.uk	Rosalind.Rickaby@earth.ox.ac.uk

4. ECORD Highlights

4.1 IODP Expedition 339- Mediterranean Outflow Preliminary results

L. Lourens will present the preliminary Results of the 339 IODP Expedition.

5. Breakout sessions

5.1 Introductions

Introductions will be provided by C. Escutia to guide discussions.

5.2 Breakout sessions

The ESSAC Nomination and staffing Education and Outreach Subcommittees will meet for 45 minutes. This will be followed by a Plenary discussion on "The Future of ESSAC" and its ToR (Annex 5).

6. ECORD highlights

6.1 Bo Barker Jørgensen will ive a summary of the goals and plan of "MSP Expedition 347, Baltic Sea Paleoenvironment, and the IODP deep biosphere research"

7. Nominations and Staffing

7.1 Staffing

- C. Escutia will update the Staffing.
- 7.1.1 Ranking procedures, quotas and statistics
- 7.1.2 Updates on expedition staffing and applications:

USIO Expeditions:

Newfounland Sediment Drifts (342),

Costa Rica Seismigenesis Project 2 (344),

Hess Deep Plutonic Crust (345),

CDEX Expeditions:

JFAST (343)

Deep Coalbed Biosphere off Shimokita (337),

NanTroSEIZE Plate Boundary Deep Riser - 2 (338)

MSP Expeditions

Baltic Sea Paleoenvironment (347)

7.2 Updates on SAS panels

C. Escutia will present rotations on panels and give an update of the applications received.

7.3 N&S Subcommittee report, discussion and future actions

L. Lourens will report the N&S Subcommittee discussions and give an overview of the future actions.

8. Education and outreach

8.1 Summer Schools 2012 update

- 8.1.1 USSP: The Urbino Summer School in Paleoclimatology: Past Global Change Reconstruction and Modeling Techniques, July 2012.
- L. Lourens will give a short report about the Urbino Summer School in Paleoclimatology. The Pdf course program and list of applicants are given in the Annex 6.
- 8.1.2 ECORD Summer School on Submarine Landslides, MARUM, Bremen, September 2012 R. Stein will present information of the ECORD Summer School on Submarine Landslides in Bremen.
- 8.1.3 Impacts of the Cryosphere dynamics from Land to Ocean, Montreal, July, 2012 D. Weis will show information related to the ECORD Summer School Impacts of the Cryosphere dynamics from Land to Ocean in Montreal.

8.2 ECORD Scholarships 2012, and ECORD Research Grants 2012

J. Gutierrez-Pastor will give summary of ECORD Scholarships and Grants 2012.

8.3 ECORD Summer Schools 2013

J. Gutierrez-Pastor will give an update of ECORD Summer Schools 2013.

8.4 Distinguished Lecturer Programme 2012/2014

J. Gutierrez-Pastor will present an outlook of the Distinguished Lecturer Programme 2012/2014.

8.5 E&O Subcommittee report, discussion and future actions

X. Monteys will report the E&O subcommittee discussions and give an overview of the future actions.

9. Workshops, communication and vision

9.1 Magellan Plus Programme: updates

J. Erbacher will report on the Magellan Plus Program.

9.2 DS3F

A DS3F Summary Report will be provided by M. Borissova. Detailed Information about DS3F background, mission and goals, work packages, Sitges conference and participants, and Deep –Sea Research and the EC, is contained in Annex 7.

9.3 EGU - EuroForum 2012

C. Escutia will present an update on the development of the Euroforum Session at EGU, Vienna, April, 2012.

9.4 Overcoming barriers to Arctic Ocean scientific drilling: the site Survey challenge Magellan series Workshop, November 2011, Copenhagen

R. Stein will report the Workshop Overcoming barriers to Arctic Ocean scientific drilling: the site survey challenge Magellan series.

Convenors: Naja Mikkelsen (nm@geus.dk); Ruediger Stein (ruediger.stein@awi.de) and Bernard Coakley (bernard.coakley@gi.alaska.edu)

The workshop "Overcoming barriers to Arctic Ocean Drilling: the site survey challenge" was designed to define site survey investigations for specific IODP-type campaigns in key areas of the Arctic Ocean based on existing proposals and pre-proposals developed during the 2008 Magellan workshop at the Alfred Wegener Institute in Bremerhaven, Germany. The goal of the workshop was further to identify themes and areas for developing new and innovative science proposals and to discuss opportunities, technical needs and limitations for future scientific drilling in the Arctic Ocean. As highlighted during the 2003 Joint European Ocean Drilling Initiative (JEODI) workshop in Copenhagen, the lack of comprehensive high-resolution site survey data restricts planning future Arctic Ocean drilling. It is also true that the lack of age control for existing seismic reflection may require stratigraphic test legs to the Arctic Ocean to bootstrap drilling generally.

Technical needs for future site survey campaigns in the Arctic Ocean were discussed as were different site survey campaigns aiming at other types of drilling e.g. Mebo, BGS rock drill and long piston coring. Information on the possibilities represented by 3D seismic site surveys in seasonally ice free Arctic Ocean regions was highlighted in this context as was the potential of closer collaboration with industry.

New and alternative ships available for drilling and seismic surveys in the Arctic Ocean were debated. While ice capable platforms are still needed, declining ice cover in parts of the Arctic

Ocean may enable the IODP drill ship "JOIDES Resolution" to operate, unaided, particularly in the Beaufort Sea and western Arctic Ocean. The new ship, Stena Drill Max, for drilling in ice infested waters was presented as an alternative to the three ship operation used during the 2004 IODP-ACEX campaign on the Lomonosov Ridge, and the use of a hovercraft for undertaking seismic surveys was discussed as an alternative to larger seismic vessels. It was thus a general consensus that future seismic campaigns and drilling operations could well be of a smaller scale compared to previous campaigns in the Arctic Ocean.

Major scientific themes and hypotheses related to active and planned Arctic Ocean proposals were identified by breakout groups. For the Lomonosov Ridge, Beaufort Sea and Chukchi Plateau areas concrete strategies for future drilling campaigns were developed and ideas of a gas hydrate theme was developed into a new and Pan Arctic drilling proposal: "Arctic methane in ocean and climate systems."

The convenors gratefully acknowledge the generous support provided by European Consortium for Ocean Research Drilling (ECORD); European Science Foundation (Magellan workshop Series) and International Arctic Science Committee (Marine Working Group).

An EGU Abstract of the Future Scientific Drilling in the Arctic Ocean is in the Annex 8.

9.5 Co-ordinated Scientific Drilling in the Beaufort Sea, February 2012

R. Stein will show a summary of the Co-ordinated Scientific Drilling in the Beaufort Sea.

10. Review of consensus, motions and actions

C. Escutia will review the list of consensus, motions and actions of the 18th ESSAC meeting.

11. Next meetings

S. Berné will talk about the schedule and plan of the next ESSAC meeting. ESSAC #19, October 2012, Perpignan, France ESSAC #20, May 2013, Granada, Spain

12. Any other Business

LIST OF CONSENSUS, MOTIONS AND ACTIONS 17th ESSAC MEETING

Dublin, 25-27 October, 2011

1. INTRODUCTION

1.3 Discussion and approval of the Agenda

ESSAC Consensus 1110-01: ESSAC approves the Agenda of its 17th meeting on October 25-27, 2011 in Dublin, Ireland

2. IODP News

2.3 Outreach Task Force

> **ESSAC Action Item 1110-01**: ESSAC Office to add to the May 2012 meeting Agenda a discussion within the E&O Subcommittee about improving the recording/reporting of IODP science – knowing about publications in advance to promote media interest.

3. ECORD News

3.1 EMA - ECORD Council

- > **ESSAC Action Item 1110-02:** ESSAC Office charged to circulate information on DS3F and other meetings of IODP interests (Town Hall AGU 2011, Euroforum, etc) to community/mailing lists.
- > ESSAC Action Item 1110-03: R. Stein to contact Dr. Michael Diepenbroek to ask for a potential contribution to the next ECORD Newsletter No 18 about the SEDIS (Scientific Earth Drilling Information Service) database that is developed by IODP to facilitate access to all data and information related to scientific ocean drilling.

> **ESSAC Consensus 1110-02**: ESSAC Consensus on soliciting a contribution to the ECORD Newsletter dealing with SEDIS

4. THE FUTURE OF IODP

4.2 Plenary discussion: The future of the new IODP and ESSAC's position

ESSAC Consensus 1110-03: ESSAC Consensus on the future of IODP:

- The internationally developed Science Plan remains the overarching vision that provides the scientifically-driven suite of highest priority objectives using multiple platforms in the next decade.

- ESSAC supports that all platforms will be funded and operated independently while maintaining an international framework to scientific ocean drilling.
- In this respect, ESSAC strongly supports the ongoing efforts of the ECORD Council to establish the future program.
- The independent operation of the platforms provides opportunities for developing programs with an ECORD flag (e.g., Arctic, Mediterranean, etc).

5. NOMINATIONS AND STAFFING

- > **ESSAC Action Item 1110-04**: ESSAC Office to modify Quota table to reflect participation of scientists representing ECORD (not an specific country) including Russian participation.
- > **ESSAC Action Item 1110-05:** ESSAC Office to contact chairs of PEP & SCP to check for required expertise in panels to issue calls for rotation ECORD members in SAS in Nov 12.
- > **ESSAC Action Item 1110-06**: ESSAC Office to issue calls for nominations for the SAS panels to replace members rotating by Nov 2012.

7. EDUCATION AND OUTREACH

7.1 ECORD Summer Schools

- > **ESSAC Action Item 1110-07:** ESSAC Office to circulate among delegates a revised proposal for the handling of the review and selection of applicants for ECORD Scholarships.
- > **ESSAC Action Item 1110-08:** ESSAC Office to issue calls for organization of summer schools in 2013 during January 2012.

7.2 ECORD Grants and scholarships 2011

> **ESSAC Action Item 1110-09:** ESSAC Office to issue calls for summer schools scholarships 2012 during January 2012.

7.3 Distinguished Lecturer Programme update

> **ESSAC Action Item 1110-10:** ESSAC Delegates to propose next DLP nominations during the ESSAC May 2012 meeting.

8. WORKSHOP REPORTS

8.1 ESF Magellan Programme: Present and Future

- > **ESSAC Consensus Item 1110-04:** ESSAC consensus on the nomination of Jochen Erbacher as Chair and Lucas Lourens as Vice-Chair of the MagellanPlus Scientific Steering Committee.
- > **ESSAC Action Item 1110-11:** ESSAC Office to elevate ESSAC nominations of the MagellanPlus Program Chair and Vice-Chair for approval during the ECORD Council meeting in November 2011.

10. NEXT MEETINGS

> **ESSAC Consensus Item 1110-05:** Location of ESSAC Meeting #18 is Aarhus, Denmark; it will be held May 30-June 1, 2012. Location of ESSAC Meeting #19 will be Perpignan, France.

11. ANY OTHER BUSINESS

- > **ESSAC Action Item 1110-12:** Approval of minutes ESSAC 16th meeting will be conducted by mail and minutes will be posted in the ESSAC website.
- > **ESSAC Consensus Item 1110-06**: ESSAC thanks Xavier Monteys for hosting the 17th ESSAC Meeting.

1St Meeting, 1-3 December 2012

San Francisco, USA

Proposal Evaluation Panel - PEP

Richard Arculus

Jennifer Biddle

Tim Bralower

Australian National University
University of Delaware
Pennsylvania State University

Julie Carlut CNRS (Centre national de la recherche scientifique)

Antonio Cattaneo^a IFREMER

Gail Christeson^b University of Texas Institute for Geophysics
Tim Ferdelman Max-Planck-Institut für marine Mikrobiologie

Ian Hall^c Cardiff University

David Hodell University of Cambridge
Matthew Hornbach University of Texas at Austin
Barbara John University of Wyoming

Juergen Koepke Institut für Mineralogie, Leibniz Universität Hannover

The University of Edinburgh Dick Kroon* Korea Maritime University Kyung Eun Lee John Maclennan University of Cambridge Cecilia McHugh Queens College, CUNY Katsuyoshi Michibayashi Shizuoka University Tomoaki Morishita Kanazawa University Maryline Moulin Instituto Dom Luiz Masafumi Murayama Kochi University

Clive Neal University of Notre Dame

Hiroshi Nishi Tohoku University

Koichiro Obana Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Amelia Shevenell University of South Florida
Ashok Singhvi Physical Research Laboratory
Aleksey Smirnov Michigan Technological University

David Smith University of Rhode Island

Michael Strasser ETH Zurich
Nabil Sultan IFREMER

Yohey Suzuki The University of Tokyo

Yoshinori Takano Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Eiichi Takazawa

Jun Tian

Jody Webster

Yasuhiro Yamada

Yusuke Yokoyama

Niigata University

Tongji University

Sydney University

Kyoto University

The University of Tokyo

James Zachos University of California, Santa Cruz

Unable to attend.

a –Alternate for Sultan b –Alternate for Hornback c –Alternate for Hodell

Liaisons, Guests, and Observers

Jamie Allan National Science Foundation (NSF), USA Rodey Batiza National Science Foundation (NSF), USA

Peter Blum Integrated Ocean Drilling Program, Texas A&M University, USA

Sarah Davies University of Leicester, UK

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

Julie Farver Consortium for Ocean Leadership, USA

Holly Given Consultant to IODP-MI, USA

Tom Janecek
Yoshi Kawamura
National Science Foundation (NSF), USA
IODP Management International, Inc., Japan

Yusuke Kubo Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan

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

Hans Chrisitian Larsen IODP Management International, Inc., Japan

Young-Joo Lee Korea Institute of Geoscience and Mineral Resources (KIGAM), Korea

Gilles Lericolais IFREMER, France

Alberto Malinverno Lamont-Doherty Earth Observatory of Columbia University, USA
Mitch Malone Integrated Ocean Drilling Program, Texas A&M University, USA
Charna Meth U.S. Science Support Program, Consortium for Ocean Leadership, USA

Catherine Mével ECORD Managing Agency, Paris Geophysical Institute, France

Kiyoka Miki Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan

Dhananjai Pandey National Centre for Antarctic and Ocean Research, India

Terry Quinn University of Texas at Austin, USA

Sanny Saito Japan Agency for Marine-Earth Science and Technology, Japan Jeff Schuffert U.S. Science Support Program, Consortium for Ocean Leadership, USA Shingo Shitaba Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan

Craig Shipp Shell International E&P

Angela Slagle Lamont-Doherty Earth Observatory, USA

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

Shouting Tuo Tongji University, China

Keita Umetsu Japan Drilling Earth Science Consortium (J-DESC), Japan

Michiko Yamamoto IODP Management International, Inc., Japan

IODP Proposal Evaluation Panel 1st Meeting, 1-3 December 2012 San Francisco, USA

DRAFT minutes (Ver. 2)

Thursday	1 December 2012	08:30-17:30
----------	-----------------	-------------

1. Introduction

1.1. Call to order and self-introductions

PEP chair Dick Kroon called the meeting to order at 8:30. All meeting participants introduced themselves.

1.2. Welcome and meeting logistics

Local host Jeff Schuffert welcomed the meeting participants and outlined the logistics for the meeting.

1.3. PEP and new SAS

1.3.1. Role of PEP in SAS (terms of reference)

Kroon went over PEP's terms of reference and noted the following roles of PEP.

- 1. PEP evaluates all proposals in the context of the themes of the new science plan
- 2. PEP selects the best proposals and forwards them to SIPCOM and OTF
- 3. PEP stimulates proposal pressure in certain scientific areas in case needed

Kroon reminded the panel members of the following review procedure.

- 1. PEP evaluates Pre-proposals, identifies those ready for development into a full proposal (one revision!), nursing stage, MDP, etc.
- 2. PEP evaluates full proposals, identifies those ready for external review (note, only one revision possible if not ready for external review!).
- 3. PEP rates full proposals, taking into account reviewers comments and reply letter, the 'good and excellent ones' will move forward to OTF and SIPCOM (note, in the post 2013 system directly to Platform providers)

1.3.2. Approval of 4 vice chairs

Kroon introduced 4 vice chairs.

Tim Bralower - Climate and Ocean Change

Yoshinori Takano - Biosphere Frontiers

Richard Arculus - Earth Connections

Michi Strasser - Earth in Motion

Kroon asked the sub-chairs to lead the discussion in the thematic sub-panels and present the discussion summary in the agenda item 7.

1.4. Approve PEP meeting agenda

Kroon summarized the major agenda items for the meeting. He asked if there needed to be any changes to the agenda. No changes were suggested.

1.5. PEP Review Process

1.5.1 Rules and Policies

Kroon explained the following rules and policies applied to the PEP meeting.

[Voting]

- 1. When PEP makes a motion or consensus statement, chair assigns the sub-chair, or other who moves, to write down the statement on which we vote.
- 2. The sub-chair counts the votes
- 3. The information of who moved, who seconded, and who voted what is needed for agenda item 10 (Review of motions and consensus items"). The sub-chair sends information to Yamamoto (MI) and chair.

[Conflict of Interest]

The members who fit the following conditions are considered to have a conflict of interest and need to declare to chair beforehand.

- PEP members who are co-proponent of proposal leave the room during discussions
- PEP members who have a colleague as co-proponent don't comment during the discussions and abstain from voting

1.5.2. Design of discussions

Kroon explained the roles of watchdogs, chair and sub-chairs in PEP discussions.

- Watchdog 1 presents proposal (plenary or in break-out groups), comments on strengths and weaknesses of the proposal
- Watchdog 2 writes comments to proponents
- Watchdog 3 adds to the discussion
- Chair or vice-chair asks for additional comments from audience, discussion follows. Chair or vice-chair makes a proposition for the fate of the proposal. If there is no consensus, the panel members vote.

Kroon reminded that watchdogs must not ask the proponents for presentation slides.

1.5.3. Rating system and criteria

[Evaluation criteria]

- Are the scientific questions/hypotheses being addressed exciting and of sufficiently wide interest to justify the requested resources?
- Will the proposal significantly advance one or more goals of the Science Plan?
- Would the proposal engage new communities or other science programs into the drilling program?
- To what degree does the integrated experimental design of site characterization, drilling, sampling, measurements, and downhole experiments constitute a compelling and feasible scientific proposal?

[Rating]

(See the full set of rating parameters in appendix.)

Larsen commented that proposals which lack a partial site survey data set or EPSP related information could be forwarded into the holding bin.

1.5.4. Key points for feedback to proponents.

Kroon explained that the feedback to the proponents should describe how the proponents could clear the evaluation criteria above.

Larsen informed that PEP can recommend proponents, who have submitted a Pre-proposal,

to have a workshop, which is a new option from this meeting.

2. Question-and-answers to Agency reports

Agency reports have been previously tabled. Clive Neal asked for some insight from the NSF representative with respect to the future of the IODP, and clarification why the situation of the future platform implementation by separate agencies had developed during the past year. Rodey Batiza replied that the fundamental issues were budgetary, and it should be solved in a clear optimization of available funding for maximal scientific return for the largest community.

Catherine Mével informed that ECORD, NSF and MEXT had a meeting in August, and came to an agreement, which has been already partly published, but the details will be finalized at the next Goa meeting in January. The basic idea of the common international SAS structure as the only one entry will be kept for future.

Kroon stressed that PEP helps the bottom-up system driven by proposal pressure, which is very important for this program. Larsen added that PEP is the most important panel as it is the only panel to evaluate science.

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

Michiko Yamamoto reported the statistics of IODP active proposals.

[Proposal statistic]

Total number of active proposal: 87

Breakdown by science plan theme

Theme	Number of proposal
Climate and Ocean	40
Biosphere Frontier	15
Earth Connections	20
Earth in Motion	12

Breakdown by ocean

Ocean	Number of proposal
Arctic	6
Atlantic	23
Indian	14

Pacific	37
Southern	4

Breakdown by SAS evaluation stage

SAS Stage	Number of proposal
PEP(New)	5
PEP(SSEP)	38
PEP(SPC)	6
OTF	37
Holding Bin	1

() = Old SAS stage the proposals were transferred from.

Breakdown by lead proponent

Country of PI	Number of proposal	
US	39	
Japan	12	
ECORD	29	
China	1	
Korea	1	
ANZIC	4	
India	1	

Breakdown by platform

Platform	Number of proposal
Non-Riser	59
Riser	8
MSP	11
Multiple	6

[Approved IODP workshop list]

Title	Lead_proponents	Country	Proposed date
Continental transform boundaries: Tectonic			
evolution and Geohazards	McHugh	USA	2011
Workshop to develop a conceptual			
framework for ocean drilling to unlock			
thesecrets of slow slip events	Wallace	ANZIC:NZ	June 2011
			Oct-Nov.
Indian Ocean Drilling	Pandey	India	2011
Coordinated Scientific Drilling in the Canadian			
Beaufort Sea: Addressing Past, Present and			
Future Changes in Arctic Terrestrial and			Jan-Feb.
Marine Systems.	Matt O'Regan	UK	2012
Unlocking the opening processes of the South			
China Sea	Chun-Feng Li	China	Jan, 2012

[Schedule of SAS meeting]

19-Jan-12	SIPCOM	GOA, India
April 1st		Proposal deadline
19-Mar-12	STP	Kochi, Japan
28-Mar-12	EPSP	College Station, USA
May, 2012	PEP	TBD

[IODP-MI news]

- New IODP web site will be open in Spring 2012
- IODP-MI has received additional funding (up to 600K USD) to fund necessary instrumentation to pursue J-FAST as planned.
- New proposal submission system is under development.
- Change in staff: Hans Christian Larsen and Kevin Johnson leave IODP-MI at end of January.

Larsen informed that only 5 proposals have been submitted for the last October 1st deadline,

which is the lowest submission number since the start of IODP.

Kroon noted that keeping proposal pressure is very important. Mével informed that a letter was sent out to the Ocean Drilling community emphasizing the continuous need of submitting the best ideas as proposals to the system.

4. Implementing Organization (IO) reports

4.1. CDEX

Yusuke Kubo provided CDEX report.

Chikyu's activity over the last 12 months

Expedition #	Title	Time window
Exp 332	NanTroSEIZE Riserless Observatory 2	25 Oct to 12 Dec
Exp 333	NanTroSEIZE Inputs Coring 2 and Heat Flow	12 Dec to 10 Jan
Non-IODP		10 Jan to 7 Mar
Exp 337	Deep Coalbed Biosphere off Shimokita	Postponed
Exp 338	NanTroSEIZE Plate Boundary Deep Riser - 2	Postponed

[Exp 332: NanTroSEIZE Riserless Observatory 2]

- Installed a permanent riserless long-term borehole observatory at Site C0002
- Recovered the temporary SmartPlug and replaced it with a newly designed GeniusPlug at Site C0010
- The data collected from the recovered SmartPlug proved to be complete time series data over >15 months

[Exp 333: NanTroSEIZE Inputs Coring 2 and Heat Flow]

- Coring and in situ heat flow measurements at C0011 and C0012
- Basement coring at Site C0012
- Coring mass transport deposits associated with major splay fault at C0018

Chikyu activity over the coming 12 months

Expedition #	Title	Time window
Non-IODP	At Sri Lanka	~ late Jan
Non-IODP	At Nankai Trough	Feb-Mar

	Japan Trench Fast Drilling	
Exp 343	Project	1 Apr to 25 May
Annual inspection (and installation of		
a new thruster) in dry dock		
	Coalbed biosphere off	
Exp 337	Shimokita	6 Jul to 16 Sep
	NanTroSEIZE Plate	
Exp 338	Boundary Deep Riser - 2	19 Sep to 31 Jan, 2013

[Exp 343: Japan Trench Fast Drilling Project (1 Apr - 25 May, 2012)]

- LWD, temperature measurement, and coring across co-seismic slip will provide dynamic coefficient of friction and stress conditions

[Exp 337: Deep Coalbed Biosphere off Shimokita (15 Mar to 21 May, 2012)]

- Riser drilling with spot cores to 2200 mbsf
- Large diameter cores across the critical formations
- Formation fluid sampling by wireline tools
- Mud gas monitoring by newly installed lab

[Expedition 338: Plate Boundary Deep Riser – 2 (10 Aug, 2012 to 10 Jan, 2013)]

- Deepen the Hole C0002F to 3300 mbsf.
- The riser hole is intended to access the plate boundary faults at an ultimate depth of 7000 meters.
- Spot coring within the inner wedge accretionary complex
- LWD and wireline logging, downhole stress, pore pressure and permeability tests,
- A zero-offset and/or walkaway VSP

David Smith asked the status of the 6th thruster. Kubo replied that reinstallation is planned to May/June 2012

4.2. USIO

David Divins provided USIO report.

[Tie-Up Period – UPDATE]

JOIDES Resolution in Curacao: June 8 – September 13, 2011

Two major projects:

- LIMS Reports and DESClogik Application enhancement
- Completed and deployed September 2011

JOIDES Resolution transited to Bridgetown, Barbados to begin IODP Expedition 336: Mid-Atlantic Microbiology.

[LIMS Reports Scope Highlights]

- LIMS Reports provides scientists with a simple, intuitive, web interface to extract data and generate reports for scientific analysis.
- Project encompassed the development of 30 tabular-data reports.
- Each report includes a description, definitions, and examples to guide scientists not familiar with the data.
- Each report displays the primary data relevant for that system.
- Project includes overview tables (drill down capability).
- The reports do not encompass descriptive data, which will be addressed in a separate project.

[FY12 JR OPERATIONS Schedule]

	EXP		TOTAL DAYS	
EXPEDITION	#	DATES	(port/at sea)	CO-CHIEF
				K. Edwards
Mid-Atlantic Mbio	336	16 Sep-17 Nov '11	62 (2/60)	W. Bach
				J. Hernandez-
				Molina
Mediterranean Outflow	339	17 Nov '11–17 Jan '12	61 (5/56)	D. Stow
Atlantis Massif	340T	17 Jan-6 Feb.'12	20 (5/15)	D. Blackman
				A. Le Friant
Lesser Antilles	340	6 Feb-18 March '12	41 (1/40)	O. Ishizuka
Tie-Up		18 March-18 Jun '12		
Newfoundland Sediment				R. Norris
Drifts	342	18 June–17 August '12	60 (4/56)	P. Wilson
Tie-Up		17 August-17 Oct. '12		

[FY13 JR OPERATIONS schedule]

	EXP		TOTAL DAYS	
EXPEDITION	#	DATES	(port/at sea)	CO-CHIEF
Tie-Up		17 Aug-22 Oct '12		
Costa Rica				
Seismogenesis Project 2				R. Harris
(CRISP)	334	22Oct-17 Dec '12	56 (3/53)	TBD
Hess Deep Plutonic				
Crust	345	17 Dec-16 Feb. 13	61 (5/56)	TBD
Tie-Up		16 Feb-27 May '13		
Southern Alaska				
Margin Tectonics,				
Climate &				J. Jaeger,
Sedimentation	341	27 May–27 July '13	61 (3/58)	S. Gulick
Transit	346T	27 July-18 Aug '13	22 (5/17)	
Asian Monsoon	346	18 Aug-26 Sep '13	39 (1/38)	TBD

[Education & Outreach Activities]

School of Rock, 1-3 August 2011

- Onboard the JOIDES Resolution while in port in Curacao.

Port Call Events

- Ponta Delgada, Azores, 18-19 November 2011

Ship tours of the JOIDES Resolution:

200 High School Students on the 18th

70 adults including Secretary for Science and Technology for the Azores on the 19th

- -Teacher from Portugal to sail as Educator at Sea during Expedition 339: Mediterranean Outflow.
- Lisbon, Portugal, 18-19 January 2012 in partnership with ECORD Managing Agency.
- Press conference to be held during January port call; European VIPs to attend.

Jamie Allan commented that practicality issues would be put forward in the break-out sessions. Larsen commented PEP should concern mostly about science.

4.3. ESO

Sarah Davies provided the ESO report

MSPs at OTF

========

Proposal	Short title	Panel	Comments
672	Baltic Sea Basin	OTF	SPC preferred option for 2013: Tender for all
	Paleoenvironment		boreholes
548	Chicxulub K-T Impact Crater	OTF	SPC preferred option for 2014: Hazard survey
			in 2013
758	Atlantis Massif Seafloor	OTF	SPC preferred mission for first sea floor drilling
	Processes		expedition
716	Hawaiian Drowned Reefs	OTF	Forwarded March 2009
581	Late Pleistocene Coralgal	OTF	Forwarded March 2010
	Banks		
637	New England Shelf	OTF	Forwarded March 2009: work required on
	Hydrogeology		water sampling

[Proposal 672 : Project Management Team Meeting (June 2011)]

Examined requirements for: Drilling / Microbiology sampling & analysis / Downhole logging Developments:Co-chiefs appointed (Thomas Andrén & Bo Baker Jörgensen) / Expedition scheduled for 2013 / Tender for platform in 2012

[Proposal 758: Project Management Team Meeting (June 2011)]

Examined requirements for: Drilling / Logging / Microbiology sampling/ Science party Developments:

- ESO assessing sea bed data for sea floor drill operation
- Number of organizations, including the British Geological Survey is developing logging tools for use from sea bed rock drills
- Site Survey Panel has approved information ready to implement

[Proposal 548]

Developments post Project Management Team Meeting October 2010:

- Quotes requested for hazard survey
- Submitted letter of project approval to the directors of the Ministry of Environment and Natural Resources and the National Council on Science and Technology
- Permit application will be submitted through UNAM

Expeditions

========

[Exp. 325: Great Barrier Reef Environmental Changes (2010 Feb.-Apr.)]

- July 2011 Operations Review Task Force
- Expedition moratorium ended in July 2011
- Logging data ready for placement on database
- Great Barrier Reef cores now at Kochi Core Centre
- Second post-cruise is planned for July 2012

Data Management & QA/QC for Mission Specific Platform expeditions

- Bremen leading with IODP-MI
- Metadata for all Mission Specific Platform expeditions entered into IODP database
- Link metadata to analytical data
- QA/QC procedures for specific analytical equipment & data requests
- Developing online tutorials for offshore and onshore phases

Outreach

=======

- ECORD/ESO videos finalised with input from IODP-MI
- ESO Outreach Officer, Alan Stevenson, was interviewed about Chicxulub for a Norwegian daily newspaper
- August 2011 IODP booth at the Goldschmidt Conference (Prague)
- September 2011 IODP booth at the AAPG Polar Petroleum Potential Arctic Conference

(Halifax, Nova Scotia)

Holly Given asked ESO's perspective on the collaboration between IODP and Petroleum industry in Arctic. Mével replied that industry is interested in gaining general knowledge including geodynamics of the area. It is a sensitive issue but there is room for scientific proposals from them.

5. Borehole into Earth's Mantle (BEAM) Report

Holly Given, Manager of the BEAM Scoping Group, reported on the aims of this conceptual project which is supported with a \$US500K grant from the Alfred P. Sloan Foundation. The Project is to accelerate science planning for the first borehole through the entire ocean crust into Earth's mantle. The Project has been scientifically underpinned by a series of community workshops from 2006 to 2010, and has been identified as a priority scientific goal in both current and future scientific plans for IODP.

BEAM will test the design limits of IODP drilling platforms and require new partnerships between research, engineering, and industry. The Scoping Group will be formed from selected experts with a wide range of expertise to develop a roadmap with prioritized scientific goals and engineering approaches; define a conceptual international scheme of science and engineering management; inform the public and policy makers of the Project's goals; develop and refine relationships with the Deep Carbon Observatory, a multidisciplinary international initiative dedicated to understanding Earth's deep carbon cycle also funded by the Sloan Foundation; and define the management of risk for the Project.

The rough order of magnitude costs of BEAM are \$US500 million for a drilling commencement possibly in 2018. Relationships with the IODP and its scientific advisory structure will be explored in the future.

	FY2009	FY2010	FY2011	FY2012	FY	/2013	FY2014	FY2015	FY2016	
	program year 6	program yr 7	pgm yr 8	pgm yr 9	pgr	n yr 10	IODP yr 1	pgm yr 2	pgm yr 3	
	,	naracterization				Site ecision Detailed site surveys				
	Communit y-wide	INVEST	Project :	Scoping Group		Project Management Team			am	
IODP	internatio nal workshop on scientific drilling in 2013-23	Report; Internation al Workshop MoHole, Japan	Initial feasibility study	Conceptua Design	I			Project Ma	Project Management	
Sloan Founda		Mantle Frontier	Initiate Project Scoping							
tion- IODP- DCO		Internation al Workshop	Office; prepare for conceptu al design	Project Scopi Office	ng	Project Management Office			ice	
Project Executi		forts for hype development	r-deep wate	r deep drilling		Forma operators' Operation pl I start preparatio procurem ns				
	FY2017	FY2018	FY2019	FY2020	FY	/2021	FY2022	FY2023	FY2024	
roject	Operation planning,	Crust-Mol Camp		Preparation	ns	Scientific		n research		
executi	procurem ents, outfitting	Step-by-st	ep results	First scienti Sample dist				continues		

Tim Bralower commented that the scoping group should figure out the technical feasibility very quickly. Given agreed with Bralower, and recommended reading a commentary on the initial feasibility plan, in which many optimistic comments are introduced. Yoshi Kawamura commented that the commentary is based on much assumption, but it doesn't say "not achievable" at least. Given added that the balance on how much they can spend and scientific gain should be articulated.

Richard Arculus asked if the scoping group expected PEP to approve the BEAM proposal

when it will be submitted. Given commented that she did not know the details of the proposal. Allan commented that MI received the funding from Sloan Foundation independently, and NSF did not approve it prior to when it happened. He stressed that MI should step away from the proposal. Larsen agreed with Allan and noted that no one from MI can be a proponent of the mantle proposal.

6. Proposal review

6.1 Proposal review process

This agenda item was merged with the agenda item 1.5.3 and is not discussion here.

6.2. Proposal review

The first watchdog listed below presented their assigned proposal. They explained the scientific objectives, alignment with New Science Plan and site assessment. This was followed by the second and third watchdog's comments, and then the floor was opened for comments from everyone. After the panel reached a conclusion, the second watchdog writes the PEP recommendation.

6.2.1. (Plenary) 6 SPC proposals

Proposal#	Version	Short Title	WD1	WD2
567	Full4	South Pacific	Zachos	Bralower
		Paleogene		
589	Full3	Gulf of Mexico	Obana	John
		Overpressures		
659	Full	Newfoundland Rifted	Arculus	Takazawa
		Margin		
698	Full3	Izu-Bonin-Mariana Arc	Neal	MacLennan
		Middle Crust		
703	Full	Costa Rica SeisCORK	Moulin	Cattaneo
772	APL2	North Atlantic Crustal	John	Obana
		Architecture		

6.2.2. (Plenary) 2 SSEP proposals with External reviews and PRLs

Proposal #	Version	Short Title	WD1	WD2	WD3
696	Full3	Izu-Bonin-Mariana Deep	Neal	Takazawa	Morishita
		Forearc Crust			

747	Full	North Atlantic Paleogene	Zachos	Bralower	Singhvi
		Climate			

Friday 2 December 2012	08:30-17:30
------------------------	-------------

6.2.3. (Plenary) 1 CDP and daughter proposal with PRL

Proposal	Version	Short Title	WD1	WD2	WD3
#					
770	Full2	Kanto Asperity Project:	Strasser	John	Cattaneo
		Observatories			
707	Full	Kanto Asperity CDP	Strasser	Moulin	Michibayashi

6.2.4. (Plenary) 1 MDP and daughter proposal pair

Proposal #	Version	Short Title	WD1	WD2	WD3
781	MDP	Hikurangi	MacLennan	Yamada	Moulin
		subduction margin			
781A	Full	Hikurangi:	Moulin	Cattaneo	John
		observatory			

6.2.5. (Plenary) 1 New and 1 revised APLs

Proposal #	Version	Short Title	WD1	WD2	WD3
791	APL	Continental Margin	Biddle	Suzuki	Takano
		Mathane Cycling			
777	APL2	Okinawa Trough	Murayama	Shevenell	McHugh
		Quaternary			
		Paleoceanography			

6.2.6. (Breakout) 18 existing SSEP proposals without external reviews The panel members were thematically divided into four breakout groups to review and

discuss on the proposals that have not reached the stage of external review.

Breakout group1 (chaired by Hall)

Theme: Climate and Ocean Change

Proposal #	Version	Short Title	WD1	WD2	WD3
625	Full	Pleistocene Pacific Southern Ocean	Lee	Hall	
751	Full	West Antarctic Ice Sheet Climate	Hall		
771	Full	Iberian Margin Paleoclimate 2	Lee	Shevenell	
784	Full	Amundsen Sea Ice Sheet history	Hall	Cattaneo	Ferdelman
615	Full2	NW Pacific Coral Reefs	Hall	Webster	

Breakout group2 (chaired by Bralower)

Theme: Climate and Ocean Change

Proposal	Version	Short Title	WD1	WD2
#				
667	Full	NW Australian Shelf	McHugh	Tian
		Eustasy		
680	Full	Bering Strait Climate	Yokoyama	Shevenell
		Change		
702	Full	Southern African	Zachos	Tian
		Climates		
776	Full	Arabian Sea	Bralower	Tian
		Paleoclimate		
658	Full2	North Atlantic	Nishi	Bralower
		Volcanism and		
		Paleoclimate		
778	Full2	Tanzania Margin	Zachos	Nishi
		Paleoclimate Transect		

Breakout group3 (chaired by Strasser and Takano)

Theme: Earth in Motion and Biosphere Frontiers

Proposal #	Version	Short Title	WD1	WD2
735	СРР	South China Sea Tectonic Evolution	Christeson	Smirnov

704	Full2	Sumatra Seismogenic	Smirnov	Obana
		Zone		
635	Full3	Hydrate Ridge	Biddle	MacLennan
		Observatory		

Breakout group4 (chaired by Arculus)

Theme: Earth Connections

Proposal	Version	Short Title	WD1	WD2
#				
640	Full	Godzilla Mullion	Carlut	Koepke
692	Full	Flemish Cap Rifted	Koepke	Takazawa
		Margin		
740	Full	Galicia Margin Rift	Carlut	Yokoyama
		History		
754	Full2	Norwegian Sea Silica Diagenesis	Koepke	Lee
778	Full2	Tanzania Margin	Zachos	Nishi
		Paleoclimate Transect		

Saturday	3 December 2012	08:30-17:30
----------	-----------------	-------------

6.2.7. (Breakout) 16 preliminary proposal

The panel members were thematically divided into four breakout groups to review and discuss on the preliminary proposals.

Breakout group1 (chaired by Bralower)

Theme: Climate and Ocean Change

Proposal #	Version	Short Title	WD1	WD2
750	Pre	Beringia Sea Level	Yokoyama	McHugh
		History		
756	Pre	Arctic Ocean Exit	Murayama	Hall
		Gateway		
760	Pre	SW Australia Margin	Takano	Bralower
		Cretaceous Climate		

Breakout group2 (chaired by Shevenell)

Theme: Climate and Ocean Change

Proposal #	Version	Short Title	WD1	WD2
708	Pre2	Central Arctic	Lee	Shevenell
		Paleoceanography		
730	Pre2	Sabine Bank Sea Level	Shevenell	Murayama
753	Pre2	Beaufort Sea	Shevenell	Webster
		Paleoceanography		
790	Pre	Indian Ocean	Webster	Yokoyama
		Neogene monsoon		

Breakout group3 (chaired by Arculus and Strasser)

Theme: Earth Connections and Earth in Motion

Proposal #	Version	Short Title	WD1	WD2	WD3
729	Pre	Western Lord Howe	Morishita	Nishi	
		Rise Extension			
731	Pre	Papua New Guinea	Nishi	Morishita	
		Orogenic Lifecycle			
782	Pre	Kanto Asperity	Michibayashi	Neal	
		Project: Plate			
		Boundary			
		Deformation			
788	Pre	Shiva Impact	Arculus	Tian	Obana
		Structure			
789	Pre	Arctic Slope Stability	Cattaneo	Yamada	Christeson

Breakout group4 (chaired by Takano)

Theme: Biosphere Frontiers

Proposal #	Version	Short Title	WD1	WD2
749	Pre	Gulf of California	Suzuki	Smith
		Rifting &		
		Microbiology		
759	Pre	EPR Fast-Spread	Michibayashi	Biddle
		Crust		
761	Pre	South Atlantic Bight	Ferdelman	Christeson
		Hydrogeology		
780	Pre	Rodriguez Triple	Smith	Suzuki
		Junction		
		Microbiology		

7. Reports from breakout sessions

Sub-chairs presented the summary of the breakout discussions. The course of action regarding each of the 49 PEP proposals reviewed during the 1st PEP meeting was achieved by consensus of the full panel. The specific dispositions for each proposal were as follows:

Proposal	Version	Short Title	Disposition
# 567	Full4	South Pacific Paleogone	Forward to OTF
589	Full3	South Pacific Paleogene Gulf of Mexico Overpressures	Submit revised full
	-	NW Pacific Coral Reefs	
615	Full2		Deactivate
625	Full	Pleistocene Pacific Southern Ocean	Deactivate
635	Full3	Hydrate Ridge Observatory	Submit revised full
640	Full	Godzilla Mullion	Deactivate
658	Full2	North Atlantic Volcanism and Paleoclimate	Submit revised full
659	Full	Newfoundland Rifted Margin	Submit revised full
667	Full	NW Australian Shelf Eustasy	Submit revised full
680	Full	Bering Strait Climate Change	Submit revised full
692	Full	Flemish Cap Rifted Margin	Submit revised full
696	Full3	Izu-Bonin-Mariana Deep Forearc Crust	Submit revised full
698	Full3	Izu-Bonin-Mariana Arc Middle Crust	Forward to OTF
702	Full	Southern African Climates	Submit revised full
703	Full	Costa Rica SeisCORK	Submit revised full
704	Full2	Sumatra Seismogenic Zone	Submit revised full
707	Full	Kanto Asperity CDP	Submit revised full
708	Pre2	Central Arctic Paleoceanography	Submit full
729	Pre	Western Lord Howe Rise Extension	Deactivate
730	Pre2	Sabine Bank Sea Level	Submit full
731	Pre	Papua New Guinea Orogenic Lifecycle	Deactivate
735	СРР	South China Sea Tectonic Evolution	Submit revised full
740	Full	Galicia Margin Rift History	Submit revised full
747	Full	North Atlantic Paleogene Climate	Submit revised full
749	Pre	Gulf of California Rifting & Microbiology	Submit full
750	Pre	Beringia Sea Level History	Submit full
751	Full	West Antarctic Ice Sheet Climate	Submit revised full
753	Pre2	Beaufort Sea Paleoceanography	Submit full
754	Full2	Norwegian Sea Silica Diagenesis	Submit revised full
756	Pre	Arctic Ocean Exit Gateway	Submit full
759	Pre	EPR Fast-Spread Crust	Deactivate

/iew
view
/iew
,

8. Future PEP meeting

Dick Kroon emphasizes that the relationship with SCP is very important. PEP needs specific advice from SCP for evaluating whether or not there are scientific concerns arising from site survey data. Considering the time proponents need to prepare site survey data between PEP and SPC meetings, alternating meetings of PEP and SCP are considered the most effective. Gilles Lericolais (SCP chair) seconded this statement. He noted that it is important to avoid proposals going back and forward between OTF and PEP.

Sanny Saito provided the STP report. He introduced STP's role in SAS and recent STP activities.

[STP mandates]

STP develops guidelines and provides advice on a wide range of IODP functions such as

shipboard measurements, downhole measurements/observatories, data management, publications and Curation.

- STP reviews QA/QC of data collection procedures on IODP platforms and expedition measurement plans to ensure consistent high quality data across the program.
- STP recommendations shall be sent to CMO, SIPCom, PEP, and IOs.

[Recent STP activities]

Routine tasks

- Review of expedition QA/QC report from the IOs
- Approval of measurement plans (non-standard measurements) for scheduled expeditions
- Evaluation of shipboard/on shore science system

Shorter-term issues: examples

- Cuttings sampling, measurements, archiving, and curation
- Routine microbiology sampling
- IODP Depth Scale implementation
- New publication format, etc.

Longer-term issues

-Development of Scientific Technology Roadmap. Current version 1.1 includes 56 items with periodization and availability.

Saito noted that the PEP-STP relationship is very important for proposal evaluation when it needs technical advice. He offered STP's help on assessment of technical issues by reporting back to PEP from STP watchdogs.

Kroon noted that PEP would identify proposals that need technical advice, which can be forwarded to STP for advice. Yasuhiro Yamada commented that PEP cannot wait for a next STP meeting for their advice. Saito replied that STP can discuss through emails between their meetings, and he estimated one month as maximum time for STP to answer.

9. Other business

No other business was discussed.

PEP1112 agenda

Dick Kroon praised Hans Christan Larsen and Kevin Johnson for their outstanding service to IODP over a long period.

10 Review of motions and consensus items

There was no motion or consensus to review.

11. Future meetings

Tom Janecek asked how the proponents receive the feedback from IOs. Larsen replied that IOs are given the opportunity to make comments during the PEP meeting. PEP will include IO's comments in their review. Janecek suggested that IOs would see the PEP reviews and add their comments before sending them out to the proponents. Allan agreed with Janecek and commented IO's reviews would benefit proponents very much. Larsen agreed on Janecek's suggestion but only for this meeting.

11.1 Liaisons to other panels and programs

Kroon attends SIPCOM. Kroon and sub-chairs attend OTF

11.2. 2nd PEP meeting

Host: Dick Kroon

Place: Edinburgh

Date: 14-15 May 2012

Kroon adjourned the meeting at 17:30.

[Appendix - PEP Rating System]

This rating system will be applied to all proposals that have passed through the full PEP review cycle, including external, anonymous peer-review. The rating is applied by PEP based on the proposal version reviewed by the external reviewers, and augmented with the proponent response letter (PRL). It is a three level rating system:

- Excellent (10 20 percent of proposals)
- Good (40 60 percent of proposals)
- Fair (20 30 percent of proposals)

Because proposals that have not been found of high enough quality by PEP to undergo external review, truly insufficient or unfeasible proposals are not expected to reach the stage of PEP rating (to be rejected if there is not meeting PEP approval for external review after the maximum one revision).

The rating value applies specifically to the science quality of the proposal. The technical feasibility and/or other logistical parameters are to be discussed in accompanying comments, but should not be used as a rating criterion by PEP, whose charge is to evaluate the scientific quality and merit of the proposal. This is in order to maintain simple and clear scientific evaluation criteria. These comments on technical drilling feasibility can be utilized by the experts that liaise with PEP, but are not PEP members with the responsibilities this implies. Technical drilling feasibility will therefore be commented on separately by relevant experts (typically Implementing Organization (IO) representatives). However, an experiment design can also have scientific risks (e.g., suggested measurements are at experimental, unproven stage, entire success depends entirely of one specific sampling target, imaging/presence of target is a concern etc.). PEP, assisted by SCP, STP, and other SAS expertise will comment on such kinds of 'science risk'.

The general evaluation criteria for IODP proposals are (as per PEP ToR):

- Are the scientific questions/hypotheses being addressed exciting and of sufficiently wide interest to justify the requested resources?
- Will the proposal significantly advance one or more goals of the Science Plan?
- Would the proposal engage new communities or other science programs into the drilling program?
- To what degree does the integrated experimental design of site characterization, drilling, sampling, measurements, and downhole experiments constitute a compelling and feasible scientific proposal?

Together with these general criteria, the 3 rating categories are defined as follows:

Excellent proposal:

Proposal is exciting, addresses new scientific problems, or will take novel approaches to existing problems that remain unresolved/controversial and considered of wide importance. May challenge existing paradigms, has strong potential for true discoveries and breakthroughs and most likely will open up new avenues of research in the field(s) pursued or even beyond. Should be drilled if at all possible:

- -The science plan proposed is innovative, cutting edge, aims at, or extends beyond, the vision of the new science plan
- -Excellent, succinct and carefully planned scientific drilling and research plan
- -In all probability, the expedition(s) will be regarded as a major achievement of scientific ocean drilling
- -In all probability, the scientific and technical achievements will have important societal impact in one way or another (e.g., application of results, outreach, or public education).

Good proposal

This second category of proposals also has potential for producing exciting science, and will apply compelling research strategies. Compared to 'Excellent' proposals, 'Good' proposals address more mature scientific problems with less potential for major new discoveries or paradigm changes. They are still highly likely to produce important datasets that can support long-term building of data archives, help resolve long-standing controversies in established fields of research, and thereby advance such fields of research in a significant way, possibly including new avenues of research within the fields pursued. Should be seriously considered for drilling if fitting into long-term efforts/planning and platform schedules:

- -Objectives are consistent with one or more themes of the new science plan
- -In all probability, the expedition(s) will result in important refinements of existing scientific concepts and advance the science plan. Data are very useful to test the hypotheses as formulated in the proposal.
- -Good and succinct drilling plan, feasible, carefully planned
- -The science plan is likely to result in successful expedition(s) with a good effort to outcome ratio
- -In all probability, the scientific and technical achievements will be important for society in one way or another.

'Fair' proposal

This third category of proposals falls behind in terms of excitement and potential for discovery. The research may still be able to provide important, complementary data sets that can help filling specific niches, but is unlikely to move the field of research significantly forward, or to lead to new avenues of research. Nevertheless, the proposal may contain elements that, if fitting into other proposals or other planned drilling activities (e.g., regional proximity), could provide a solid scientific return for a limited program investment, and therefore might be considered for (partial) implementation at some point:

- Objectives show a fair consistency with thematic priorities in the new science plan
- The science plan is not clear, and deficiencies are identified
- The expedition(s) could possibly result in some non-trivial achievements, but mostly of incremental nature, perhaps a partly relevant data set to test the hypotheses as formulated in the proposal, or the expedition(s) will not be successful.
- Insufficient drilling plan with unfavourable effort to output ratio
- The potential societal impacts from scientific and technical achievements are not high, or are poorly documented.

Science Implementation and Policy Committee

1st Meeting, 19-20 January 2012

Goa, India

Science Advisory Structure Executive Committee - SASEC

Keir Becker University of Miami, USA

Jan de Leeuw Royal Netherlands Institute for Sea Research, The Netherlands

Robert Dunbar Stanford University

Javier Escartin CNRS Institut de Physique du Globe

Akira Hayashida Doshisha University
Yasufumi Iryu Nagoya University
Akira Ishiwatari Tohoku University
Hodaka Kawahata The University of Tokyo

Gil Young Kim Korea Institute of Geoscience and Mineral Resources

Dick Kroon The University of Edinburgh

Young-Joo Lee (N)* Korea Institute of Geoscience and Mineral Resources (KIGAM)

Zhifei Liu (N) * Tongji University Richard Murray Boston University

Terry Quinn University of Texas at Austin Ram Sharma (N) Ministry of Earth Science

Ruediger Stein Alfred Wegener Institute for Polar and Marine Research

Lisa Tauxe University of California, San Diego

Paul Wilson* University of Southampton

Hiroyuki Yamamoto Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Chris Yeats (N) CSIRO Earth Science and Resource Engineering

*Unable to attend (N) – non-voting

Liaisons, Observers and Guests

Wataru Azuma Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan

Rodey Batiza National Science Foundation, USA
Gilbert Camoin ECORD Managing Agency (EMA), France
David Divins Consortium for Ocean Leadership, USA

Nobuhisa Eguchi Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan

Robert Gatliff British Geological Survey, UK

Tom Janecek National Science Foundation (NSF), USA Yoshihisa Kawamuara IODP Management International, Inc.

Shin'ichi Kuramoto Ministry of Education, Culture, Sports, Science and Technology, Japan

Hans Christian Larsen IODP Management International, Inc.

David McInroy British Geological Survey, UK

Kiyoka Miki Ministry of Education, Culture, Sports, Science and Technology, Japan

Dhananjai Pandey National Centre for Antarctic and Ocean Research

Jeff Schuffert U.S. Science Support Program, Consortium for Ocean Leadership Shingo Shibata Winistry of Education, Culture, Sports, Science and Technology, Japan

Ashok Singhvi Physical Research Laboratory, India Kiyoshi Suyehiro IODP Management International, Inc. Michiko Yamamoto IODP Management International, Inc.

Science Implementation and Policy Committee

1st Meeting, 19-20 January 2012

Goa, India

EXECUTIVE SUMMARY (ver. 2)

Thursday 19 January 2012 09:00-17:30

1. Introduction

1.6. Meeting agenda approval

SIPCOM Consensus 1201-01: SIPCOM approves the agenda for its 1st meeting on 19-20 January in Goa, India.

6. SIPCOM Discussion on reports

6.1 Framework of post 2013 program, and the role/structure of SAS

SIPCOM Consensus 1201-02: Based on discussion of the "Revised Framework" and "Transfer of SIPCOM Duties" documents (dated January 18, 2012), SIPCOM stresses the importance of having very strong representation (e.g., a majority of voting persons) by scientists from the international community on the IODP Forum and on the individual Facility Governing Boards (FGBs). The chairs of the respective FGBs should each be a member of the international scientific community not affiliated with the funding agencies, national offices, Implementing Organizations, etc.

SIPCOM Consensus 1201-03: SIPCOM discussed the latest versions of the "Framework International Ocean Discovery Program" and "Transfer of SIPCOM duties to other IODP entities post 2013" as produced by IWG+ on January 18.

A multitude of questions and suggestions were made and are recorded in the SIPCOM meeting minutes to help and advise IWG+ to improve both documents.

7. SIPCOM procedural discussion

7.1. Interactions between OTF and SIPCOM, SIPCOM and CMO/funding agencies

SIPCOM Consensus 1201-04: Interactions between OTF and SIPCOM are established by the SIPCOM chair attending the OTF meetings and vice versa. The interaction between SIPCOM and CMO/funding agencies is arranged by regular email contact, incidental meetings and through the SIPCOM minutes.

7.2. SIPCOM reporting lines to funding agencies and IODP-MI

SIPCOM Consensus 1201-05: SIPCOM reports to funding agencies and IODP-MI through its minutes and by regular contacts of its chair with representatives of these IODP bodies.

8. New SAS structure

8.1. Discussion and approval of 'New SAS' Terms of Reference

SIPCOM Action Item 1201-06: SIPCOM agrees on the new SAS Terms of References, taking into account that several minor issues and flaws have to be addressed and that the approval of annual expedition schedule developed by OTF will be handled electronically in early March to meet the deadline of 18 months before the end of the next fiscal year and that SIPCOM reports to IODP-MI, IODP Council, funding agencies and IWG+. IODP-MI will take care of these adaptations and will send the documents out for final SIPCOM approval.

SIPCOM Action Item 1201-07: SIPCOM, being asked by IWG+ to draft the Terms of Reference for the IODP Forum, forms a subcommittee consisting of Keir Becker, Lisa Tauxe, Chris Yeats, Hiroyuki Yamamoto, Rick Murray, Ruediger Stein and Zhifei Liu chaired by Terry Quinn to draft the Terms of Reference for the IODP Forum and to present this draft at the next SIPCOM meeting in June 2012 for discussion and approval.

8.2. Cycle of SAS meetings and proposal submission deadlines

SIPCOM Consensus 1201-08: SIPCOM agrees on the cycle of SAS meetings and proposal submission deadlines as shown in the following table.

Month	Meeting / Submission deadline
1	
2	SCP
3	STP
	EPSP
4	Proposal deadline
5	Workshop deadline
	PEP
6	Data submission deadline
	SIPCOM
7	
8	SCP
9	STP(?)
10	Proposal deadline
11	PEP
12	Data submission deadline

9. IODP-MI program plan

9.1. SIPCOM discussion/approval of revised FY12 APP

SIPCOM Consensus 1201-09: SIPCOM discussed the updates of the FY12 APP budget regarding the additional costs for technical support for the J-FAST expedition and the 945kUSD reduction withdrawn by ECORD to be carried over to FY13 and approved these adaptations, thereby approving the FY12 APP.

9.2. Discussion of budget planning

SIPCOM Action Item 1201-10: SIPCOM forms a subcommittee to review the budget planning of IODP-MI for FY13 chaired by Keir Becker, seconded by Javier Escartin and Yasufumi Iryu to report at the SIPCOM meeting in June.

Friday 20 January 2012 08:30-17:15

10. PEP report

SIPCOM Consensus 1201-11: SIPCOM recommends that PEP has the authority to form limited-term, small membership Detailed Planning Groups (DPG), as needed, to foster the formation of feasible drilling leg proposals from one or more existing proposals.

11. IO Reports on End of Program planning:

11.6 SIPCOM directives, Long-range Plan to end of program

SIPCOM Motion 1201-12: SIPCOM recognizes that proposal pressure is critical to the successful implementation of the science plan, including efficient scheduling of the drilling platforms, both in the near and long term. To enhance long-term planning, SIPCOM recommends that IODP-MI have a call for regional workshop proposals. The goal of these regional workshops is to facilitate and encourage the scientific community to develop high quality drilling proposals from regions of the world's ocean that presently are underrepresented in the proposal pool. SIPCOM seeks to augment the workshop proposal mechanism as a means to enlarge the proposal pool so that ship track scenarios can be developed that maximize scientific drilling and minimize transit times.

Becker moved, Escartin seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

12. Workshops in FY2012-13

SIPCOM Motion 1201-13: SIPCOM recommends funding a workshop on "Observatories in Scientific Ocean Drilling" with funding to be used explicitly for foreign participant travel (as requested). SIPCOM notes that a co-funding proposal is currently pending with USSSP.

Dunbar moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

SIPCOM Motion 1201-14: SIPCOM declines the request for funding a workshop on the Mediterranean Sea Drilling Project. SIPCOM continues to be concerned that the proponents have yet to address the considerable technological challenges associated with drilling a 7 km riser borehole in 2400 m of water through a sedimentary sequence that includes ~3 km of evaporites.

Quinn moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The Motion passed.

SIPCOM Motion 1201-15: SIPCOM has reviewed the IODP Workshop Proposal of "**Southwest Pacific Ocean**" and strongly recommends funding for this workshop because this area is important and this proposal tries to develop the new phase of IODP.

Kawahata moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

SIPCOM Motion 1201-16: SIPCOM declines the request of funding for the "Ultra Deep Drilling Into Arc Crust" workshop proposal and, in light of the overall high scientific status of the closely associated scientific proposal at PEP, further recommends that the proponents consider developing a focused workshop addressing the technical and engineering aspects of the proposed drilling, as well as a technical/engineering risk analysis (e.g., what scientific objectives would be compromised by drilling to less than proposed depths).

Murray moved, Dunbar seconded, 14 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 1 abstained (Ishiwatari), 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

15. Role of SAS in long range planning (post 2013)

SIPCOM Action Item 1201-17: SIPCOM asks PEP to summarize the scientific and regional distribution of pre-proposals, proposals, CPPs, and APLs at PEP and OTF, to enable SIPCOM at their June 2012 meeting to evaluate future coverage of the post-2013 IODP Science Plan.

SIPCOM Consensus 1201-18: Regarding the long-term planning of JR (post FY14) it is recognized that, following probable work in the Western Pacific, additional proposal pressure at OTF level is required throughout to facilitate and optimize JR operations and transits, while maximizing scientific return. A recent Indian Ocean Workshop and a planned SW-Pacific workshop may increase the number of drillable targets in these areas. To encourage future proposal pressure in the South Atlantic, Circum-Antarctic, and Indian Ocean, which are possible routes for the JR in the long term, SIPCOM requests that future proposal calls for both drilling projects and workshops specifically solicit submissions concerning these areas.

19. Review of any additional action items, motions, and consensus statements

SIPCOM Consensus 1201-19: SIPCOM expresses its gratitude to Dr. Dhananjai K Pandey and NCAOR, our local hosts for this meeting in Goa, India. The first-class hotel and meeting facilities provided a superb venue for a productive meeting. Meeting participants enjoyed the nightly dinners, which featured a dazzling array of Indian food, drink, and music. Meeting participants will not soon forget their time in Goa.

SIPCOM Consensus 1201-20: SIPCOM wishes to recognize Hans Christian Larsen for his years of dedicated service to scientific ocean drilling, most recently as Vice President of IODP-MI. Hans Christian's steady hand proved critical to the success of IODP as it originated and went through its many changes. Hans Christian travelled the world in support of IODP and his institutional knowledge of the proposals in the system never ceased to amaze. SIPCom wishes Hans Christian the best in his (semi) retirement and thanks him for all of his years of service to IODP.

Science Implementation and Policy Committee

1st Meeting, 19-20 January 2012

Goa, India

Draft Meeting Minutes (ver. 1)

Thermodern	40 1 2042	00.00 47.20
Thursday	19 January 2012	09:00-17:30

1. Introduction

1.1. Call to order and opening remarks

SIPCOM Chair Jan De Leeuw called the meeting to order at 9:00.

1.2. Welcome message from the Indian MoES Secretary

Local host Dhananjai Pandey welcomed the meeting participants to Goa, and outlined the logistics for the meeting.

1.3. Introduction of participants

All meeting participants introduced themselves.

1.4. Welcome and meeting logistics

Merged with 1.2

1.5. Rules of engagement (Robert's rules, COI policy, etc.)

De Leeuw referred to the SIPCOM terms of reference, and noted that an SIPCOM decision requires either a consensus or an affirmative vote of at least two-thirds of all members present and eligible to vote. He explained that SIPCOM meetings are conducted according to Robert's Rules of Order, and listed some of the salient points from this set of rules.

1.6.2. Conflict-of-interest policy and statements

De Leeuw reviewed the conflict-of-interest procedures for the meeting. He stated that potential conflicts should be declared. SIPCOM members declared their potential conflicts, and de Leeuw ruled the following.

Declarant	Conflict with:
-----------	----------------

Becker	Workshop discussion (helped a proponent)
Escartin	Proposal 758-Full
Murray	Expedition346 (Asian Monsoon)
Eguchi	Med. Sea workshop proposal

1.6. Meeting agenda approval

De Leeuw asked if there were any changes to the agenda. No changes were suggested.

SIPCOM Consensus 1201-01: SIPCOM approves the agenda for its 1st meeting on 19-20 January in Goa, India.

------ SIPCOM, IODP-MI, and IWG+ Joint Session -----

(FGB= Facility Governing Board)

6. SIPCOM Discussion on reports

6.1 Framework of post 2013 program, and the role/structure of SAS

De Leeuw explained the background of the "New Framework" document. The document was created based on the IWG+ discussions at the last AGU fall meeting and discussions with representatives of NSF, MEXT and ECORD just before this SIPCOM meeting. He noted that the new framework is important for SIPCOM in terms that it would influence on how SIPCOM operates until the end of the current program.

--- IODP Program Management ---

De Leeuw noted that the IODP Forum will be the face of the program, and the chair should be a well-recognized active scientist. Keir Becker commented that whether the representative of the Forum is an active research scientist or someone from a funding agency was still open, and it's up to the agencies or the Forum to decide. De Leeuw replied that SIPCOM can still suggest, because SIPCOM is in charge of crafting the Forum's terms of

reference. He indicated that the Forum membership is probably a mixture of active research scientists and representatives from the funding agencies and other organizations like ICDP or PAGES. Becker asked who would make sure that there are some good representations of active scientists. Tom Janecek replied that it was under discussion by IWG+ and that SIPCOM could address this issue when they generate a Terms of Reference for the forum.

Robert Dunbar noted that SIPCOM should state in the terms of reference that active researchers should dominate the Forum, and he questioned if EXCOM of the Forum is needed.

Ashok Singhvi noted that the Forum seems just an advisory group, and asked if they have no executive mandate. Janecek responded that the ultimate responsibility of program execution would remain at the FGBs.

Hans Christian Larsen and Rick Murray asked which entity is to approve and host SAS meetings. Janecek confirmed that the support office host the meetings.

Dunbar asked if IO representatives on FGBs would be non-voting members due to their possible conflict of interest. Janecek replied that was not decided yet for the US FGB.

Escartin commented that the FGB structure seemed to represent a triplication rather than a simplification. Camoin replied that the new SAS system with only one proposal evaluation panel represents a simplification.

Murray asked if the Forum is a part of SAS or a part of management. Janecek replied that the Forum is independent from SAS or the management. The Forum is a body to provide large overarching monitoring and advising. But ultimately it is the responsibility of the FGBs to execute real tasks, and FGBs are a part of the management. Murray commented that both the Forum and FGBs should have very strong scientific representation.

SIPCOM Consensus 1201-02: Based on discussion of the "Revised Framework" and "Transfer of SIPCOM Duties" documents (dated January 18, 2012), SIPCOM stresses the importance of having very strong representation (e.g., a majority of voting persons) by

scientists from the international community on the IODP Forum and on the individual Facility Governing Boards (FGBs). The chairs of the respective FGBs should each be a member of the international scientific community not affiliated with the funding agencies, national offices, Implementing Organizations, etc.

-----Platform Provider Program Management ------

Ruediger Stein commented that each FGB needs international membership if the program wants to remain truly international. De Leeuw agreed. Janecek replied that US FGB would include international scientific representation and include a subcommittee that works like the current OTF and includes representatives from IOs and the scientific community.

Murray asked if NSF funds the support office. Janecek replied that the funds would come from all members that participate in the US FGB to pay JR operations.

Stein suggested that US FGB has a chair selected from the scientific community like Japanese FGB. Janecek replied that the roles of US and Japanese FGB chairs are different. NSF will act more in the sense of a meeting facilitator and that the actual Chair would be an an active leading member of the drilling community. He indicated that the Framework wording would be changed to reflect this.

Becker pointed out that the framework document showed that the membership of European FGB doesn't include IOs and liaisons from major entities as members. Camoin replied that it would be determined soon.

Lisa Tauxe asked why the current curation system will continue into the next program. Janecek replied because the present system works well. The funding agencies have solved many problems to bring the system up to the level expected by the scientific community.

Murray asked if the Forum monitors the data archive and publications. Janecek replied that it's ultimately the responsibility of the FGBs, but all the entities are involved.

---- Program Exchange -----

5

Janecek explained that the "bilateral relationship" mentioned in the framework document means that JR FGB would offer berths on the JR to countries/consortia that provide drilling platforms in exchange for US FGB berths on their platforms . Singhvi was concerned that it could compromise the international character of the program by benefiting only countries having vessels. Janecek replied that the bilateral agreement is not between another country and US, but between another country and US FGB which includes all countries who pay for JR. Murray agreed that it does not affect the international nature of the program.

----- Scientific Advisory Structure -----

Hodaka Kawahata asked who decides which platform would be the best for a proposal. Janecek replied that it's a multi-step process. At the first step, PEP makes its initial recommendations, then each FGB discuss the possibilities and works out which is the best platform to execute the operations.

Stein asked why platform providers use the service panels for the proposals that already passed these panels and PEP assured that they were ready for drilling. Janecek replied that the text could be revised to reflect that the platform provider should consider how effective the current service panel is to their particular needs.

--- JR Planning -----

Stein asked if there is no chance to join the US FGB for someone having less than 1 million USD (say 0.75M) and no options for joining through a consortium. Janecek replied that in such cases the US FGB would act in a flexible way and negotiate a solution.

---- MSP Planning ----

Chris Yeats commented that #27 is redundant because #26 already speaks about access to JR. Camoin agreed. He informed that NSF and ECORD decided to provide direct access to MSPs to each associate member which contributes to JR.

-----Chikyu Planning -----

De Leeuw commented that "Chikyu friend" should be changed to a more appropriate name.

Becker commented that the framework needs a motherhood statement like "SAS recommends the Science Plan on behalf of international science community". Janecek agreed.

Yamamoto asked who evaluates to what extent the drilling activities meet the program scientific goals, if the Forum is only to "monitor". De Leeuw replied that it should be the Forum. Janecek agreed with de Leeuw, and suggested substituting the phrase "monitor and provides recommendations" for the word "monitor".

Janecek also suggested adding a statement about an every-a-few-years evaluation of the framework at the end of the framework document. Becker asked who evaluates the framework. Janecek replied that it could be a combination of the Forum, support office and FGBs. Rodey Batiza added that NSF management also needs to evaluate it.

Yeats made the comment that while review would be useful, reconsidering the framework after 2-3 years could cause problems for partners in securing five years program subscription.

SIPCOM Consensus 1201-03: SIPCOM discussed the latest versions of the "Framework International Ocean Discovery Program" and "Transfer of SIPCOM duties to other IODP entities post 2013" as produced by IWG+ on January 18.

A multitude of questions and suggestions were made and are recorded in the SIPCOM meeting minutes to help and advise IWG+ to improve both documents.

6.2 The mandate and tasks of the FY12 and FY13 SAS in planning for post FY13

De Leeuw proposed combining the agenda item 6.2 with 7.3. No objection.

-----Workshop Proposal Evaluation

De Leeuw noted that this task will be conducted by IODP Forum (with assistance from Support Office) and implemented by either Facility Governing Board (FGB) or Support Office (via funding from FGBs).

Tauxe asked how you know which country funds the workshops when you don't know which platform the proposal would go for. Janecek replied that it would be the support office to decide with help of the Forum's recommendation.

Terry Quinn questioned if the Forum is not full of scientific members, how they can evaluate workshops. Murray pointed out the possibility of external review. Larsen commented that external review would be not worthwhile because the funds from IODP are limited to \$30,000. Schuffert suggested that PEP evaluates workshop proposals. Kroon warned that SIPCOM should be careful about the workload on PEP. Schuffert commented that it would be difficult to get useful external reviews because the most knowledgeable external reviewers are not interested in the workshops that are not taking place yet.

----- Monitoring science plan delivery

De Leeuw noted that this task will be conducted by IODP Forum and individual FGBs.

----- Long-term planning and Regional planning

De Leeuw noted that IODP Forum monitors progress and recommends changes to Facility Governing Boards.

Becker commented that FGBs could make a recommendation regarding where proposal pressure needs.

--- Collaboration issues (ICDP, PAGES, OOI, DCO, etc.)

De Leeuw noted that the collaboration with other programs is coordinated by the Forum Chair who goes out to all organizations and to see where and when collaborations are necessary and fruitful.

---- IODP Website

De Leeuw noted that the Support Office will administrate the IODP website with advice and recommendations from IODP Forum and FGBs.

---- General operational performance assessment

De Leeuw noted that JR performance assessment will be done by NSF, Chikyu assessment by JAMSTEC/MEXT, and MSP assessment by ECORD/EMA.

----- Improving transparency at all levels

De Leeuw noted that all IODP entities should always make an effort to improve system transparency. This issue will be a regular discussion item for IODP Forum.

Singhvi pointed out that the Forum's workload is huge enough to need full-time staff. De Leeuw agreed. Janecek emphasized that salary support for the Forum chair, and (if needed), on the spot support, comes from the nation/entity providing the Forum chair. Becker added that the Support Office will provide the bulk support of the Forum and its chair.

----- Overarching educational issues

De Leeuw noted that educational issues should be considered as national activities, with website assistance (i.e. posting of information) provided by the Support Office.

Schuffert pointed out that IODP-MI had a task force dedicated to education and communication, and he asked if there is a mechanism to restart it. Larsen replied that the support office would have to coordinate it in the future. Yeats suggested that international publicity activities should be coordinated by all countries together.

---- Oversight of planning and scoping of BEAM and other major projects.

De Leeuw noted that respective FGB and Platform Provider oversees, and IODP Forum monitors the progress.

Murray questioned the need of the task to oversee such projects within the IODP, and who will identify what project is worthy of IODP effort. De Leeuw replied that it would be the Forum. Becker agreed and commented that it might come under the long-term planning functions, so it should go to the Forum.

----- Monitoring and evaluating engineering development

De Leeuw noted that IOs are responsible for engineering development. Facility Governing Boards monitor and determine the level of interaction between platform providers. He explained that this task was brought up because SASEC had decided that EDP does not continue to the new program.

Tauxe asked who would bring attention to the need for engineering developments. De Leeuw replied that it is IOs under FGB's supervision. Becker informed that each IO will have its own engineering taskforce as SASEC recommended two meetings ago. Azuma commented that IOs will discuss this issue in a future IO meeting and decide on how to create an efficient mechanism. Larsen added that the Forum could send a message about overarching engineering requests. De Leeuw suggested discussing this issue again during the next June meeting.

-----Monitoring and stimulating overarching outreach and PR activities

De Leeuw noted that such tasks will be conducted as national acitivities, and checked by the Forum Chair with website assistance (i.e. posting of information) by Support Office.

De Leeuw commented that the website is already targeted to the science community and the public at large, which is automatically building overarching PR activity with the support office's help.

----- Overseeing Rapid Response Drilling-type activities and their impact on planned expeditions.

De Leeuw noted that Facility Governing Boards and Implementing Organizations oversee these type of activities. The Forum assists in communication to the scientific community.

-----Ethical issues, such as conditions of co-funding by commercial entities

De Leeuw noted that this is an FGB activity with IODP Forum's help in communication to the scientific community. He also reminded SIPCOM members to keep an eye on this issue until the end of the current program, and to alert IODP-MI when appropriate.

------Exploring optimum platform flexibility, e.g. exploring alternatives for corking expeditions by using local/regional research vessels, seabed drilling by local/regional research vessels, etc.

De Leeuw noted that this is FGB/ IO activity with input from PEP and technical panels.

-----Standardization of reporting formats, an important issue now that individual FGBs will become responsible for data collection/archiving, shipboard reports, preliminary reports, etc.

De Leeuw noted that the Framework specifies the goals of common publications, sampling polices, etc., and that individual Facility Governing Boards determine the level of compliance.

Escartin emphasized the need to adhere to a single, common standard on reporting and data collection. De Leeuw stressed that standardization of formats is an important issue because each FGB will be responsible for data collection, archiving, shipboard reports, preliminary reports, etc.

Murray commented that people who want to use samples do not care which ship, or which

FGB, is involved. They need one common portal to lead them to the samples they want. Janecek replied that concept of a common portal will need to be discussed further by IWG+ and the individual FGB's in light of funding constraints. Larsen added that SEDIS was developed to be the tool of choice for single data portal.

Becker commented that policy issues and approval of annual plans are missing from the duty transfer list. Becker suggested adding this issue to the list. De Leeuw agreed.

Becker asked if there will be three different annual plans. Janecek replied that the three annual facility program plans form one overarching annual program plan, but essentially there will be three plans. Murray pointed out that the framework document says that the support office is responsible for preparation of the annual program plan, which sounds as if the annual program plan is the responsibility of the support office.

7. SIPCOM procedural discussion

7.1. Interactions between OTF and SIPCOM, SIPCOM and CMO/funding agencies

De Leeuw explained that the interactions between OTF and SIPCOM are realized mainly by the SIPCOM chair attending OTF meetings and reporting back to SIPCOM. PEP chair can also help here as he or she also attends both the OTF and SIPCOM meetings. The CMO and the funding agencies also attend SIPCOM meetings and interact with SIPCOM.

SIPCOM Consensus 1201-04: Interactions between OTF and SIPCOM are established by the SIPCOM chair attending the OTF meetings and vice versa. The interaction between SIPCOM and CMO/funding agencies is arranged by regular email contact, incidental meetings and through the SIPCOM minutes.

7.2. SIPCOM reporting lines to funding agencies and IODP-MI

Reports from SIPCOM to the funding agencies and CMO are made through SIPCOM meeting minutes, motions, consensuses, and actions.

SIPCOM Consensus 1201-05: SIPCOM reports to funding agencies and IODP-MI through its minutes and by regular contacts of its chair with representatives of these IODP bodies.

7.3. Review of SIPCOM tasks

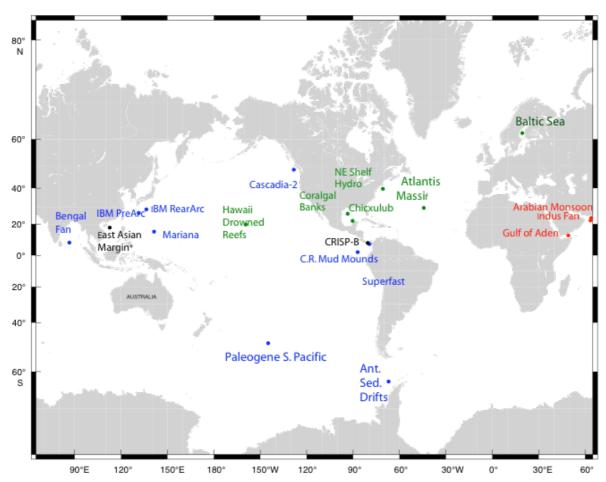
Discussed under the agenda item 6.2.

7.4 Process and timelines for long-term platform scheduling and role of SAS

De Leeuw initiated the discussion about the process and criteria for planning long-term platform scheduling.

Kroon commented that PEP drives the bottom-up system by identifying excellent proposals, but at the moment PEP is not directly involved in long-term scheduling. De Leeuw commented that SIPCOM advises on long-term scheduling. He liked the bottom-up system, but SIPCOM for example needs to know the regional gaps on the proposal map to suggest calls for workshop proposals. Kroon commented that calling for regional workshop proposals means that the program adopts the top-down approach, which is against what PEP does. He was concerned how the two-way system can work. Escartin suggested having workshops of not only one region but many different regions to see what comes out from the community. For a 10-15 year long plan, this approach is not heavily top-down and can work with PEP's bottom-up philosophy. Kroon suggested calling for workshop proposals involving a region where PEP has already identified some excellent proposals. For example, PEP has two excellent proposals in the South Pacific. To develop a few more proposals in that region, SIPCOM can call for South Pacific workshops.

[Proposals in OTF]



•Non-riser, •Riser, •MSP, •Not drillable, security issues

Escartin pointed out that there is a big gap in the Atlantic and in a large area of the Pacific, and suggested calling for workshop proposals in those areas.

Larsen mentioned another driving tool, "Calls for thematic workshop". Considering what scientific objectives are not achieved yet and considering their priorities are also important for long-term planning.

Dunbar asked if this was to discuss the procedure that the Forum and PEP will use in the future when SIPCOM doesn't exist anymore. De Leeuw replied yes. However, Divins noted that USIO needed to start planning for FY14 and 15 now, and cannot wait. SIPCOM therefore should discuss now where the next program will go in the next two years.

Becker asked if the planning should be platform specific, and commented that the planning for JR can be geographically focused, but it's not clear how important the geographic factor is for the other platforms. De Leeuw suggested limiting geographical discussions to JR because MSP can go wherever good science is proposed, and Chikyu already has its long-term schedule.

Becker noted that the Asian monsoon expedition is the start for the next program. Divins commented that the question is where to go after the Asian monsoon expedition. If IODP wants to take the JR around the world, the system needs more proposals for say the Atlantic in order to form a critical mass that can fill in after work in the Indian Ocean. There are several possible paths between the Indian Ocean and the Atlantic. Increased proposal pressure is also needed to define an optimum ship track between major oceans.

Quinn commented that the bottom-up way of running the program has led to an inefficient use of JR over the last few years. If SIPCOM's responsibility is to improve program efficiency, a call for workshop proposals for the South Atlantic or the Southern Ocean makes sense. Larsen pointed out that ODP adopted the top-down approach and had program-planning group to identify the areas that needed more proposals. Murray commented that the top-down and bottom-up approach could work together if SIPCOM sees workshops from a policy point of view and proposals from a grassroots point of view. Quinn commented that the top-down system is better also for proponents not to waste their time writing proposals for an area where the ship won't go. Becker agreed with Quinn, and suggested a call for workshops in the regions that could connect logically with the Indian Ocean.

De Leeuw suggested creating a subcommittee to look at this issue to report at the June meeting. Yeats pointed out that we should take action at this meeting to meet the next May 1st workshop proposal deadline. De Leeuw and Becker agreed.

Kroon commented that he was not comfortable with a call for regional workshop proposals that hints to the community what the program wants them to do. Murray suggested entertaining proposals for workshops geographically focused on any particular region. Kroon agreed.

Larsen pointed out that the program will run out of proposals for an efficient ship track in

1.5-2 years. He urged SIPCOM members to take the top-down approach to refuel the proposal pool very quickly. Tauxe agreed with Larsen, and commented that if the planning group worked well in ODP, it will work well in the next program as well.

De Leeuw suggested using one or two excellent proposals as the seeds of this long-term planning, and start to work top-down by asking for workshops in that particular region. Singhvi agreed with de Leeuw and suggested accepting all (drilling) proposals but welcoming workshop proposals of the area around where the good proposals stand to think what value can be added. Quinn commented that he liked in some sense having stellar proposals as a magnet for other new proposals, however to be most proactive in arranging efficient ship tracks, he suggested sticking to the top-down way.

Kroon commented that the call for the South Atlantic workshop would not be needed at this point because there are already some excellent proposals fitting in the South Pacific and Indian Oceans, which makes a potential ship track driven by science. De Leeuw suggested considering mid- and long-term planning separately, and suggested a call for the South Pacific for the mid-term, and any region for the long-term planning. (IODP-MI followed up with Call for WS proposals reflecting this discussion.)

Larsen noted that SIPCOM also needed to decide what the priority of Chikyu is. De Leeuw commented that the priority for JR is also the priority for Chikyu, although a much longer planning time is needed. Kroon commented that there are a lot of good proposals in the system for Chikyu (e.g. IBM proposals), but if Chikyu politically needs to go out of the Pacific, we don't have any good proposals at the moment.

De Leeuw suggested coming back to this issue next day after giving it some thought overnight.

8. New SAS structure

8.1. Discussion and approval of 'New SAS' Terms of Reference

De Leeuw explained that the current terms of reference were approved at the last SASEC meeting in June 2011, and they don't reflect the changes made since then. He suggested asking IODP-MI to revise the ToRs because the changes are all minor: for example, there is

no PGB anymore.

Yeats commented that SASEC discussed if SIPCOM reports to CMO or PGB(Program Governing Board) or IWG+, and they chose PGB. But the PGB is now gone, so the options should be CMO or the IODP Council. De Leeuw suggested reporting to both of IODP council and IODP-MI. Becker suggested reporting also to IWG+ for making recommendations to future program. De Leeuw agreed.

SIPCOM Action Item 1201-06: SIPCOM agrees on the new SAS Terms of Reference, taking into account that several minor issues and flaws have to be addressed and that the approval of the annual expedition schedule developed by OTF will be handled electronically in early March to meet the deadline of 18 months before the end of the next fiscal year, and that SIPCOM reports to IODP-MI, IODP Council, funding agencies and IWG+. IODP-MI will take care of these adaptations and will send the documents out for final SIPCOM approval.

SIPCOM Action Item 1201-07: SIPCOM, being asked by IWG+ to draft the Terms of Reference for the IODP Forum, forms a subcommittee consisting of Lisa Tauxe, Chris Yeats, Hiroyuki Yamamoto, Rick Murray, Ruediger Stein and Zhifei Liu chaired by Terry Quinn to draft the Terms of Reference for the IODP Forum and to present this draft at the next SIPCOM meeting in June 2012 for discussion and approval.

8.2. Cycle of SAS meetings and proposal submission deadlines

Larsen proposed the meeting cycle with the table below.

Month	Meeting / Submission deadline							
1								
2	SCP							
3	STP							
	EPSP							
4	roposal deadline							
5	Workshop deadline							
	PEP							
6	Data submission deadline							
	SIPCOM							
7								
8	SCP							
9	STP(?)							
10	Proposal deadline							
11	PEP							
12	Data submission deadline							

utes for #1 SIPCOM 19-20 January 2012

Divins noted that OTF and SIPCOM need to decide the annual plan in March to secure 18 months lead time for staffing, selecting co-chairs, etc. Divins asked if SIPCOM would be able to electronically approve the schedule prior to the June meeting. De Leeuw replied yes.

Becker asked what the timelines are for the other platforms. Murray commented the planning for other platforms would not be changed dramatically by the timing of the SIPCOM decision. De Leeuw agreed. Azuma commented that OTF by early June works for Chikyu.

Becker pointed out that PEP and SCP meeting cycle is different from what the current ToR mentioned. Larsen replied that PEP and SCP chairs discussed on this at the last PEP meeting, and they decided the meeting cycle above is more efficient.

Schuffert noted that Larsen proposed the two-week earlier deadline of proposal submission at the last SASEC meeting, and asked if that idea was dropped. Larsen replied that he didn't see the need for change from the traditional deadlines so far. But it will change when it's needed.

SIPCOM Consensus 1201-08: SIPCOM agrees on the cycle of SAS meetings and proposal

submission deadlines as shown by Larsen.

Friday 20 January 2012 08:30-17:15

9. IODP-MI program plan

9.1. SIPCOM discussion/approval of revised FY12 APP

De Leeuw informed that SASEC basically approved the FY12 APP at their last meeting in Amsterdam, and now SIPCOM is asked to approve its revised version with some changes including the expenditure for J-FAST expedition.

Kiyoshi Suyehiro thanked SIPCOM for approving the 600K for J-FAST in time. He explained that the new version of the APP also reflects ECORD council's decision to reduce 945K from POC to carry over to FY13 for a MSP expedition. Dunbar asked if the carry-over budget was secured for ECORD, and wondered if the budget could be used for other parties. De Leeuw replied that that is not the case.

SIPCOM Consensus 1201-09: SIPCOM discussed the updates of the FY12 APP budget regarding the additional costs for technical support for the J-FAST expedition and the 945kUSD reduction withdrawn by ECORD to be carried over to FY13 and approved these adaptations, thereby approving the FY12 APP.

9.2. Discussion of budget planning

De Leeuw suggested forming a subcommittee to look into the FY13 budget when the budget information comes in March-April and report at the SIPCOM June meeting. No one opposed.

Becker pointed out that there have not been firm financial numbers in June for the past three years, so he anticipated that there won't be a final budget to be presented at the next June meeting, and that SIPCOM will probably end up having a conceptual approval.

De Leeuw commented that it has been very difficult for Suyehiro and the SASEC subcommittee to figure out how the expenditures of IODP-MI were positioned within the whole financial structure, and he suggested this time looking only at MI's expenditure, not trying to position it in the overall financial figure.

SIPCOM Action Item 1201-10: SIPCOM forms a subcommittee to review the budget planning of IODP-MI for FY13 chaired by Keir Becker, seconded by Javier Escartin and Yasufumi Iryu to report at the SIPCOM meeting in June.

10. PEP report

10.1. December 2011 meeting report

PEP chair Dick Kroon provided PEP report.

---- PEP ToR

Kroon reviewed PEP's terms of reference and noted the following roles of PEP.

- 1. PEP evaluates all proposals in the context of the themes of the new science plan
- 2. PEP selects the best proposals and forwards them to SIPCOM and OTF
- 3. PEP stimulates proposal pressure in certain scientific areas as needed

---- Review procedure

The proposals were reviewed along the following procedure.

- 1. PEP evaluates pre-proposals, identifies those ready for development into a full proposal (one revision only!), nurturing stage, MDP, etc.
- 2. PEP evaluates full proposals, identifies those ready for external review (note, only one revision possible if not ready for external review!).
- 3. PEP rates full proposals, taking into account reviewers' comments and reply letter, forwarding those rated 'good' and 'excellent' to OTF and SIPCOM (note, in the post 2013 system directly to Platform providers)

---- PEP sub-chairs

Kroon introduced 4 sub-chairs.

Tim Bralower - Climate and Ocean Change

Yoshinori Takano - Biosphere Frontiers

Richard Arculus - Earth Connections

Michi Strasser - Earth in Motion

These sub-chairs lead the four thematic sub-panels aligned with the new Science Plan

-----Design of discussions

Kroon explained the roles of watchdogs, chair and sub-chairs in discussions.

- Watchdog 1 presents proposal (plenary or in break-out groups), comments on strengths and weaknesses of the proposal
- Watchdog 2 writes comments to proponents
- Watchdog 3 adds to the discussion

Chair or sub-chair asks for additional comments from the other PEP members, discussion follows. Chair or sub-chair makes a proposition for the fate of the proposal. If there is no consensus, the panel members vote.

----- Rating system and criteria

[Evaluation criteria]

- Are the scientific questions/hypotheses being addressed exciting and of sufficiently wide interest to justify the requested resources?
- Will the proposal significantly advance one or more goals of the Science Plan?
- Would the proposal engage new communities or other science programs into the drilling program?
- To what degree does the integrated experimental design of site characterization, drilling, sampling, measurements, and downhole experiments constitute a compelling and feasible scientific proposal?

10.2. Highly rated proposals; overview

----- Review result

Proposal	Version	Short Title	Disposition
#			
567	Full4	South Pacific Paleogene	Forward to OTF
589	Full3	Gulf of Mexico Overpressures	Submit revised full
615	Full2	NW Pacific Coral Reefs	Deactivate
625	Full	Pleistocene Pacific Southern Ocean	Deactivate
635	Full3	Hydrate Ridge Observatory	Submit revised full
640	Full	Godzilla Mullion	Deactivate
658	Full2	North Atlantic Volcanism and Paleoclimate	Submit revised full
659	Full	Newfoundland Rifted Margin	Submit revised full
667	Full	NW Australian Shelf Eustasy	Submit revised full
680	Full	Bering Strait Climate Change	Submit revised full *2
692	Full	Flemish Cap Rifted Margin	Submit revised full
696	Full3	Izu-Bonin-Mariana Deep Forearc Crust	Submit revised full
698	Full3	Izu-Bonin-Mariana Arc Middle Crust	Forward to OTF
702	Full	Southern African Climates	Submit revised full
703	Full	Costa Rica SeisCORK	Submit revised full
704	Full2	Sumatra Seismogenic Zone	Submit revised full
707	Full	Kanto Asperity CDP	Submit revised full
708	Pre2	Central Arctic Paleoceanography	Submit full
729	Pre	Western Lord Howe Rise Extension	Deactivate
730	Pre2	Sabine Bank Sea Level	Submit full
731	Pre	Papua New Guinea Orogenic Lifecycle	Deactivate
735	СРР	South China Sea Tectonic Evolution	Submit revised full
740	Full	Galicia Margin Rift History	Submit revised full
747	Full	North Atlantic Paleogene Climate	Submit revised full
749	Pre	Gulf of California Rifting & Microbiology	Submit full
750	Pre	Beringia Sea Level History	Submit full *2

751	Full	West Antarctic Ice Sheet Climate	Submit revised full*1
753	Pre2	Beaufort Sea Paleoceanography	Submit full
754	Full2	Norwegian Sea Silica Diagenesis	Submit revised full
756	Pre	Arctic Ocean Exit Gateway	Submit full
759	Pre	EPR Fast-Spread Crust	Deactivate
760	Pre	SW Australia Margin Cretaceous	Submit full
		Climate	
761	Pre	South Atlantic Bight Hydrogeology	Submit full
770	Full2	Kanto Asperity Project:	Submit revised full
		Observatories	
771	Full	Iberian Margin Paleoclimate 2	Submit revised full
772	APL2	North Atlantic Crustal Architecture	Submit revised full
776	Full	Arabian Sea Paleoclimate	Deactivate
777	APL2	Okinawa Trough Quaternary	Submit revised APL
		Paleoceanography	
778	Full2	Tanzania Margin Paleoclimate	Send to external review
		Transect	
780	Pre	Rodriguez Triple Junction	Deactivate
		Microbiology	
781	MDP	Hikurangi subduction margin	Send to External review
781A	Full	Hikurangi: observatory	Send to External review
782	Pre	Kanto Asperity Project: Plate	Submit full
		Boundary Deformation	
784	Full	Amundsen Sea Ice Sheet history	Submit revised full *1
788	Pre	Shiva Impact Structure	Deactivate
789	Pre	Arctic Slope Stability	Deactivate
790	Pre	Indian Ocean Neogene monsoon	Deactivate
791	APL	Continental Margin Methane Cycling	Submit revised APL

^{*1 –} with recommendation for a joint Antarctic Ice Sheet workshop

 $^{^{*2}-}$ with recommendation for a joint Bering Sea workshop

Kroon introduced the two proposals rated as excellent at the PEP meeting.

567-Full4 South Pacific Paleogene

The proposal calls for double/triple APC coring at 9 sites in a latitudinal transect (Eocene latitudes 55-70°S) in the South Pacific. It addresses high priority objectives of the new IODP science plan regarding greenhouse climate dynamics. The primary objectives are to constrain the CCD history of the South Pacific, particularly the late Paleocene-early Eocene, Southern ocean ice-rafting, and the evolution of ocean temperatures and the ACC in the Pacific. Site characterization is complete. Previous concerns about the presence of carbonate sediment at proposed sites have been adequately addressed by the proponents, as well as by Exp 329 coring at Site U1370.

698-Full3 IZU-Bonin-Mariana Arc Middle Crust

This proposal contains excellent science, addressing a fundamental problem in Earth Sciences, that of the generation of the continental crust. The relationship between the continental crust and its putative birthplace in intra-oceanic arcs has been a focal point for studies of crustal genesis, and is a key component of the new science plan. This project will obtain core from mid-crustal depths in the Izu-Bonin-Mariana arc (IBM), characterise the rocks, understand their petrogenesis and link their seismic properties to those observed in wide-angle surveys of the IBM, other arcs, and the continental crust. The target of the project can only be met by deep drilling, and requires the ambitious strategy outlined in the proposal, which entails almost 1 year of drilling with a riser vessel. The high impact and deep target of this proposal could make it a flagship opportunity for the medium-term future of scientific ocean drilling.

----- Worries

Kroon expressed his concerns about the following three points.

- Impact of one revision of full proposals
- -Impact of deactivation of proposals, potential misunderstanding that PEP rejected proponent's idea and does not want them to come back.
- Low number of proposals as the result of many brutal deactivations and misunderstanding in proponents, although PEP encourage them to re-submit in review form.

Yamamoto asked how PEP stimulates proposal pressure, and pointed out that it's the Forum's task. Kroon replied that PEP stimulates proposal pressure by identifying areas for workshops, combining some proposals to develop them into a better proposal, and identifying the science plan theme that lacks of proposals and report to SIPCOM or the Forum. De Leeuw noted that PEP and SIPCOM/Forum need to communicate in timely manner for effective stimulation.

Camoin asked if PEP also advises on the number of drilling sites based on how many sites PEP thinks the proponents need to achieve their scientific objectives. Kroon replied that PEP does this with input from IOs, and if the proposal is too ambitious with too many sites, PEP encourages the proponents to re-submit a new proposal with a more realistic plan. Tauxe questioned that approach. She commented that planning a whole leg is not the proponent's job, and PEP should not reject proposals based on their leg plan. Becker commented that there was an announcement to the community that proponents do not need to propose a leg plan that exactly fits in the leg time of two months, because IOs arrange the total length by combining short segments into single leg. Robert Gatliff asked PEP to evaluate only science concerning MSP proposals and not to look at leg time, because MSP legs are all different.

Dunbar expressed his concerns that PEP might be stuck in the individual mindset of what can be done in a 60-day long leg. He suggested discussing with PEP how different kinds of proposals are fostered. Kroon replied that PEP would consider this.

Larsen pointed out that forming a Detailed Planning Group could be the solution for reconstruction of proposals. The members of a past DPG were about 15 people, 50% proponents and 50% non-proponents, and non-proponents are the key people who don't push their own science. Kroon agreed that having a DPG is a good idea. Schuffert pointed out that DPGs do not exist any more in the current new SAS. Tauxe commented that a small workshop could also function in the same way as a DPG. Becker pointed out that DPGs sometimes continue for up to three years, not like workshops. Tauxe agreed that a DPG works better in this case.

SIPCOM Consensus 1201-11: SIPCOM recommends that PEP has the authority to form

limited-term, small membership Detailed Planning Groups (DPG), as needed, to foster the formation of feasible drilling leg proposals from one or more existing proposals.

11. IO Reports on End of Program planning:

11.1 Status of Chikyu

Nobu Eguchi provided Chikyu and J-FAST report.

[Chikyu activities]

					2011						-	2012		
	4	1 5	6	7	8	9	10	11	12	1	2	3	4	5
Dock work				(4/11	- 7/3)									
portcall				[] (7	/3 - 7/9)								
Transit					(7/1) - 8/1								
lmigration					[8/1	- 8/5)								
Hole-1							(8/6-	10/1)						
Hole-2									(10/1	11/9)				
Hole-3									(1	1/9-1	2/16)			
Stand-by (off Sri Lanka)									<u> </u>	(12/1	- 12/2	9)		
Transit											(12/29	- 1/25)	
Non-IODP													(2/6-3	3/21)
Exp. 343												!		W-W.W
													(4/1 - !	5/24)

[Successful Chikyu operation off Sri Lanka]

-Cairn Lanka Ltd., a wholly owned subsidiary of Cairn India Ltd., has made a gas discovery in the CLPL-Dorado-91H/1z, an exploratory well drilled in 1,354 meters of water in block SL 2007-01-001, offshore Sri Lanka.

-The well, drilled in the Mannar Basin, encountered a 25-meter gross hydrocarbon column in a sandstone reservoir between the depths of 3,041.8 and 3,068.7. Measurements while

drilling data indicate the zone is predominantly gas bearing and also carries some liquid hydrocarbon potential. Cairn Lanka is the operator and holds 100% of the participating interest in the block. Further drilling is needed to establish commercial potential.

- The company notes that the CLPL-Dorado-91H/1z is the first well to be drilled in Sri Lanka in 30 years and the first to discover hydrocarbons in the country.

[4P Azimuth Thruster repair work]

-Timing

28 May – 2 July 2012 (including sea trial and transit to Shimizu port)

-Dock

SKK Sasebo dock

- -Summary of repair work
 - 1. Platform installation
 - 2. Thruster installation
 - 3. Riser tensioner test
 - 4. Install real-time riser monitoring system

11.2 J-FAST Report

[Expedition 343 J-FAST summary]

- Schedule: 54 days (1 April~24 May including transit)
- Main Goal of JFAST Project
- 1. Understand the level of stress (friction) whichs control the large slip (20 50 m) on the shallow portion of the megathrust.
 - 2. Temperature Measurements to Estimate Friction
 - 3. Fault Zone Sampling for Physical Properties
- Water depth; Approximately 7,000 m
- Target Depth : 900 1,000 mbsf
- Co-chiefs; Fred Chester (TAMU) and Jim Mori (Kyoto U.)
- EPM; Nobu Eguchi (back-up EPM; Sean Toczko)

- Science party; 27 scientists (Japan, US, ECORD, ANZIC, India, China)

11.3 Budget status and schedule options for JR operations

Divins provided the report on JR budget status and schedule.

[FY12 JR Operations Schedule]

			TOTAL DAYS	
EXPEDITION	EXP#	DATES	(port/at sea)	CO-CHIEF
				K. Edwards
Mid-Atlantic Mbio	336	16 Sep - 17 Nov '11	62 (2/60)	W. Bach
Mediterranean				J. Hernandez-Molina
Outflow	339	17 Nov'11 - 17 Jan '12	61 (5/56)	D. Stow
Tie-Up/Dry Dock		17 Jan - 15 Feb '12		
Atlantis Massif				
(779 APL)	340T	15 Feb - 3 Mar '12	17 (0/17)	D. Blackman
				A. Le Friant
Lesser Antilles	340	3 Mar - 17 April '12	45 (3/42)	O. Ishizuka
Tie-Up		17 April - 2 Jun '12		
Newfoundland				R. Norris
Sediment Drifts	342	2 Jun - 1 Aug '12	60 (2/58)	P. Wilson
Tie-Up		1 Aug - 23 Oct '12		

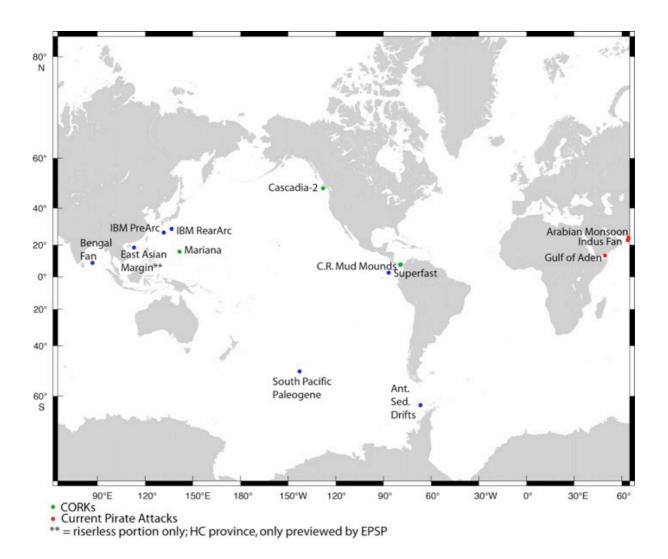
[FY13 JR Operations Schedule]

			TOTAL DAYS	
EXPEDITION	EXP#	DATES	(port/at sea)	CO-CHIEF

Tie-Up		1 Aug-23 Oct '12		
Costa Rica				
Seismogenesis Project2				R. Harris
(CRISP)	344	23 Oct-11 Dec '12	49 (2/47)	A. Sakaguchi
Hess Deep Plutonic				K. Gillis
Crust	345	11 Dec-10 Feb '13	61 (5/56)	J. Snow
Tie-Up		10 Feb-29 May '13		
Southern Alaska				
Margin Tectonics				
Climate &				J. Jaeger
Sedimentation	341	29 May-29 July '13	61 (3/58)	S. Gulick
Transit	346T	29 July-20 Aug '13	21 (4/17)	
				R. Tada
Asian Monsoon	346	20 Aug-28 Sep '13	39 (1/38)	TBD

[What's left at OTF]

(The following figure shows the locations of the drilling sites proposed by the unscheduled OTF proposals as of December 2012.)



Divins noted that there are not many options for JR's future path because JR cannot go into the dangerous areas (red dots) and probably also into CORK areas because they are too expensive (green dots.).

[FY14 and Beyond]

- •If on the same planning cycle as we were previously (not scheduling 18 months in advance as planned in the TOR), CORKs are out since USIO has to budget in FY13 for FY14 CORKs (even if we could afford them).
- •This leaves the following in the W. Pacific/E Indian
 - IBM-Pre-Arc (Arculus): challenging operations (water depth + penetration;
- 4720+1450 m): need ideal weather window; purchase casing hangers in FY13
- IBM-Rear Arc (Tamura): 1900 m deep hole (1200 m highest priority), purchase casing hangars in FY13
 - Bengal Fan

-East Asian Margin: phase 1 nonriser drilling only

Divins stressed that it is critical that PEP moves proposals to SIPCOM/OTF for FY14 and 15, and USIO needs to know FY14 schedule when they are developing the APP to purchase long lead items (e.g., casing hangers) in FY13.

[Precruise schedule]

	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
Expedition Planning															
PEP															
SIPCOM-I															
SIPCOM-2/OTF (Schedule)						Should be here			Usually here						
FY13 APP															
Invite FY14 Co-chiefs							Should	be here			ls to be rlier				
Staffing Solicitation 1st FY14 exp.									Should be	e here		Needs ear	to be lier		

Gatliff asked if USIO considered asking the Navy to protect the expeditions in dangerous areas (e.g. Gulf of Aden). Divins replied that USIO took that approach once before, but recently has not been very energetic about it.

Larsen asked if USIO could consider getting external funding for CORK instrumentation packages, and if it can help to get CORK projects back in the future plan. Divins replied that it would not be easy because the external funding could not cover the all of the CORK projects. Larsen commented that this information is very important because CORKs are one of the selling points of the new science plan.

11.4 Proposed Chikyu schedule through end of program

Eguchi introduced the Chikyu schedule to the end of the program.

		2012										2013									
USFY		FY12								FY13							FY14				
JPFY	JFY					Y12						JFY13				3					
Month	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
IODP	34	3			337			33	8								3	XX			
Non IODP																					

Quinn asked if the end of 3xx expedition means the end of NanTroSEIZE. Eguchi replied no, and explained that it needs three years in total, which means it ends in 2014, although budgetary constrains could push it into 2015.

Larsen asked if this schedule includes full implementation. Eguchi replied this schedule does not include observatory installation, which will be discussed at the PMT meeting in the end of February.

11.5 MSP operations to end of program

David McInroy provided MSP report

[Future MSPs]

FY12							
	Late Pleistocene Coralgal		Forwarded March 2010, SPC ranked #10				
581	Banks	OTF	Drilling trial part funded by ECORD, Feb/March				
	(drilling trial)		2012				
FY13,	next MSP						
672	Baltic Sea Basin	ОТГ	Forwarded March 2011, SPC ranked #2				
0/2	Paleoenvironment	OTF	Spring/Summer 2013				

	FY15 options							
548	Chicxulub K-T Impact Crater	OTF	Forwarded March 2010, SPC ranked #4					
340	emekalab K 1 impact crater	011	First MSP of the new program, 2014?					
758	Atlantis Massif Seafloor	OTF	Forwarded March 2011, SPC ranked #1					
	Processes	OIF	2014-2015? Depends on seabed drill readiness					
FY16 and beyond								
716	Hawaiian Drowned Reefs	OTF	Forwarded March 2009, SPC ranked #6					
581	Late Pleistocene Coralgal	OTF	Forwarded March 2010, SDC ranked #10					
	Banks	OIF	Forwarded March 2010, SPC ranked #10					
637	New England Shelf	OTF	Forwarded March 2009, SPC ranked #4					
	Hydrogeology	OIF	In holding bin with technology and cost issues					

Plus new MSP proposals, possibly in the Arctic

[Expedition 374 Baltic Sea: Planning]

- Issue notice of interest for platform February/March 2012.
- Expected to start Spring/Summer 2013, duration 60 days.
- In discussion with provider who can supply one platform to tackle all sites
- Co-chiefs accepted:
 - -- Thomas Andrén, Södertörn University, ECORD/Sweden.
 - -- Bo Barker Jørgensen, Aarhus University, ECORD/Denmark.
- •Currently planning the expedition science program, which includes a significant microbiology element.
- •No major issues regarding permitting:
 - -- Swedish Coast Guard: Swedish Exclusive Economic Zone Act.
 - -- Swedish Continental Shelf Act, Ministry of Enterprise, Energy and Communications.
 - -- Danish Ministry of Climate and Energy.

[Proposal 581 Coralgal Banks Feasibility test]

- •Offer from Fugro of 24 hours of geotechnical ship time for \$75k.
- •Test coring methods and tools to recover relict coralgal reef material.
- •Technical test, no Science Party or minimum measurements.
- •Currently in discussion with Fugro regarding details and contract.

- •Current opportunity window from mid-February to early March 2012.
- •Permit already granted by the Bureau of Ocean Energy Management, Regulation and Enforcement.
- •Possible bonus: recovered material may answer many of the questions in the original proposal.

[Proposal 548, Chicxulub Impact Crater]

Permitting

- Project brief and IODP/ECORD letter of project approval sent to Mexican authorities
- Positively received, face-to-face meetings not required
- ESO has been asked to submit permit applications when ready
- Have contact at British Embassy, Mexico City, to handle applications
- To apply, we need to know the hazard survey & drilling companies

Hazard survey

- ESO has solicited potential companies/institutes to do hazard survey
- Due to the value of the survey, we are required to go to open tender

Next steps

- Confirmation of FY14 funds: 'Left over' funds from Baltic Expedition plus ECORD FY14 member contributions, minus JR contribution
- If FY14 Chicxulub drilling is affordable, issue notice(s) of interest for hazard survey work and platform
 - Apply for permits once the preferred contractors are known
 - Aim for hazard survey in 2013

[ECORD Arctic Ambitions]

-- AAPG Polar Petroleum Potential (3P) Exhibition and Conference Halifax, Canada, 30 Aug – 2 Sep, 2011

"The First Deep Coring in the Central Arctic Ocean: The Drilling of the Lomonosov Ridge by the IODP".

-- Finding Petroleum: Exploring the Arctic conference Geological Society, London, 11 Oct, 2011

-- Magellan workshop: "Overcoming barriers to Arctic Ocean Drilling: the site survey Challenge"

Rungstedgård, Copenhagen, Denmark, 1 – 3 Nov, 2011

Dunbar wondered if the Coralgal Banks activities could fail to achieve their scientific goal because of uncertainties in how much corals extend into the matrix and how much they can recover it.

Stein commented that there are no icebergs in Chukchi Sea, so JR should be available around there.

Larsen commented that the Chicxulub is currently constrained in FY14, and asked if they have more flexibility for it. Gatliff replied that ESO cannot change it until ECORD has started to get an MOU organized. Azuma commented that Chicxulub is important in terms of the collaboration with ICDP. McInroy informed that this proposal will be re-activated in ICDP as soon as the expedition is set in FY14 or FY15.

11.6 SIPCOM directives, Long-range Plan to end of program

De Leeuw asked the members if they support the FY13 schedules presented by IOs. Becker asked if alternatives were discussed at the OTF. Divins replied that the alternatives were presented to SPC in August, and they selected the schedule at that time. Now SIPCOM should approve the program plan together with the schedule.

SIPCOM Motion 1201-12: SIPCOM recognizes that proposal pressure is critical to the successful implementation of the science plan, including efficient scheduling of the drilling platforms, both in the near and long term. To enhance long-term planning, SIPCOM recommends that IODP-MI have a call for regional workshop proposals. The goal of these

regional workshops is to facilitate and encourage the scientific community to develop high

quality drilling proposals from regions of the world's oceans that presently are

under-represented in the proposal pool. SIPCOM seeks to augment the workshop

proposal mechanism as a means to enlarge the proposal pool so that ship track scenarios

can be developed that maximize scientific drilling and minimize transit times.

Becker moved, Escartin seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe,

Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

12. Workshops in FY2012-13

Workshop title: Observatories in Scientific Ocean Drilling

<u>Lead Proponent:</u> Heinrich Villinger

Objectives: Bring scientists together to the brainstorming about the role of observatories,

and engage observatory scientists for post-2013 drilling and for the work that will be

involved as new borehole observatories are designed, constructed, and deployed.

Requested funding: \$24000 to allow 15 foreign participants to attend the workshop in

Houston, Texas.

Remarks: \$40000 request was submitted to USSSP, which is now under evaluation.

Watchdog: Robert Dunbar

Watchdog's comment:

We have gaps in understanding the engineering capabilities for IODP platforms, how to get

observatories funded, data collections, data management, data archiving and distribution. If

this workshop fills the gaps and produces a good report, it is well worth \$24000, although

the plan and objectives could be more specific.

Singhvi asked which category the workshop falls in. Dunbar replied this is a thematic

workshop.

Draft meeting minutes for #1 SIPCOM 19-20 January 2012

Dunbar suggested recommending funding this workshop on the condition that the

recommendation is valid only if the funding from USSSP is secured, otherwise we provide

them with travel fees when they have no workshop they travel to.

Yeats expressed his concern about spending budget for this workshop with such a vague

goal. Dunbar replied that he shared Yeats's concern, but he would still recommend this

workshop. Quinn and De Leeuw agreed with Dunbar. De Leeuw indicated that this proposal

would help to connect with other observatory programs (Neptune, OOI, DONET, ESONET,

GMES).

SIPCOM Motion 1201-13: SIPCOM recommends funding a workshop on "Observatories in

Scientific Ocean Drilling" with funding to be used explicitly for foreign participant travel (as

requested). SIPCOM notes that a co-funding proposal is currently pending with USSSP.

Dunbar moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe,

Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

Workshop title: Mediterranean Sea Drilling Project

Lead Proponent: Marina Rabineau

Objectives:

•Clarify the scientific objectives and evaluate the hypotheses that will be addressed.

Evaluate and justify the drilling site location to accomplish the proposal scientific

objectives.

Develop a clear strategy for implementation (e.g. time estimates for drilling and logging,

technical improvement for better halite recovery)

Requested funding: \$30000

Remarks: 7 km RISER borehole in 2400 m of water

Workshop Proposal History:

- October, 2010 ESF Magellan Workshop
- focused mainly on consolidation of scientific objectives of Mediterranean Sea drilling
- little discussion of implementation issues
- workshop report published on ECORD website (April 2011)
- •SASEC reviewed and declined WP in January, 2011 (Miami)
- Needed to assess outcomes of the October workshop before funding another workshop (no workshop report)
 - •SASEC reviewed and declined WP in June 2011 (Amsterdam)
- -SASEC stated "concern about the technological feasibility of the GOLD drilling as well as the lack of discussion and experts addressing this aspect in the proposed workshop."

Watchdog: Terry Quinn

Watchdog's comment:

- Key Strengths
- -MSC represents a significant and important event in the tectono-climate history of the Cenozoic
- Terrestrial record (and previously drilled marine record) contains large gaps due to the presence of erosional unconformity
 - Key Weaknesses
 - -New WP proposal largely unchanged from previous submission
 - -Technological challenges remain unaddressed
- -List 6 industry representatives as members of steering committee, but evidence of any input from them is missing
- Outstanding Question
- -Cost/benefit ratio? Are the scientific objectives of this proposal worthy of the great cost associated with drilling a 7 km riser hole?
- Recommendation
 - -Decline this workshop proposal
- -PIs should be strongly encouraged to seriously address technological challenges associated with the planned drilling.
- -A small meeting/workshop between a few of the PIs and a suite of drilling engineers might be an appropriate pathway forward

Draft meeting minutes for #1 SIPCOM 19-20 January 2012

De Leeuw commented that this proposal seemed not much revised from the previous

version of this proposal that SASEC reviewed and declined at their last June meeting.

Dunbar asked about the informal conversation between SASEC and the proponents after

the SASEC June meeting. De Leeuw replied that he as the watchdog told them to focus on

the microbial environment that is nicely sealed off in non-halite layers in between the halite

above and beneath, and to involve more people with engineering expertise and more senior

type scientists, and then write a new pre-proposal. But the present proposal did not reflect

his advice at all. Quinn agreed with de Leeuw.

Becker asked if they have an active proposal in the system. Larsen replied no. Becker

commented that he would have supported this workshop if they have an active

pre-proposal. He agreed Quinn's recommendation.

SIPCOM Motion 1201-14: SIPCOM declines the request for funding a workshop on the

Mediterranean Sea Drilling Project. SIPCOM continues to be concerned that the

proponents have yet to address the considerable technological challenges associated with

drilling a 7 km riser borehole in 2400 m of water through a sedimentary sequence that

includes ~3 km of evaporites.

Quinn moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe,

Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The Motion passed.

Workshop title: Southwest Pacific Ocean IODP

Lead Proponent: Neville Exon

Objectives:

-Identify the leading scientific ideas, hypotheses and questions for this region that are

pressing and require ocean drilling.

Draft meeting minutes for #1 SIPCOM 19-20 January 2012

- Review the latest work in the region, briefly outline possible future IODP expeditions,

coordinate activities associated with scheduled and proposed geoscience research cruises in

the area, and set up working groups to develop proposals for post-2013 IODP expeditions

- Identify synergies between the active and deactivated South Pacific proposals, improve

interaction, discuss additional opportunities and establish the robust international alliance.

Requested funding: \$30000

Watchdog: Kawahata

Watchdog's comment: Recommend full funding

Kroon commented that the South Pacific becomes very important in the next couple of

years for the proposed pressure that the long-term plan needs. He suggested expanding this

workshop to include the IBM workshop. De Leeuw replied that that is a possibility.

Murray indicated that it could be problematic since there was already a fund allocated to a

similar workshop (Indian Ocean Drilling Workshop, Goa, India, Oct 2011), but he agreed on

recommending this workshop because this is a very important area to steer the program. De

Leeuw agreed, and commented that connections and collaborations between the major

institutes in the regions are also appealing.

SIPCOM Motion 1201-15: SIPCOM has reviewed the IODP Workshop Proposal of

"Southwest Pacific Ocean" and strongly recommends funding for this workshop because this

area is important and this proposal tries to develop the new phase of IODP.

Kawahata moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe,

Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

========

Workshop title: ULTRA-DEEP DRILLING INTO ARC CRUST: genesis of continental

crust in volcanic arcs

Lead Proponent: Shuichi Kodaira

Objectives: Bring together geophysicists, geologists, geochemists and petrologists interested

in the nature of arc crust, how it is modified in collision zones and preserved in continental

crust and to discuss the best place for ultra deep drilling into arc crust (Izu-Bonin-Mariana,

IBM).

Requested funding: \$30000

<u>Watchdog:</u> Paul Wilson (absentee), Jan de Leeuw (deputy presenter)

Watchdog's comment:

• A suitably organized workshop with involvement of key people (e.g., Kelemen) well-placed

to comment on the relative merits of various deep drilling projects (e.g., IBM, MoHole)

might help resolve some of these major issues

• The WS proposal would appear to incorporate some nice scientific themes and questions.

SIPCom would benefit from expert evaluation of the scope of topics to be discussed and the

list of possible speakers. Preferably this input might be sought from someone with

experience of IBM proposal nurture (e.g., an existing or former watchdog from the science

evaluation panel).

De Leeuw asked Larsen how much is available for new workshops. Larsen replied that MI

has \$200K for FY12. However, since some workshops budgeted for FY11 were actually held

in early FY12, there is still uncertainness until MI secures the carry forward budget to FY12.

Becker commented that he didn't see if their workshop is to develop new proposals or to do

another endorsement of the existing proposals.

Kroon noted that the proponents have their proposal in the system and PEP evaluated it as

"excellent" and "ready to drill", therefore he questioned the necessity of having this

workshop at this stage. Larsen commented that it might not be a bad idea to have further

information from the workshop before implementing the expedition. Kroon commented

that if the workshop helps to answer unsolved issues, he could support it, but he did not like

to delay the implementation too much. Quinn commented that if the unsolved issue is

technological feasibility, a DPG could look into it with no need for using MI's budget. Becker

agreed with Kroon and Quinn. He commented that what they need now is not a thematic but technological workshop. Azuma offered to coordinate a technology session in the workshop. Murray appreciate Azuma's offer, but he suggested evaluating only what the proponents proposed, because Azuma's offer was not a part of the proposal.

Kroon pointed out that the proponents probably did not know that PEP rated their proposals as "excellent" when they submitted this workshop proposal. He suggested asking them to re-submit a new proposal based on PEP's feedback. Quinn agreed on the resubmission but on the condition that the new proposal focuses on technological challenges and potential partner or colleagues.

SIPCOM Motion 1201-16: SIPCOM declines the request of funding for the "Ultra Deep Drilling Into Arc Crust" workshop proposal and, in light of the overall high scientific status of the closely associated scientific proposal at PEP, further recommends that the proponents consider developing a focused workshop addressing the technical and engineering aspects of the proposed drilling, as well as a technical/engineering risk analysis (e.g., what scientific objectives would be compromised by drilling to less than proposed depths).

Murray moved, Dunbar seconded, 14 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 1 abstained (Ishiwatari), 3 non-voting (Kim, Sharma, Yeats). The motion passed.

13. IODP program developments

13.1 New IODP website

Larsen provided an update on renewal of the IODP web site.

IODP-MI is managing the renewal with a selected commercial vendor to:

- 1. Upgrade CMS (Content Management System) to a new open-source CMS
- 2. Increase navigability using information architecture methods
- 3. Improve outreach to target audiences, particularly the general public through re-design (pages/content)
- 4. Implement a stable platform for the IODP.org site that can smoothly transfer to

post-2013 IODP

[Design change concept]

-"clean," "friendly," "professional"

- Provide access to critical community information resources while improving the ability of

IODP.org website to capture the mission of IODP

- Front page will have far fewer links than the current front page.

- Second tier pages provide a landing area for main target audiences

- Quick Links will provide easy access to most commonly accessed resources

[Time lines]

-The project is scheduled for completion in April 2012.

Tauxe asked if the web site will be migrating into a new form gradually, or suddenly switched someday in April. Larsen replied that MI was updating the contents in the existing structure, but at a certain point of time the old system will be cut off with migration of all contents to switch to the new system.

13.2 New Proposal guidelines

De Leeuw commented that the proposal guideline and primer currently on the web were already approved by SASEC, and there was no need to change the text in there. But he suggested combining the workshop guideline with the proposal guideline. Larsen agreed.

Yeats suggested adding an explanation of PEP's rating system to the guideline. Murray agreed with Yeats. Larsen commented that the criteria of PEP evaluation are already included, and that should be enough.

13.3 Program Archive

Larsen reported that the on-going program archive project was for:

- -Easily accessible, permanent archives through a common data portal
- Replicated databases and web-based front-end in Japan, USA, Europe
- Documents and multimedia repositories (CMS archive?)
- Sample materials (i.e., cores/samples) inventories
- Possible library-based digital archive of IODP publications

Tauxe commented that free access to all published papers related to IODP would be helpful to everyone in the community. De Leeuw replied that he agreed but there is nothing SIPCOM can do. Larsen reminded that we have free access to expedition-related publications. Murray commented that it's a great help that USIO scans papers and updates their library. Larsen commented that a digital library is far more than a collection of digital copies. For example, TAMU Library had decided not to host a digital ocean drilling library. Divins confirmed.

14. Scoping of BEAM mantle drilling

Kiyoshi Suyehiro provided BEAM report.

BEAM stands for Borehole into Earth's Mantle. This is not about the actual project but it is about scoping on engineering to drill into the mantle.

The scoping project is funded by the Sloan Foundation for two years and will end in mid-2013. This two year BEAM activity is an intermediate planning step for the eventual goal of the 10 year project. At the end of the term of Sloan Foundation support, the following documents are expected.

- 1. BEAM Science Plan
- 2. Preliminary Technical Implementation Plan
- 3. Public Engagement Plan
- 4. Risk Assessments and Management Plan

One of the important objectives of this activity is to attract the science community and engineers. IODP-MI have been posting advertisements to call people in discussion, and the first meeting during the AGU on December 7th had 40 participants, showing this project filtering into the community.

IODP-MI will have a SWOT (strength/weakness, opportunities/threats) exercise to analyze the risks of the mantle drilling and to brainstorm on management strategy, and eventually come up with a list of recommendations for the next step.

Kroon asked if Suyehiro had some timelines of the mantle drilling. Suyehiro replied that the proponents of the future mantle drilling proposal had a meeting and agreed to submit the proposal for April 1 deadline. Larsen confirmed it and commented that the proponents are a group of 20+ international scientists.

15. Role of SAS in long range planning (post 2013)

De Leeuw suggested a platform-wise discussion about workshops which could be ingredients of the post-2013 program.

----- MSP

Stein, Escartin and Iryu left due to their conflict of interest.

De Leeuw suggested selecting promising proposals and areas for 2016-2017. He noted that the Arctic must be the highest priority area because of the excellent Arctic proposals in the system. Kroon commented that Bering Strait is a good candidate for a workshop area as there are two potential proposals in the system. He pointed out that however, they could come up sooner than 2016, and he could not see yet how many other Arctic proposals will be submitted and how strong the competition will be beyond 2016.

Quinn commented that beyond 2016 long term planning will be a task for the IODP Forum and/or FGBs. Camoin explained that the Forum sees the long-term planning from a thematic point of view, while FGB plans ship schedules platform by platform. De Leeuw commented that SIPCOM acts as if it continues after 2013 for a smooth transition to the Forum and the FGBs. Quinn agreed that there should not be a hiatus in advice from executive committees at the end of 2013. However, beyond FY16 the territory is still wide open, and it's premature to make firm decisions. Dunbar and Becker agreed. Janecek commented that his point about monitoring and advising on long-term planning is not particularly dealing with the specifics of proposals, but only in the sense of finding any critical science missing from the planned program achievement. Thus, it is too early to act. He suggested just monitoring what is scheduled in the next few years, and making recommendations if SIPCOM sees that something critical is missing.

Kroon commented that if SIPCOM is not involved in planning beyond FY16, they still should encourage workshops about the Arctic or Bering Strait or somewhere in a sense that those are highly important in the new science plan. De Leeuw agreed. Becker suggested recommending Arctic workshops including the Bering Strait. Larsen commented that there is a disconnection between the groups of Arctic and Bering Strait proponents, because Bering Sea drilling in general does not need ice breaking facilities, in fact is primarily MSP proposal because of water depth, whereas the high Arctic drilling does need icebreaker capability for both drilling and site survey, and that proponent have a tendency to organize themselves according to logistics.

Yeats commented that PEP, which has a thorough knowledge of the proposals and can detect where more proposal pressure is needed, should be more involved in calls for workshop proposals. Kroon agreed with Yeats, and commented that even if there are enough pre-proposals for the Arctic at the moment, PEP cannot tell if those will end up as excellent full proposals. PEP can advise the FGBs to watch and stimulate the community in that area. De Leeuw commented that SIPCOM can also proactively encourage the community to submit Arctic workshop proposals as we already know that the Arctic is very important in the new science plan. Janecek agreed with de Leeuw, and commented that if the call for workshops would be based on the science plan, this discussion did not have to

be platform by platform.

Becker commented that analysis on the active proposals in the system is needed to decide where we need workshops. Yeats agreed with Becker. Dunbar suggested doing homework and discussing the long-term plan again in the next June meeting. De Leeuw suggested forming a subcommittee to do that homework. Yeats commented that PEP is more effective. Murray asked if PEP reviews OTF proposals for FY16. Kroon replied no and noted that in the current rule, OTF proposals are reviewed by OTF. Kroon suggested inviting PEP subchairs to that homework, and PEP will review it and report to SIPCOM.

SIPCOM Action Item 1201-17: SIPCOM asks PEP to summarize the scientific and regional distribution of pre-proposals, proposals, CPPs, and APLs at PEP and OTF, to enable SIPCOM at their June 2012 meeting to evaluate future coverage of the post-2013 IODP Science Plan.

Stein, Escartin and Iryu came back in the room.

----- JR

De Leeuw invited member's comments on where JR should go for FY 14,15 after the Asian monsoon expedition. He commented that SIPCOM already noticed that there was a dense population of proposals in the Western Pacific.

Kroon noted that the South China Sea CPP proposal was not well received by PEP but has a high potential. The Izu-Bonin-Mariana Deep Forearc Crust (P696) and South Pacific Paleogene (P567) proposals are also promising. They are implying a possible JR track from Asian monsoon expedition to the West Pacific, then to the South Pacific.

Larsen suggested discussing this issue at the next June meeting because the situation will be clearer after the next proposal deadline April 1st and the next PEP and OTF meetings. Quinn agreed with Larsen.

Divins commented that USIO was going to start scheduling for FY14 in three months, and

cannot wait until the next April proposal deadline and the next PEP reviews. After picking up some proposals for FY14, there are not many left for FY15. USIO wants to see a world map with all proposed drilling sites. SIPCOM could then solicit proposals to fill the gaps on the map, then USIO can have something to choose for FY15.

Kawamura explained that the FY14 schedule is already drafted but is not fixed yet, and that's why the OTF meeting is scheduled in March. After the March OTF meeting, SIPCOM can approve or endorse the outcome from the OTF. What USIO asked was more proposals to have options for the FY15 JR schedule. De Leeuw agreed.

SIPCOM Consensus 1201-18: Regarding the long-term planning of JR (post FY14) it is recognized that, following probable work in the Western Pacific, additional proposal pressure at the OTF level is required to facilitate and optimize JR operations and transits, while maximizing scientific return. A recent Indian Ocean Workshop and a planned SW-Pacific workshop may increase the number of drillable targets in these areas. To encourage future proposal pressure in the South Atlantic, Circum-Antarctic, and Indian Ocean, which are possible routes for the JR in the long term, SIPCOM requests that future proposal calls for both drilling projects and workshops specifically solicit submissions concerning these areas.



Kroon commented that he didn't see any shortage of excellent proposals for Chikyu. Quinn commented that he read from Kroon's presentation that IBM is the next one. Becker added that CRISP in the Eastern Pacific is also a good choice.

Becker questioned if CDEX needs guidance from SIPCOM in terms of science priority versus logistical priority, which the FGB will deal with at some point. De Leeuw concluded that SIPCOM did not need to take any action at this stage.

16. Linkages to other programs (PAGES, OOI, etc.)

De Leeuw provided a report on IODP-PAGES collaboration.

[Overlap in both science plan]

- High resolution paleoenvironmental and paleoclimatic reconstruction
- Ocean Biogeochemistry
- Proxy development
- Model-Proxy record integration
- (Paleo-) Biodiversity
- Sub-seafloor life communities
- Human evolution and climate
- Outreach and Education
- New Technologies and Modeling
- Workshops aiming to submit proposals

[What IODP can offer to PAGES?]

- Mean to obtain SUPERB continuous long marine sediment cores
- State of art on-board and on-shore facilities
- Data management facilities
- Outreach facilities (SD?)
- WS support

[What PAGES can offer to IODP?]

- High quality Drilling Proposals (e.g. ultra-high resolution, land-sea correlation)
- New community and expertise
- Direct link to the IGBP(International Geosphere-Biosphere Program) frame

[Challenge]

- Policy in IODP: in principle only researchers from IODP member countries can participate

IODP expeditions

[How to proceed]

-Joint workshop to create a IODP proposal

IODP-MI and each IODP member nation have budget for workshops

-Need of MoU?

Becker asked if PAGES has workshop budgets. De Leeuw replied that they have a quite

substantial budget for workshops.

Singhvi commented that IODP-India will hold the next open science meeting of the PAGES in

Goa (13-16 Feb 2013), which is a once-in-4 year big event, and suggested organizing an IODP

presentation at that meeting.

Tauxe asked if PAGES was aware of the way to submit proposals to IODP. De Leeuw replied

no, and commented that only a few members of the PAGES scientific steering committee

knew about IODP. Kroon suggested submitting workshop proposals to both programs to

create a virtual joint workshop. Dunbar commented that he has been involved in PAGES

from the year it was created, and has seen five or six high-resolution sediment archive

workshops. There have been some years when every single member of the steering

committee knew well about IODP and a third of them had actually participated, and it would

happen again through cycle of people. He didn't think SIPCOM needs to stimulate

collaboration, but he suggested making them aware that there is workshop funding

available, and that IODP looks favorably upon linkages with other groups, and that

co-funding of workshops is the right thing to do. De Leeuw agreed and he will communicate

back to PAGES.

Becker wondered what SIPCOM can do more about linkages to the observatory projects like

50

NEPTUNE-Canada and DONET(Japan). De Leeuw commented that SIPCOM may await the answer as the outcome from the observatory workshop, and suggested coming back to this issue at the next meeting.

17. ICDP-IODP linkages update

Larsen reported about ICDP-IODP linkage.

Larsen and Kroon had a meeting with some ICDP members in San Francisco, and it was confirmed that they wanted to continue joint activities and joint publication on Scientific Drilling.

IODP and ICDP programs have scientific overlap in all of four themes. In the past, there were some joint projects in which IODP covered deep drilling and ICDP covered shallow drilling. ICDP also has considered funding ocean drilling in the Barents Sea to study an impact crater clearly visible in seismic data. However, such joint operations have never fully developed because of differences in the process of proposal submission and evaluation. Now that IODP has a streamlined SAS system, it should be easier to build a joint proposal evaluation system. Kroon added that a joint annual meeting was suggested.

Gatliff commented that ESO has been also organizing the links with ICDP on the technology side, and envisages a European infrastructure to support scientific drilling, where ESO and

ICDP will work together to implement and develop new technologies.

Stein noted that there was the IODP-ICDP "Climate-Human Evolution" Joint Program Planning Group, and asked how it went and if this planning group still exists. Murray replied that nothing has happened as far as he remembered.

SPC consensus statement 1003-7: SPC recognizes the high scientific value and widespread societal interest in understanding how—or whether—climate influenced the early stages of human evolution on the African continent. Addressing this issue requires a much more detailed understanding of the regional and local climates in which hominids and hominins evolved, and this understanding will require a coherent and integrated approach to

recovering detailed climate records from terrestrial (former lake) sequences, from present day lakes in Africa, and from the ocean basins surrounding Africa. SPC invites the ICDP community to join with the IODP community to establish a Joint Program Planning Group charged to plan an integrated onshore, lake, and ocean drilling program that would dramatically enhance scientific understanding of how past climates may have influenced the early stages of our evolution.

Escartin suggested using a joint workshop to get ICDP involved more. Dunbar informed that there has been a joint IODP-ICDP workshop or colloquium every year since about 2006, and suggested encouraging this kind of activity to continue. He also commented that it's hard to imagine what more we can do proactively. Larsen suggested having a joint discussion about a joint review mechanism. Dunbar and de Leeuw agreed with Larsen. Yeats commented that if we have a discussion on joint reviews, PEP chair should be the main speaker, because PEP is the only evaluation panel in IODP. Kroon suggested having PEP and ICDP meetings in parallel in separate rooms but with a joint session at some time during the two days. Becker informed that IWG+ planned to invite an ICDP liaison to IODP Forum, and commented that that would help to accomplish the joint evaluation plan.

Iryu asked who would pay for the joint operation in the joint mechanism, and pointed out that in the current system, IODP proponents don't have to pay for expeditions because the program pays for it, but ICDP proponents have to pay by themselves.

Murray commented that IODP needs to be more aggressive to reach out to ICDP whenever SIPCOM or PEP spots a potential linkage. Quinn commented that a check box in the proposal form to show if the proposal is related to ICDP might help to find future collaboration. Murray and de Leeuw agreed.

18. Review of action items, motions, and consensus statements

Panel members walked through the drafts of the consensus statements and discusses motions, action items, and wording.

Draft meeting minutes for #1 SIPCOM 19-20 January 2012

19. Review of any additional action items, motions, and consensus statements

SIPCOM Consensus 1201-19: SIPCOM expresses its gratitude to Dr. Dhananjai K Pandey

and NCAOR, our local hosts for this meeting in Goa, India. The first-class hotel and

meeting facilities provided a superb venue for a productive meeting. Meeting participants

enjoyed the nightly dinners, which featured a dazzling array of Indian food, drink, and

music. Meeting participants will not soon forget their time in Goa.

SIPCOM Consensus 1201-20: SIPCOM wishes to recognize Hans Christian Larsen for his

years of dedicated service to scientific ocean drilling, most recently as Vice President of

IODP-MI. Hans Christian's steady hand proved critical to the success of IODP as it

originated and went through its many changes. Hans Christian travelled the world in

support of IODP and his institutional knowledge of the proposals in the system never ceased

to amaze. SIPCOM wishes Hans Christian the best in his (semi) retirement and thanks him

for all of his years of service to IODP.

---- Next SIPCOM Meeting

Place: Washington DC, USA

Date: 19-20 June 2012

20. Closing Remarks

De Leeuw adjourned the meeting at 17:15.

ADJOURN

53

Science Implementation and Policy Committee

1st Meeting, 19-20 January 2012

Goa, India

Science Advisory Structure Executive Committee - SASEC

Keir Becker University of Miami, USA

Jan de Leeuw Royal Netherlands Institute for Sea Research, The Netherlands

Robert Dunbar Stanford University

Javier Escartin CNRS Institut de Physique du Globe

Akira Hayashida Doshisha University
Yasufumi Iryu Nagoya University
Akira Ishiwatari Tohoku University
Hodaka Kawahata The University of Tokyo

Gil Young Kim Korea Institute of Geoscience and Mineral Resources

Dick Kroon The University of Edinburgh

Young-Joo Lee (N)* Korea Institute of Geoscience and Mineral Resources (KIGAM)

Zhifei Liu (N) * Tongji University Richard Murray Boston University

Terry Quinn University of Texas at Austin Ram Sharma (N) Ministry of Earth Science

Ruediger Stein Alfred Wegener Institute for Polar and Marine Research

Lisa Tauxe University of California, San Diego

Paul Wilson* University of Southampton

Hiroyuki Yamamoto Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Chris Yeats (N) CSIRO Earth Science and Resource Engineering

*Unable to attend (N) – non-voting

Liaisons, Observers and Guests

Wataru Azuma Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan

Rodey Batiza National Science Foundation, USA
Gilbert Camoin ECORD Managing Agency (EMA), France
David Divins Consortium for Ocean Leadership, USA

Nobuhisa Eguchi Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan

Robert Gatliff British Geological Survey, UK

Tom Janecek National Science Foundation (NSF), USA Yoshihisa Kawamuara IODP Management International, Inc.

Shin'ichi Kuramoto Ministry of Education, Culture, Sports, Science and Technology, Japan

Hans Christian Larsen IODP Management International, Inc.

David McInroy British Geological Survey, UK

Kiyoka Miki Ministry of Education, Culture, Sports, Science and Technology, Japan

Dhananjai Pandey National Centre for Antarctic and Ocean Research

Jeff Schuffert U.S. Science Support Program, Consortium for Ocean Leadership Shingo Shibata Winistry of Education, Culture, Sports, Science and Technology, Japan

Ashok Singhvi Physical Research Laboratory, India Kiyoshi Suyehiro IODP Management International, Inc. Michiko Yamamoto IODP Management International, Inc.

Science Implementation and Policy Committee

1st Meeting, 19-20 January 2012

Goa, India

EXECUTIVE SUMMARY (ver. 2)

Thursday 19 January 2012 09:00-17:30

1. Introduction

1.6. Meeting agenda approval

SIPCOM Consensus 1201-01: SIPCOM approves the agenda for its 1st meeting on 19-20 January in Goa, India.

6. SIPCOM Discussion on reports

6.1 Framework of post 2013 program, and the role/structure of SAS

SIPCOM Consensus 1201-02: Based on discussion of the "Revised Framework" and "Transfer of SIPCOM Duties" documents (dated January 18, 2012), SIPCOM stresses the importance of having very strong representation (e.g., a majority of voting persons) by scientists from the international community on the IODP Forum and on the individual Facility Governing Boards (FGBs). The chairs of the respective FGBs should each be a member of the international scientific community not affiliated with the funding agencies, national offices, Implementing Organizations, etc.

SIPCOM Consensus 1201-03: SIPCOM discussed the latest versions of the "Framework International Ocean Discovery Program" and "Transfer of SIPCOM duties to other IODP entities post 2013" as produced by IWG+ on January 18.

A multitude of questions and suggestions were made and are recorded in the SIPCOM meeting minutes to help and advise IWG+ to improve both documents.

7. SIPCOM procedural discussion

7.1. Interactions between OTF and SIPCOM, SIPCOM and CMO/funding agencies

SIPCOM Consensus 1201-04: Interactions between OTF and SIPCOM are established by the SIPCOM chair attending the OTF meetings and vice versa. The interaction between SIPCOM and CMO/funding agencies is arranged by regular email contact, incidental meetings and through the SIPCOM minutes.

7.2. SIPCOM reporting lines to funding agencies and IODP-MI

SIPCOM Consensus 1201-05: SIPCOM reports to funding agencies and IODP-MI through its minutes and by regular contacts of its chair with representatives of these IODP bodies.

8. New SAS structure

8.1. Discussion and approval of 'New SAS' Terms of Reference

SIPCOM Action Item 1201-06: SIPCOM agrees on the new SAS Terms of References, taking into account that several minor issues and flaws have to be addressed and that the approval of annual expedition schedule developed by OTF will be handled electronically in early March to meet the deadline of 18 months before the end of the next fiscal year and that SIPCOM reports to IODP-MI, IODP Council, funding agencies and IWG+. IODP-MI will take care of these adaptations and will send the documents out for final SIPCOM approval.

SIPCOM Action Item 1201-07: SIPCOM, being asked by IWG+ to draft the Terms of Reference for the IODP Forum, forms a subcommittee consisting of Keir Becker, Lisa Tauxe, Chris Yeats, Hiroyuki Yamamoto, Rick Murray, Ruediger Stein and Zhifei Liu chaired by Terry Quinn to draft the Terms of Reference for the IODP Forum and to present this draft at the next SIPCOM meeting in June 2012 for discussion and approval.

8.2. Cycle of SAS meetings and proposal submission deadlines

SIPCOM Consensus 1201-08: SIPCOM agrees on the cycle of SAS meetings and proposal submission deadlines as shown in the following table.

Month	Meeting / Submission deadline
1	
2	SCP
3	STP
	EPSP
4	Proposal deadline
5	Workshop deadline
	PEP
6	Data submission deadline
	SIPCOM
7	
8	SCP
9	STP(?)
10	Proposal deadline
11	PEP
12	Data submission deadline

9. IODP-MI program plan

9.1. SIPCOM discussion/approval of revised FY12 APP

SIPCOM Consensus 1201-09: SIPCOM discussed the updates of the FY12 APP budget regarding the additional costs for technical support for the J-FAST expedition and the 945kUSD reduction withdrawn by ECORD to be carried over to FY13 and approved these adaptations, thereby approving the FY12 APP.

9.2. Discussion of budget planning

SIPCOM Action Item 1201-10: SIPCOM forms a subcommittee to review the budget planning of IODP-MI for FY13 chaired by Keir Becker, seconded by Javier Escartin and Yasufumi Iryu to report at the SIPCOM meeting in June.

Friday 20 January 2012 08:30-17:15

10. PEP report

SIPCOM Consensus 1201-11: SIPCOM recommends that PEP has the authority to form limited-term, small membership Detailed Planning Groups (DPG), as needed, to foster the formation of feasible drilling leg proposals from one or more existing proposals.

11. IO Reports on End of Program planning:

11.6 SIPCOM directives, Long-range Plan to end of program

SIPCOM Motion 1201-12: SIPCOM recognizes that proposal pressure is critical to the successful implementation of the science plan, including efficient scheduling of the drilling platforms, both in the near and long term. To enhance long-term planning, SIPCOM recommends that IODP-MI have a call for regional workshop proposals. The goal of these regional workshops is to facilitate and encourage the scientific community to develop high quality drilling proposals from regions of the world's ocean that presently are underrepresented in the proposal pool. SIPCOM seeks to augment the workshop proposal mechanism as a means to enlarge the proposal pool so that ship track scenarios can be developed that maximize scientific drilling and minimize transit times.

Becker moved, Escartin seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

12. Workshops in FY2012-13

SIPCOM Motion 1201-13: SIPCOM recommends funding a workshop on "Observatories in Scientific Ocean Drilling" with funding to be used explicitly for foreign participant travel (as requested). SIPCOM notes that a co-funding proposal is currently pending with USSSP.

Dunbar moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

SIPCOM Motion 1201-14: SIPCOM declines the request for funding a workshop on the Mediterranean Sea Drilling Project. SIPCOM continues to be concerned that the proponents have yet to address the considerable technological challenges associated with drilling a 7 km riser borehole in 2400 m of water through a sedimentary sequence that includes ~3 km of evaporites.

Quinn moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The Motion passed.

SIPCOM Motion 1201-15: SIPCOM has reviewed the IODP Workshop Proposal of "**Southwest Pacific Ocean**" and strongly recommends funding for this workshop because this area is important and this proposal tries to develop the new phase of IODP.

Kawahata moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

SIPCOM Motion 1201-16: SIPCOM declines the request of funding for the "Ultra Deep Drilling Into Arc Crust" workshop proposal and, in light of the overall high scientific status of the closely associated scientific proposal at PEP, further recommends that the proponents consider developing a focused workshop addressing the technical and engineering aspects of the proposed drilling, as well as a technical/engineering risk analysis (e.g., what scientific objectives would be compromised by drilling to less than proposed depths).

Murray moved, Dunbar seconded, 14 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 1 abstained (Ishiwatari), 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

15. Role of SAS in long range planning (post 2013)

SIPCOM Action Item 1201-17: SIPCOM asks PEP to summarize the scientific and regional distribution of pre-proposals, proposals, CPPs, and APLs at PEP and OTF, to enable SIPCOM at their June 2012 meeting to evaluate future coverage of the post-2013 IODP Science Plan.

SIPCOM Consensus 1201-18: Regarding the long-term planning of JR (post FY14) it is recognized that, following probable work in the Western Pacific, additional proposal pressure at OTF level is required throughout to facilitate and optimize JR operations and transits, while maximizing scientific return. A recent Indian Ocean Workshop and a planned SW-Pacific workshop may increase the number of drillable targets in these areas. To encourage future proposal pressure in the South Atlantic, Circum-Antarctic, and Indian Ocean, which are possible routes for the JR in the long term, SIPCOM requests that future proposal calls for both drilling projects and workshops specifically solicit submissions concerning these areas.

19. Review of any additional action items, motions, and consensus statements

SIPCOM Consensus 1201-19: SIPCOM expresses its gratitude to Dr. Dhananjai K Pandey and NCAOR, our local hosts for this meeting in Goa, India. The first-class hotel and meeting facilities provided a superb venue for a productive meeting. Meeting participants enjoyed the nightly dinners, which featured a dazzling array of Indian food, drink, and music. Meeting participants will not soon forget their time in Goa.

SIPCOM Consensus 1201-20: SIPCOM wishes to recognize Hans Christian Larsen for his years of dedicated service to scientific ocean drilling, most recently as Vice President of IODP-MI. Hans Christian's steady hand proved critical to the success of IODP as it originated and went through its many changes. Hans Christian travelled the world in support of IODP and his institutional knowledge of the proposals in the system never ceased to amaze. SIPCom wishes Hans Christian the best in his (semi) retirement and thanks him for all of his years of service to IODP.

Science Implementation and Policy Committee

1st Meeting, 19-20 January 2012

Goa, India

Draft Meeting Minutes (ver. 1)

The same allows	40 1 2042	00.00 47.20
Thursday	19 January 2012	09:00-17:30

1. Introduction

1.1. Call to order and opening remarks

SIPCOM Chair Jan De Leeuw called the meeting to order at 9:00.

1.2. Welcome message from the Indian MoES Secretary

Local host Dhananjai Pandey welcomed the meeting participants to Goa, and outlined the logistics for the meeting.

1.3. Introduction of participants

All meeting participants introduced themselves.

1.4. Welcome and meeting logistics

Merged with 1.2

1.5. Rules of engagement (Robert's rules, COI policy, etc.)

De Leeuw referred to the SIPCOM terms of reference, and noted that an SIPCOM decision requires either a consensus or an affirmative vote of at least two-thirds of all members present and eligible to vote. He explained that SIPCOM meetings are conducted according to Robert's Rules of Order, and listed some of the salient points from this set of rules.

1.6.2. Conflict-of-interest policy and statements

De Leeuw reviewed the conflict-of-interest procedures for the meeting. He stated that potential conflicts should be declared. SIPCOM members declared their potential conflicts, and de Leeuw ruled the following.

Declarant	Conflict with:
-----------	----------------

Becker	Workshop discussion (helped a proponent)
Escartin	Proposal 758-Full
Murray	Expedition346 (Asian Monsoon)
Eguchi	Med. Sea workshop proposal

1.6. Meeting agenda approval

De Leeuw asked if there were any changes to the agenda. No changes were suggested.

SIPCOM Consensus 1201-01: SIPCOM approves the agenda for its 1st meeting on 19-20 January in Goa, India.

------ SIPCOM, IODP-MI, and IWG+ Joint Session -----

(FGB= Facility Governing Board)

6. SIPCOM Discussion on reports

6.1 Framework of post 2013 program, and the role/structure of SAS

De Leeuw explained the background of the "New Framework" document. The document was created based on the IWG+ discussions at the last AGU fall meeting and discussions with representatives of NSF, MEXT and ECORD just before this SIPCOM meeting. He noted that the new framework is important for SIPCOM in terms that it would influence on how SIPCOM operates until the end of the current program.

--- IODP Program Management ---

De Leeuw noted that the IODP Forum will be the face of the program, and the chair should be a well-recognized active scientist. Keir Becker commented that whether the representative of the Forum is an active research scientist or someone from a funding agency was still open, and it's up to the agencies or the Forum to decide. De Leeuw replied that SIPCOM can still suggest, because SIPCOM is in charge of crafting the Forum's terms of

reference. He indicated that the Forum membership is probably a mixture of active research scientists and representatives from the funding agencies and other organizations like ICDP or PAGES. Becker asked who would make sure that there are some good representations of active scientists. Tom Janecek replied that it was under discussion by IWG+ and that SIPCOM could address this issue when they generate a Terms of Reference for the forum.

Robert Dunbar noted that SIPCOM should state in the terms of reference that active researchers should dominate the Forum, and he questioned if EXCOM of the Forum is needed.

Ashok Singhvi noted that the Forum seems just an advisory group, and asked if they have no executive mandate. Janecek responded that the ultimate responsibility of program execution would remain at the FGBs.

Hans Christian Larsen and Rick Murray asked which entity is to approve and host SAS meetings. Janecek confirmed that the support office host the meetings.

Dunbar asked if IO representatives on FGBs would be non-voting members due to their possible conflict of interest. Janecek replied that was not decided yet for the US FGB.

Escartin commented that the FGB structure seemed to represent a triplication rather than a simplification. Camoin replied that the new SAS system with only one proposal evaluation panel represents a simplification.

Murray asked if the Forum is a part of SAS or a part of management. Janecek replied that the Forum is independent from SAS or the management. The Forum is a body to provide large overarching monitoring and advising. But ultimately it is the responsibility of the FGBs to execute real tasks, and FGBs are a part of the management. Murray commented that both the Forum and FGBs should have very strong scientific representation.

SIPCOM Consensus 1201-02: Based on discussion of the "Revised Framework" and "Transfer of SIPCOM Duties" documents (dated January 18, 2012), SIPCOM stresses the importance of having very strong representation (e.g., a majority of voting persons) by

scientists from the international community on the IODP Forum and on the individual Facility Governing Boards (FGBs). The chairs of the respective FGBs should each be a member of the international scientific community not affiliated with the funding agencies, national offices, Implementing Organizations, etc.

-----Platform Provider Program Management ------

Ruediger Stein commented that each FGB needs international membership if the program wants to remain truly international. De Leeuw agreed. Janecek replied that US FGB would include international scientific representation and include a subcommittee that works like the current OTF and includes representatives from IOs and the scientific community.

Murray asked if NSF funds the support office. Janecek replied that the funds would come from all members that participate in the US FGB to pay JR operations.

Stein suggested that US FGB has a chair selected from the scientific community like Japanese FGB. Janecek replied that the roles of US and Japanese FGB chairs are different. NSF will act more in the sense of a meeting facilitator and that the actual Chair would be an an active leading member of the drilling community. He indicated that the Framework wording would be changed to reflect this.

Becker pointed out that the framework document showed that the membership of European FGB doesn't include IOs and liaisons from major entities as members. Camoin replied that it would be determined soon.

Lisa Tauxe asked why the current curation system will continue into the next program. Janecek replied because the present system works well. The funding agencies have solved many problems to bring the system up to the level expected by the scientific community.

Murray asked if the Forum monitors the data archive and publications. Janecek replied that it's ultimately the responsibility of the FGBs, but all the entities are involved.

---- Program Exchange -----

5

Janecek explained that the "bilateral relationship" mentioned in the framework document means that JR FGB would offer berths on the JR to countries/consortia that provide drilling platforms in exchange for US FGB berths on their platforms . Singhvi was concerned that it could compromise the international character of the program by benefiting only countries having vessels. Janecek replied that the bilateral agreement is not between another country and US, but between another country and US FGB which includes all countries who pay for JR. Murray agreed that it does not affect the international nature of the program.

----- Scientific Advisory Structure -----

Hodaka Kawahata asked who decides which platform would be the best for a proposal. Janecek replied that it's a multi-step process. At the first step, PEP makes its initial recommendations, then each FGB discuss the possibilities and works out which is the best platform to execute the operations.

Stein asked why platform providers use the service panels for the proposals that already passed these panels and PEP assured that they were ready for drilling. Janecek replied that the text could be revised to reflect that the platform provider should consider how effective the current service panel is to their particular needs.

--- JR Planning -----

Stein asked if there is no chance to join the US FGB for someone having less than 1 million USD (say 0.75M) and no options for joining through a consortium. Janecek replied that in such cases the US FGB would act in a flexible way and negotiate a solution.

---- MSP Planning ----

Chris Yeats commented that #27 is redundant because #26 already speaks about access to JR. Camoin agreed. He informed that NSF and ECORD decided to provide direct access to MSPs to each associate member which contributes to JR.

-----Chikyu Planning -----

De Leeuw commented that "Chikyu friend" should be changed to a more appropriate name.

Becker commented that the framework needs a motherhood statement like "SAS recommends the Science Plan on behalf of international science community". Janecek agreed.

Yamamoto asked who evaluates to what extent the drilling activities meet the program scientific goals, if the Forum is only to "monitor". De Leeuw replied that it should be the Forum. Janecek agreed with de Leeuw, and suggested substituting the phrase "monitor and provides recommendations" for the word "monitor".

Janecek also suggested adding a statement about an every-a-few-years evaluation of the framework at the end of the framework document. Becker asked who evaluates the framework. Janecek replied that it could be a combination of the Forum, support office and FGBs. Rodey Batiza added that NSF management also needs to evaluate it.

Yeats made the comment that while review would be useful, reconsidering the framework after 2-3 years could cause problems for partners in securing five years program subscription.

SIPCOM Consensus 1201-03: SIPCOM discussed the latest versions of the "Framework International Ocean Discovery Program" and "Transfer of SIPCOM duties to other IODP entities post 2013" as produced by IWG+ on January 18.

A multitude of questions and suggestions were made and are recorded in the SIPCOM meeting minutes to help and advise IWG+ to improve both documents.

6.2 The mandate and tasks of the FY12 and FY13 SAS in planning for post FY13

De Leeuw proposed combining the agenda item 6.2 with 7.3. No objection.

-----Workshop Proposal Evaluation

De Leeuw noted that this task will be conducted by IODP Forum (with assistance from Support Office) and implemented by either Facility Governing Board (FGB) or Support Office (via funding from FGBs).

Tauxe asked how you know which country funds the workshops when you don't know which platform the proposal would go for. Janecek replied that it would be the support office to decide with help of the Forum's recommendation.

Terry Quinn questioned if the Forum is not full of scientific members, how they can evaluate workshops. Murray pointed out the possibility of external review. Larsen commented that external review would be not worthwhile because the funds from IODP are limited to \$30,000. Schuffert suggested that PEP evaluates workshop proposals. Kroon warned that SIPCOM should be careful about the workload on PEP. Schuffert commented that it would be difficult to get useful external reviews because the most knowledgeable external reviewers are not interested in the workshops that are not taking place yet.

----- Monitoring science plan delivery

De Leeuw noted that this task will be conducted by IODP Forum and individual FGBs.

----- Long-term planning and Regional planning

De Leeuw noted that IODP Forum monitors progress and recommends changes to Facility Governing Boards.

Becker commented that FGBs could make a recommendation regarding where proposal pressure needs.

--- Collaboration issues (ICDP, PAGES, OOI, DCO, etc.)

De Leeuw noted that the collaboration with other programs is coordinated by the Forum Chair who goes out to all organizations and to see where and when collaborations are necessary and fruitful.

---- IODP Website

De Leeuw noted that the Support Office will administrate the IODP website with advice and recommendations from IODP Forum and FGBs.

---- General operational performance assessment

De Leeuw noted that JR performance assessment will be done by NSF, Chikyu assessment by JAMSTEC/MEXT, and MSP assessment by ECORD/EMA.

----- Improving transparency at all levels

De Leeuw noted that all IODP entities should always make an effort to improve system transparency. This issue will be a regular discussion item for IODP Forum.

Singhvi pointed out that the Forum's workload is huge enough to need full-time staff. De Leeuw agreed. Janecek emphasized that salary support for the Forum chair, and (if needed), on the spot support, comes from the nation/entity providing the Forum chair. Becker added that the Support Office will provide the bulk support of the Forum and its chair.

----- Overarching educational issues

De Leeuw noted that educational issues should be considered as national activities, with website assistance (i.e. posting of information) provided by the Support Office.

Schuffert pointed out that IODP-MI had a task force dedicated to education and communication, and he asked if there is a mechanism to restart it. Larsen replied that the support office would have to coordinate it in the future. Yeats suggested that international publicity activities should be coordinated by all countries together.

---- Oversight of planning and scoping of BEAM and other major projects.

De Leeuw noted that respective FGB and Platform Provider oversees, and IODP Forum monitors the progress.

Murray questioned the need of the task to oversee such projects within the IODP, and who will identify what project is worthy of IODP effort. De Leeuw replied that it would be the Forum. Becker agreed and commented that it might come under the long-term planning functions, so it should go to the Forum.

----- Monitoring and evaluating engineering development

De Leeuw noted that IOs are responsible for engineering development. Facility Governing Boards monitor and determine the level of interaction between platform providers. He explained that this task was brought up because SASEC had decided that EDP does not continue to the new program.

Tauxe asked who would bring attention to the need for engineering developments. De Leeuw replied that it is IOs under FGB's supervision. Becker informed that each IO will have its own engineering taskforce as SASEC recommended two meetings ago. Azuma commented that IOs will discuss this issue in a future IO meeting and decide on how to create an efficient mechanism. Larsen added that the Forum could send a message about overarching engineering requests. De Leeuw suggested discussing this issue again during the next June meeting.

-----Monitoring and stimulating overarching outreach and PR activities

De Leeuw noted that such tasks will be conducted as national acitivities, and checked by the Forum Chair with website assistance (i.e. posting of information) by Support Office.

De Leeuw commented that the website is already targeted to the science community and the public at large, which is automatically building overarching PR activity with the support office's help.

----- Overseeing Rapid Response Drilling-type activities and their impact on planned expeditions.

De Leeuw noted that Facility Governing Boards and Implementing Organizations oversee these type of activities. The Forum assists in communication to the scientific community.

-----Ethical issues, such as conditions of co-funding by commercial entities

De Leeuw noted that this is an FGB activity with IODP Forum's help in communication to the scientific community. He also reminded SIPCOM members to keep an eye on this issue until the end of the current program, and to alert IODP-MI when appropriate.

------Exploring optimum platform flexibility, e.g. exploring alternatives for corking expeditions by using local/regional research vessels, seabed drilling by local/regional research vessels, etc.

De Leeuw noted that this is FGB/ IO activity with input from PEP and technical panels.

-----Standardization of reporting formats, an important issue now that individual FGBs will become responsible for data collection/archiving, shipboard reports, preliminary reports, etc.

De Leeuw noted that the Framework specifies the goals of common publications, sampling polices, etc., and that individual Facility Governing Boards determine the level of compliance.

Escartin emphasized the need to adhere to a single, common standard on reporting and data collection. De Leeuw stressed that standardization of formats is an important issue because each FGB will be responsible for data collection, archiving, shipboard reports, preliminary reports, etc.

Murray commented that people who want to use samples do not care which ship, or which

FGB, is involved. They need one common portal to lead them to the samples they want. Janecek replied that concept of a common portal will need to be discussed further by IWG+ and the individual FGB's in light of funding constraints. Larsen added that SEDIS was developed to be the tool of choice for single data portal.

Becker commented that policy issues and approval of annual plans are missing from the duty transfer list. Becker suggested adding this issue to the list. De Leeuw agreed.

Becker asked if there will be three different annual plans. Janecek replied that the three annual facility program plans form one overarching annual program plan, but essentially there will be three plans. Murray pointed out that the framework document says that the support office is responsible for preparation of the annual program plan, which sounds as if the annual program plan is the responsibility of the support office.

7. SIPCOM procedural discussion

7.1. Interactions between OTF and SIPCOM, SIPCOM and CMO/funding agencies

De Leeuw explained that the interactions between OTF and SIPCOM are realized mainly by the SIPCOM chair attending OTF meetings and reporting back to SIPCOM. PEP chair can also help here as he or she also attends both the OTF and SIPCOM meetings. The CMO and the funding agencies also attend SIPCOM meetings and interact with SIPCOM.

SIPCOM Consensus 1201-04: Interactions between OTF and SIPCOM are established by the SIPCOM chair attending the OTF meetings and vice versa. The interaction between SIPCOM and CMO/funding agencies is arranged by regular email contact, incidental meetings and through the SIPCOM minutes.

7.2. SIPCOM reporting lines to funding agencies and IODP-MI

Reports from SIPCOM to the funding agencies and CMO are made through SIPCOM meeting minutes, motions, consensuses, and actions.

SIPCOM Consensus 1201-05: SIPCOM reports to funding agencies and IODP-MI through its minutes and by regular contacts of its chair with representatives of these IODP bodies.

7.3. Review of SIPCOM tasks

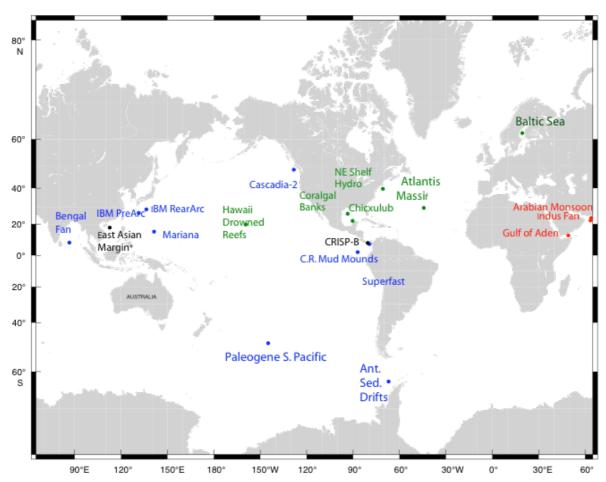
Discussed under the agenda item 6.2.

7.4 Process and timelines for long-term platform scheduling and role of SAS

De Leeuw initiated the discussion about the process and criteria for planning long-term platform scheduling.

Kroon commented that PEP drives the bottom-up system by identifying excellent proposals, but at the moment PEP is not directly involved in long-term scheduling. De Leeuw commented that SIPCOM advises on long-term scheduling. He liked the bottom-up system, but SIPCOM for example needs to know the regional gaps on the proposal map to suggest calls for workshop proposals. Kroon commented that calling for regional workshop proposals means that the program adopts the top-down approach, which is against what PEP does. He was concerned how the two-way system can work. Escartin suggested having workshops of not only one region but many different regions to see what comes out from the community. For a 10-15 year long plan, this approach is not heavily top-down and can work with PEP's bottom-up philosophy. Kroon suggested calling for workshop proposals involving a region where PEP has already identified some excellent proposals. For example, PEP has two excellent proposals in the South Pacific. To develop a few more proposals in that region, SIPCOM can call for South Pacific workshops.

[Proposals in OTF]



•Non-riser, •Riser, •MSP, •Not drillable, security issues

Escartin pointed out that there is a big gap in the Atlantic and in a large area of the Pacific, and suggested calling for workshop proposals in those areas.

Larsen mentioned another driving tool, "Calls for thematic workshop". Considering what scientific objectives are not achieved yet and considering their priorities are also important for long-term planning.

Dunbar asked if this was to discuss the procedure that the Forum and PEP will use in the future when SIPCOM doesn't exist anymore. De Leeuw replied yes. However, Divins noted that USIO needed to start planning for FY14 and 15 now, and cannot wait. SIPCOM therefore should discuss now where the next program will go in the next two years.

Becker asked if the planning should be platform specific, and commented that the planning for JR can be geographically focused, but it's not clear how important the geographic factor is for the other platforms. De Leeuw suggested limiting geographical discussions to JR because MSP can go wherever good science is proposed, and Chikyu already has its long-term schedule.

Becker noted that the Asian monsoon expedition is the start for the next program. Divins commented that the question is where to go after the Asian monsoon expedition. If IODP wants to take the JR around the world, the system needs more proposals for say the Atlantic in order to form a critical mass that can fill in after work in the Indian Ocean. There are several possible paths between the Indian Ocean and the Atlantic. Increased proposal pressure is also needed to define an optimum ship track between major oceans.

Quinn commented that the bottom-up way of running the program has led to an inefficient use of JR over the last few years. If SIPCOM's responsibility is to improve program efficiency, a call for workshop proposals for the South Atlantic or the Southern Ocean makes sense. Larsen pointed out that ODP adopted the top-down approach and had program-planning group to identify the areas that needed more proposals. Murray commented that the top-down and bottom-up approach could work together if SIPCOM sees workshops from a policy point of view and proposals from a grassroots point of view. Quinn commented that the top-down system is better also for proponents not to waste their time writing proposals for an area where the ship won't go. Becker agreed with Quinn, and suggested a call for workshops in the regions that could connect logically with the Indian Ocean.

De Leeuw suggested creating a subcommittee to look at this issue to report at the June meeting. Yeats pointed out that we should take action at this meeting to meet the next May 1st workshop proposal deadline. De Leeuw and Becker agreed.

Kroon commented that he was not comfortable with a call for regional workshop proposals that hints to the community what the program wants them to do. Murray suggested entertaining proposals for workshops geographically focused on any particular region. Kroon agreed.

Larsen pointed out that the program will run out of proposals for an efficient ship track in

1.5-2 years. He urged SIPCOM members to take the top-down approach to refuel the proposal pool very quickly. Tauxe agreed with Larsen, and commented that if the planning group worked well in ODP, it will work well in the next program as well.

De Leeuw suggested using one or two excellent proposals as the seeds of this long-term planning, and start to work top-down by asking for workshops in that particular region. Singhvi agreed with de Leeuw and suggested accepting all (drilling) proposals but welcoming workshop proposals of the area around where the good proposals stand to think what value can be added. Quinn commented that he liked in some sense having stellar proposals as a magnet for other new proposals, however to be most proactive in arranging efficient ship tracks, he suggested sticking to the top-down way.

Kroon commented that the call for the South Atlantic workshop would not be needed at this point because there are already some excellent proposals fitting in the South Pacific and Indian Oceans, which makes a potential ship track driven by science. De Leeuw suggested considering mid- and long-term planning separately, and suggested a call for the South Pacific for the mid-term, and any region for the long-term planning. (IODP-MI followed up with Call for WS proposals reflecting this discussion.)

Larsen noted that SIPCOM also needed to decide what the priority of Chikyu is. De Leeuw commented that the priority for JR is also the priority for Chikyu, although a much longer planning time is needed. Kroon commented that there are a lot of good proposals in the system for Chikyu (e.g. IBM proposals), but if Chikyu politically needs to go out of the Pacific, we don't have any good proposals at the moment.

De Leeuw suggested coming back to this issue next day after giving it some thought overnight.

8. New SAS structure

8.1. Discussion and approval of 'New SAS' Terms of Reference

De Leeuw explained that the current terms of reference were approved at the last SASEC meeting in June 2011, and they don't reflect the changes made since then. He suggested asking IODP-MI to revise the ToRs because the changes are all minor: for example, there is

no PGB anymore.

Yeats commented that SASEC discussed if SIPCOM reports to CMO or PGB(Program Governing Board) or IWG+, and they chose PGB. But the PGB is now gone, so the options should be CMO or the IODP Council. De Leeuw suggested reporting to both of IODP council and IODP-MI. Becker suggested reporting also to IWG+ for making recommendations to future program. De Leeuw agreed.

SIPCOM Action Item 1201-06: SIPCOM agrees on the new SAS Terms of Reference, taking into account that several minor issues and flaws have to be addressed and that the approval of the annual expedition schedule developed by OTF will be handled electronically in early March to meet the deadline of 18 months before the end of the next fiscal year, and that SIPCOM reports to IODP-MI, IODP Council, funding agencies and IWG+. IODP-MI will take care of these adaptations and will send the documents out for final SIPCOM approval.

SIPCOM Action Item 1201-07: SIPCOM, being asked by IWG+ to draft the Terms of Reference for the IODP Forum, forms a subcommittee consisting of Lisa Tauxe, Chris Yeats, Hiroyuki Yamamoto, Rick Murray, Ruediger Stein and Zhifei Liu chaired by Terry Quinn to draft the Terms of Reference for the IODP Forum and to present this draft at the next SIPCOM meeting in June 2012 for discussion and approval.

8.2. Cycle of SAS meetings and proposal submission deadlines

Larsen proposed the meeting cycle with the table below.

Month	Meeting / Submission deadline
1	
2	SCP
3	STP
	EPSP
4	Proposal deadline
5	Workshop deadline
	PEP
6	Data submission deadline
	SIPCOM
7	
8	SCP
9	STP(?)
10	Proposal deadline
11	PEP
12	Data submission deadline

utes for #1 SIPCOM 19-20 January 2012

Divins noted that OTF and SIPCOM need to decide the annual plan in March to secure 18 months lead time for staffing, selecting co-chairs, etc. Divins asked if SIPCOM would be able to electronically approve the schedule prior to the June meeting. De Leeuw replied yes.

Becker asked what the timelines are for the other platforms. Murray commented the planning for other platforms would not be changed dramatically by the timing of the SIPCOM decision. De Leeuw agreed. Azuma commented that OTF by early June works for Chikyu.

Becker pointed out that PEP and SCP meeting cycle is different from what the current ToR mentioned. Larsen replied that PEP and SCP chairs discussed on this at the last PEP meeting, and they decided the meeting cycle above is more efficient.

Schuffert noted that Larsen proposed the two-week earlier deadline of proposal submission at the last SASEC meeting, and asked if that idea was dropped. Larsen replied that he didn't see the need for change from the traditional deadlines so far. But it will change when it's needed.

SIPCOM Consensus 1201-08: SIPCOM agrees on the cycle of SAS meetings and proposal

submission deadlines as shown by Larsen.

Friday 20 January 2012 08:30-17:15

9. IODP-MI program plan

9.1. SIPCOM discussion/approval of revised FY12 APP

De Leeuw informed that SASEC basically approved the FY12 APP at their last meeting in Amsterdam, and now SIPCOM is asked to approve its revised version with some changes including the expenditure for J-FAST expedition.

Kiyoshi Suyehiro thanked SIPCOM for approving the 600K for J-FAST in time. He explained that the new version of the APP also reflects ECORD council's decision to reduce 945K from POC to carry over to FY13 for a MSP expedition. Dunbar asked if the carry-over budget was secured for ECORD, and wondered if the budget could be used for other parties. De Leeuw replied that that is not the case.

SIPCOM Consensus 1201-09: SIPCOM discussed the updates of the FY12 APP budget regarding the additional costs for technical support for the J-FAST expedition and the 945kUSD reduction withdrawn by ECORD to be carried over to FY13 and approved these adaptations, thereby approving the FY12 APP.

9.2. Discussion of budget planning

De Leeuw suggested forming a subcommittee to look into the FY13 budget when the budget information comes in March-April and report at the SIPCOM June meeting. No one opposed.

Becker pointed out that there have not been firm financial numbers in June for the past three years, so he anticipated that there won't be a final budget to be presented at the next June meeting, and that SIPCOM will probably end up having a conceptual approval.

De Leeuw commented that it has been very difficult for Suyehiro and the SASEC subcommittee to figure out how the expenditures of IODP-MI were positioned within the whole financial structure, and he suggested this time looking only at MI's expenditure, not trying to position it in the overall financial figure.

SIPCOM Action Item 1201-10: SIPCOM forms a subcommittee to review the budget planning of IODP-MI for FY13 chaired by Keir Becker, seconded by Javier Escartin and Yasufumi Iryu to report at the SIPCOM meeting in June.

10. PEP report

10.1. December 2011 meeting report

PEP chair Dick Kroon provided PEP report.

---- PEP ToR

Kroon reviewed PEP's terms of reference and noted the following roles of PEP.

- 1. PEP evaluates all proposals in the context of the themes of the new science plan
- 2. PEP selects the best proposals and forwards them to SIPCOM and OTF
- 3. PEP stimulates proposal pressure in certain scientific areas as needed

---- Review procedure

The proposals were reviewed along the following procedure.

- 1. PEP evaluates pre-proposals, identifies those ready for development into a full proposal (one revision only!), nurturing stage, MDP, etc.
- 2. PEP evaluates full proposals, identifies those ready for external review (note, only one revision possible if not ready for external review!).
- 3. PEP rates full proposals, taking into account reviewers' comments and reply letter, forwarding those rated 'good' and 'excellent' to OTF and SIPCOM (note, in the post 2013 system directly to Platform providers)

---- PEP sub-chairs

Kroon introduced 4 sub-chairs.

Tim Bralower - Climate and Ocean Change

Yoshinori Takano - Biosphere Frontiers

Richard Arculus - Earth Connections

Michi Strasser - Earth in Motion

These sub-chairs lead the four thematic sub-panels aligned with the new Science Plan

-----Design of discussions

Kroon explained the roles of watchdogs, chair and sub-chairs in discussions.

- Watchdog 1 presents proposal (plenary or in break-out groups), comments on strengths and weaknesses of the proposal
- Watchdog 2 writes comments to proponents
- Watchdog 3 adds to the discussion

Chair or sub-chair asks for additional comments from the other PEP members, discussion follows. Chair or sub-chair makes a proposition for the fate of the proposal. If there is no consensus, the panel members vote.

----- Rating system and criteria

[Evaluation criteria]

- Are the scientific questions/hypotheses being addressed exciting and of sufficiently wide interest to justify the requested resources?
- Will the proposal significantly advance one or more goals of the Science Plan?
- Would the proposal engage new communities or other science programs into the drilling program?
- To what degree does the integrated experimental design of site characterization, drilling, sampling, measurements, and downhole experiments constitute a compelling and feasible scientific proposal?

10.2. Highly rated proposals; overview

----- Review result

Proposal	Version	Short Title	Disposition
#			
567	Full4	South Pacific Paleogene	Forward to OTF
589	Full3	Gulf of Mexico Overpressures	Submit revised full
615	Full2	NW Pacific Coral Reefs	Deactivate
625	Full	Pleistocene Pacific Southern Ocean	Deactivate
635	Full3	Hydrate Ridge Observatory	Submit revised full
640	Full	Godzilla Mullion	Deactivate
658	Full2	North Atlantic Volcanism and Paleoclimate	Submit revised full
659	Full	Newfoundland Rifted Margin	Submit revised full
667	Full	NW Australian Shelf Eustasy	Submit revised full
680	Full	Bering Strait Climate Change	Submit revised full *2
692	Full	Flemish Cap Rifted Margin	Submit revised full
696	Full3	Izu-Bonin-Mariana Deep Forearc Crust	Submit revised full
698	Full3	Izu-Bonin-Mariana Arc Middle Crust	Forward to OTF
702	Full	Southern African Climates	Submit revised full
703	Full	Costa Rica SeisCORK	Submit revised full
704	Full2	Sumatra Seismogenic Zone	Submit revised full
707	Full	Kanto Asperity CDP	Submit revised full
708	Pre2	Central Arctic Paleoceanography	Submit full
729	Pre	Western Lord Howe Rise Extension	Deactivate
730	Pre2	Sabine Bank Sea Level	Submit full
731	Pre	Papua New Guinea Orogenic Lifecycle	Deactivate
735	СРР	South China Sea Tectonic Evolution	Submit revised full
740	Full	Galicia Margin Rift History	Submit revised full
747	Full	North Atlantic Paleogene Climate	Submit revised full
749	Pre	Gulf of California Rifting & Microbiology	Submit full
750	Pre	Beringia Sea Level History	Submit full *2

751	Full	West Antarctic Ice Sheet Climate	Submit revised full*1
753	Pre2	Beaufort Sea Paleoceanography	Submit full
754	Full2	Norwegian Sea Silica Diagenesis	Submit revised full
756	Pre	Arctic Ocean Exit Gateway	Submit full
759	Pre	EPR Fast-Spread Crust	Deactivate
760	Pre	SW Australia Margin Cretaceous	Submit full
		Climate	
761	Pre	South Atlantic Bight Hydrogeology	Submit full
770	Full2	Kanto Asperity Project:	Submit revised full
		Observatories	
771	Full	Iberian Margin Paleoclimate 2	Submit revised full
772	APL2	North Atlantic Crustal Architecture	Submit revised full
776	Full	Arabian Sea Paleoclimate	Deactivate
777	APL2	Okinawa Trough Quaternary	Submit revised APL
		Paleoceanography	
778	Full2	Tanzania Margin Paleoclimate	Send to external review
		Transect	
780	Pre	Rodriguez Triple Junction	Deactivate
		Microbiology	
781	MDP	Hikurangi subduction margin	Send to External review
781A	Full	Hikurangi: observatory	Send to External review
782	Pre	Kanto Asperity Project: Plate	Submit full
		Boundary Deformation	
784	Full	Amundsen Sea Ice Sheet history	Submit revised full *1
788	Pre	Shiva Impact Structure	Deactivate
789	Pre	Arctic Slope Stability	Deactivate
790	Pre	Indian Ocean Neogene monsoon	Deactivate
791	APL	Continental Margin Methane Cycling	Submit revised APL

^{*1 –} with recommendation for a joint Antarctic Ice Sheet workshop

 $^{^{*2}-}$ with recommendation for a joint Bering Sea workshop

Kroon introduced the two proposals rated as excellent at the PEP meeting.

567-Full4 South Pacific Paleogene

The proposal calls for double/triple APC coring at 9 sites in a latitudinal transect (Eocene latitudes 55-70°S) in the South Pacific. It addresses high priority objectives of the new IODP science plan regarding greenhouse climate dynamics. The primary objectives are to constrain the CCD history of the South Pacific, particularly the late Paleocene-early Eocene, Southern ocean ice-rafting, and the evolution of ocean temperatures and the ACC in the Pacific. Site characterization is complete. Previous concerns about the presence of carbonate sediment at proposed sites have been adequately addressed by the proponents, as well as by Exp 329 coring at Site U1370.

698-Full3 IZU-Bonin-Mariana Arc Middle Crust

This proposal contains excellent science, addressing a fundamental problem in Earth Sciences, that of the generation of the continental crust. The relationship between the continental crust and its putative birthplace in intra-oceanic arcs has been a focal point for studies of crustal genesis, and is a key component of the new science plan. This project will obtain core from mid-crustal depths in the Izu-Bonin-Mariana arc (IBM), characterise the rocks, understand their petrogenesis and link their seismic properties to those observed in wide-angle surveys of the IBM, other arcs, and the continental crust. The target of the project can only be met by deep drilling, and requires the ambitious strategy outlined in the proposal, which entails almost 1 year of drilling with a riser vessel. The high impact and deep target of this proposal could make it a flagship opportunity for the medium-term future of scientific ocean drilling.

----- Worries

Kroon expressed his concerns about the following three points.

- Impact of one revision of full proposals
- -Impact of deactivation of proposals, potential misunderstanding that PEP rejected proponent's idea and does not want them to come back.
- Low number of proposals as the result of many brutal deactivations and misunderstanding in proponents, although PEP encourage them to re-submit in review form.

Yamamoto asked how PEP stimulates proposal pressure, and pointed out that it's the Forum's task. Kroon replied that PEP stimulates proposal pressure by identifying areas for workshops, combining some proposals to develop them into a better proposal, and identifying the science plan theme that lacks of proposals and report to SIPCOM or the Forum. De Leeuw noted that PEP and SIPCOM/Forum need to communicate in timely manner for effective stimulation.

Camoin asked if PEP also advises on the number of drilling sites based on how many sites PEP thinks the proponents need to achieve their scientific objectives. Kroon replied that PEP does this with input from IOs, and if the proposal is too ambitious with too many sites, PEP encourages the proponents to re-submit a new proposal with a more realistic plan. Tauxe questioned that approach. She commented that planning a whole leg is not the proponent's job, and PEP should not reject proposals based on their leg plan. Becker commented that there was an announcement to the community that proponents do not need to propose a leg plan that exactly fits in the leg time of two months, because IOs arrange the total length by combining short segments into single leg. Robert Gatliff asked PEP to evaluate only science concerning MSP proposals and not to look at leg time, because MSP legs are all different.

Dunbar expressed his concerns that PEP might be stuck in the individual mindset of what can be done in a 60-day long leg. He suggested discussing with PEP how different kinds of proposals are fostered. Kroon replied that PEP would consider this.

Larsen pointed out that forming a Detailed Planning Group could be the solution for reconstruction of proposals. The members of a past DPG were about 15 people, 50% proponents and 50% non-proponents, and non-proponents are the key people who don't push their own science. Kroon agreed that having a DPG is a good idea. Schuffert pointed out that DPGs do not exist any more in the current new SAS. Tauxe commented that a small workshop could also function in the same way as a DPG. Becker pointed out that DPGs sometimes continue for up to three years, not like workshops. Tauxe agreed that a DPG works better in this case.

SIPCOM Consensus 1201-11: SIPCOM recommends that PEP has the authority to form

limited-term, small membership Detailed Planning Groups (DPG), as needed, to foster the formation of feasible drilling leg proposals from one or more existing proposals.

11. IO Reports on End of Program planning:

11.1 Status of Chikyu

Nobu Eguchi provided Chikyu and J-FAST report.

[Chikyu activities]

					2011						-	2012		
	4	1 5	6	7	8	9	10	11	12	1	2	3	4	5
Dock work				(4/11	- 7/3)									
portcall				[] (7	/3 - 7/9)								
Transit					(7/1) - 8/1								
lmigration					[8/1	- 8/5)								
Hole-1							(8/6-	10/1)						
Hole-2									(10/1	11/9)				
Hole-3									(1	1/9-1	2/16)			
Stand-by (off Sri Lanka)									<u> </u>	(12/1	- 12/2	9)		
Transit											(12/29	- 1/25)	
Non-IODP													(2/6-3	3/21)
Exp. 343												!		W . W . W
													(4/1 - !	5/24)

[Successful Chikyu operation off Sri Lanka]

-Cairn Lanka Ltd., a wholly owned subsidiary of Cairn India Ltd., has made a gas discovery in the CLPL-Dorado-91H/1z, an exploratory well drilled in 1,354 meters of water in block SL 2007-01-001, offshore Sri Lanka.

-The well, drilled in the Mannar Basin, encountered a 25-meter gross hydrocarbon column in a sandstone reservoir between the depths of 3,041.8 and 3,068.7. Measurements while

drilling data indicate the zone is predominantly gas bearing and also carries some liquid hydrocarbon potential. Cairn Lanka is the operator and holds 100% of the participating interest in the block. Further drilling is needed to establish commercial potential.

- The company notes that the CLPL-Dorado-91H/1z is the first well to be drilled in Sri Lanka in 30 years and the first to discover hydrocarbons in the country.

[4P Azimuth Thruster repair work]

-Timing

28 May – 2 July 2012 (including sea trial and transit to Shimizu port)

-Dock

SKK Sasebo dock

- -Summary of repair work
 - 1. Platform installation
 - 2. Thruster installation
 - 3. Riser tensioner test
 - 4. Install real-time riser monitoring system

11.2 J-FAST Report

[Expedition 343 J-FAST summary]

- Schedule: 54 days (1 April~24 May including transit)
- Main Goal of JFAST Project
- 1. Understand the level of stress (friction) whichs control the large slip (20 50 m) on the shallow portion of the megathrust.
 - 2. Temperature Measurements to Estimate Friction
 - 3. Fault Zone Sampling for Physical Properties
- Water depth; Approximately 7,000 m
- Target Depth : 900 1,000 mbsf
- Co-chiefs; Fred Chester (TAMU) and Jim Mori (Kyoto U.)
- EPM; Nobu Eguchi (back-up EPM; Sean Toczko)

- Science party; 27 scientists (Japan, US, ECORD, ANZIC, India, China)

11.3 Budget status and schedule options for JR operations

Divins provided the report on JR budget status and schedule.

[FY12 JR Operations Schedule]

			TOTAL DAYS	
EXPEDITION	EXP#	DATES	(port/at sea)	CO-CHIEF
				K. Edwards
Mid-Atlantic Mbio	336	16 Sep - 17 Nov '11	62 (2/60)	W. Bach
Mediterranean				J. Hernandez-Molina
Outflow	339	17 Nov'11 - 17 Jan '12	61 (5/56)	D. Stow
Tie-Up/Dry Dock		17 Jan - 15 Feb '12		
Atlantis Massif				
(779 APL)	340T	15 Feb - 3 Mar '12	17 (0/17)	D. Blackman
				A. Le Friant
Lesser Antilles	340	3 Mar - 17 April '12	45 (3/42)	O. Ishizuka
Tie-Up		17 April - 2 Jun '12		
Newfoundland				R. Norris
Sediment Drifts	342	2 Jun - 1 Aug '12	60 (2/58)	P. Wilson
Tie-Up		1 Aug - 23 Oct '12		

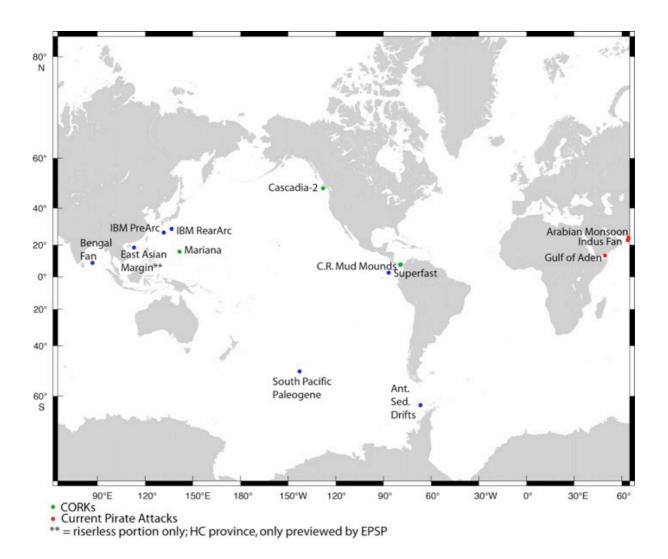
[FY13 JR Operations Schedule]

			TOTAL DAYS	
EXPEDITION	EXP#	DATES	(port/at sea)	CO-CHIEF

Tie-Up		1 Aug-23 Oct '12		
Costa Rica				
Seismogenesis Project2				R. Harris
(CRISP)	344	23 Oct-11 Dec '12	49 (2/47)	A. Sakaguchi
Hess Deep Plutonic				K. Gillis
Crust	345	11 Dec-10 Feb '13	61 (5/56)	J. Snow
Tie-Up		10 Feb-29 May '13		
Southern Alaska				
Margin Tectonics				
Climate &				J. Jaeger
Sedimentation	341	29 May-29 July '13	61 (3/58)	S. Gulick
Transit	346T	29 July-20 Aug '13	21 (4/17)	
				R. Tada
Asian Monsoon	346	20 Aug-28 Sep '13	39 (1/38)	TBD

[What's left at OTF]

(The following figure shows the locations of the drilling sites proposed by the unscheduled OTF proposals as of December 2012.)



Divins noted that there are not many options for JR's future path because JR cannot go into the dangerous areas (red dots) and probably also into CORK areas because they are too expensive (green dots.).

[FY14 and Beyond]

- •If on the same planning cycle as we were previously (not scheduling 18 months in advance as planned in the TOR), CORKs are out since USIO has to budget in FY13 for FY14 CORKs (even if we could afford them).
- •This leaves the following in the W. Pacific/E Indian
 - IBM-Pre-Arc (Arculus): challenging operations (water depth + penetration;
- 4720+1450 m): need ideal weather window; purchase casing hangers in FY13
- IBM-Rear Arc (Tamura): 1900 m deep hole (1200 m highest priority), purchase casing hangars in FY13
 - Bengal Fan

-East Asian Margin: phase 1 nonriser drilling only

Divins stressed that it is critical that PEP moves proposals to SIPCOM/OTF for FY14 and 15, and USIO needs to know FY14 schedule when they are developing the APP to purchase long lead items (e.g., casing hangers) in FY13.

[Precruise schedule]

	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
Expedition Planning															
PEP															
SIPCOM-I															
SIPCOM-2/OTF (Schedule)						Should be here			Usually here						
FY13 APP															
Invite FY14 Co-chiefs							Should	be here			ls to be rlier				
Staffing Solicitation 1st FY14 exp.									Should be	e here		Needs ear	to be lier		

Gatliff asked if USIO considered asking the Navy to protect the expeditions in dangerous areas (e.g. Gulf of Aden). Divins replied that USIO took that approach once before, but recently has not been very energetic about it.

Larsen asked if USIO could consider getting external funding for CORK instrumentation packages, and if it can help to get CORK projects back in the future plan. Divins replied that it would not be easy because the external funding could not cover the all of the CORK projects. Larsen commented that this information is very important because CORKs are one of the selling points of the new science plan.

11.4 Proposed Chikyu schedule through end of program

Eguchi introduced the Chikyu schedule to the end of the program.

				2	201	2									20	13					
USFY		FY12						FY13 FY								Y1	4				
JPFY		JF					Y12	/12							JFY13						
Month	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
IODP	34	3			337			33	8								3	XX			
Non IODP		L																			

Quinn asked if the end of 3xx expedition means the end of NanTroSEIZE. Eguchi replied no, and explained that it needs three years in total, which means it ends in 2014, although budgetary constrains could push it into 2015.

Larsen asked if this schedule includes full implementation. Eguchi replied this schedule does not include observatory installation, which will be discussed at the PMT meeting in the end of February.

11.5 MSP operations to end of program

David McInroy provided MSP report

[Future MSPs]

FY12			
	Late Pleistocene Coralgal		Forwarded March 2010, SPC ranked #10
581	Banks	OTF	Drilling trial part funded by ECORD, Feb/March
	(drilling trial)		2012
FY13,	next MSP		
673	Baltic Sea Basin	OTE	Forwarded March 2011, SPC ranked #2
672	Paleoenvironment	OTF	Spring/Summer 2013

548	Chicxulub K-T Impact Crater	OTF	Forwarded March 2010, SPC ranked #4
340	emekalab K 1 impact crater	011	First MSP of the new program, 2014?
758	Atlantis Massif Seafloor	OTF	Forwarded March 2011, SPC ranked #1
	Processes	OIF	2014-2015? Depends on seabed drill readiness
FY16 a	nd beyond		
716	Hawaiian Drowned Reefs	OTF	Forwarded March 2009, SPC ranked #6
581	Late Pleistocene Coralgal	OTF	Forwarded March 2010, SDC ranked #10
	Banks	OIF	Forwarded March 2010, SPC ranked #10
627	New England Shelf	OTF	Forwarded March 2009, SPC ranked #4
637	Hydrogeology	UIF	In holding bin with technology and cost issues

Plus new MSP proposals, possibly in the Arctic

[Expedition 374 Baltic Sea: Planning]

- Issue notice of interest for platform February/March 2012.
- Expected to start Spring/Summer 2013, duration 60 days.
- In discussion with provider who can supply one platform to tackle all sites
- Co-chiefs accepted:
 - -- Thomas Andrén, Södertörn University, ECORD/Sweden.
 - -- Bo Barker Jørgensen, Aarhus University, ECORD/Denmark.
- •Currently planning the expedition science program, which includes a significant microbiology element.
- •No major issues regarding permitting:
 - -- Swedish Coast Guard: Swedish Exclusive Economic Zone Act.
 - -- Swedish Continental Shelf Act, Ministry of Enterprise, Energy and Communications.
 - -- Danish Ministry of Climate and Energy.

[Proposal 581 Coralgal Banks Feasibility test]

- •Offer from Fugro of 24 hours of geotechnical ship time for \$75k.
- •Test coring methods and tools to recover relict coralgal reef material.
- •Technical test, no Science Party or minimum measurements.
- •Currently in discussion with Fugro regarding details and contract.

- •Current opportunity window from mid-February to early March 2012.
- •Permit already granted by the Bureau of Ocean Energy Management, Regulation and Enforcement.
- •Possible bonus: recovered material may answer many of the questions in the original proposal.

[Proposal 548, Chicxulub Impact Crater]

Permitting

- Project brief and IODP/ECORD letter of project approval sent to Mexican authorities
- Positively received, face-to-face meetings not required
- ESO has been asked to submit permit applications when ready
- Have contact at British Embassy, Mexico City, to handle applications
- To apply, we need to know the hazard survey & drilling companies

Hazard survey

- ESO has solicited potential companies/institutes to do hazard survey
- Due to the value of the survey, we are required to go to open tender

Next steps

- Confirmation of FY14 funds: 'Left over' funds from Baltic Expedition plus ECORD FY14 member contributions, minus JR contribution
- If FY14 Chicxulub drilling is affordable, issue notice(s) of interest for hazard survey work and platform
 - Apply for permits once the preferred contractors are known
 - Aim for hazard survey in 2013

[ECORD Arctic Ambitions]

-- AAPG Polar Petroleum Potential (3P) Exhibition and Conference Halifax, Canada, 30 Aug – 2 Sep, 2011

"The First Deep Coring in the Central Arctic Ocean: The Drilling of the Lomonosov Ridge by the IODP".

-- Finding Petroleum: Exploring the Arctic conference Geological Society, London, 11 Oct, 2011

-- Magellan workshop: "Overcoming barriers to Arctic Ocean Drilling: the site survey Challenge"

Rungstedgård, Copenhagen, Denmark, 1 – 3 Nov, 2011

Dunbar wondered if the Coralgal Banks activities could fail to achieve their scientific goal because of uncertainties in how much corals extend into the matrix and how much they can recover it.

Stein commented that there are no icebergs in Chukchi Sea, so JR should be available around there.

Larsen commented that the Chicxulub is currently constrained in FY14, and asked if they have more flexibility for it. Gatliff replied that ESO cannot change it until ECORD has started to get an MOU organized. Azuma commented that Chicxulub is important in terms of the collaboration with ICDP. McInroy informed that this proposal will be re-activated in ICDP as soon as the expedition is set in FY14 or FY15.

11.6 SIPCOM directives, Long-range Plan to end of program

De Leeuw asked the members if they support the FY13 schedules presented by IOs. Becker asked if alternatives were discussed at the OTF. Divins replied that the alternatives were presented to SPC in August, and they selected the schedule at that time. Now SIPCOM should approve the program plan together with the schedule.

SIPCOM Motion 1201-12: SIPCOM recognizes that proposal pressure is critical to the successful implementation of the science plan, including efficient scheduling of the drilling platforms, both in the near and long term. To enhance long-term planning, SIPCOM recommends that IODP-MI have a call for regional workshop proposals. The goal of these

regional workshops is to facilitate and encourage the scientific community to develop high

quality drilling proposals from regions of the world's oceans that presently are

under-represented in the proposal pool. SIPCOM seeks to augment the workshop

proposal mechanism as a means to enlarge the proposal pool so that ship track scenarios

can be developed that maximize scientific drilling and minimize transit times.

Becker moved, Escartin seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe,

Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

12. Workshops in FY2012-13

Workshop title: Observatories in Scientific Ocean Drilling

<u>Lead Proponent:</u> Heinrich Villinger

Objectives: Bring scientists together to the brainstorming about the role of observatories,

and engage observatory scientists for post-2013 drilling and for the work that will be

involved as new borehole observatories are designed, constructed, and deployed.

Requested funding: \$24000 to allow 15 foreign participants to attend the workshop in

Houston, Texas.

Remarks: \$40000 request was submitted to USSSP, which is now under evaluation.

Watchdog: Robert Dunbar

Watchdog's comment:

We have gaps in understanding the engineering capabilities for IODP platforms, how to get

observatories funded, data collections, data management, data archiving and distribution. If

this workshop fills the gaps and produces a good report, it is well worth \$24000, although

the plan and objectives could be more specific.

Singhvi asked which category the workshop falls in. Dunbar replied this is a thematic

workshop.

Draft meeting minutes for #1 SIPCOM 19-20 January 2012

Dunbar suggested recommending funding this workshop on the condition that the

recommendation is valid only if the funding from USSSP is secured, otherwise we provide

them with travel fees when they have no workshop they travel to.

Yeats expressed his concern about spending budget for this workshop with such a vague

goal. Dunbar replied that he shared Yeats's concern, but he would still recommend this

workshop. Quinn and De Leeuw agreed with Dunbar. De Leeuw indicated that this proposal

would help to connect with other observatory programs (Neptune, OOI, DONET, ESONET,

GMES).

SIPCOM Motion 1201-13: SIPCOM recommends funding a workshop on "Observatories in

Scientific Ocean Drilling" with funding to be used explicitly for foreign participant travel (as

requested). SIPCOM notes that a co-funding proposal is currently pending with USSSP.

Dunbar moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe,

Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

Workshop title: Mediterranean Sea Drilling Project

Lead Proponent: Marina Rabineau

Objectives:

•Clarify the scientific objectives and evaluate the hypotheses that will be addressed.

Evaluate and justify the drilling site location to accomplish the proposal scientific

objectives.

Develop a clear strategy for implementation (e.g. time estimates for drilling and logging,

technical improvement for better halite recovery)

Requested funding: \$30000

Remarks: 7 km RISER borehole in 2400 m of water

Workshop Proposal History:

- October, 2010 ESF Magellan Workshop
- focused mainly on consolidation of scientific objectives of Mediterranean Sea drilling
- little discussion of implementation issues
- workshop report published on ECORD website (April 2011)
- •SASEC reviewed and declined WP in January, 2011 (Miami)
- Needed to assess outcomes of the October workshop before funding another workshop (no workshop report)
 - •SASEC reviewed and declined WP in June 2011 (Amsterdam)
- -SASEC stated "concern about the technological feasibility of the GOLD drilling as well as the lack of discussion and experts addressing this aspect in the proposed workshop."

Watchdog: Terry Quinn

Watchdog's comment:

- Key Strengths
- -MSC represents a significant and important event in the tectono-climate history of the Cenozoic
- Terrestrial record (and previously drilled marine record) contains large gaps due to the presence of erosional unconformity
 - Key Weaknesses
 - -New WP proposal largely unchanged from previous submission
 - -Technological challenges remain unaddressed
- -List 6 industry representatives as members of steering committee, but evidence of any input from them is missing
- Outstanding Question
- -Cost/benefit ratio? Are the scientific objectives of this proposal worthy of the great cost associated with drilling a 7 km riser hole?
- Recommendation
 - -Decline this workshop proposal
- -PIs should be strongly encouraged to seriously address technological challenges associated with the planned drilling.
- -A small meeting/workshop between a few of the PIs and a suite of drilling engineers might be an appropriate pathway forward

Draft meeting minutes for #1 SIPCOM 19-20 January 2012

De Leeuw commented that this proposal seemed not much revised from the previous

version of this proposal that SASEC reviewed and declined at their last June meeting.

Dunbar asked about the informal conversation between SASEC and the proponents after

the SASEC June meeting. De Leeuw replied that he as the watchdog told them to focus on

the microbial environment that is nicely sealed off in non-halite layers in between the halite

above and beneath, and to involve more people with engineering expertise and more senior

type scientists, and then write a new pre-proposal. But the present proposal did not reflect

his advice at all. Quinn agreed with de Leeuw.

Becker asked if they have an active proposal in the system. Larsen replied no. Becker

commented that he would have supported this workshop if they have an active

pre-proposal. He agreed Quinn's recommendation.

SIPCOM Motion 1201-14: SIPCOM declines the request for funding a workshop on the

Mediterranean Sea Drilling Project. SIPCOM continues to be concerned that the

proponents have yet to address the considerable technological challenges associated with

drilling a 7 km riser borehole in 2400 m of water through a sedimentary sequence that

includes ~3 km of evaporites.

Quinn moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe,

Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The Motion passed.

Workshop title: Southwest Pacific Ocean IODP

Lead Proponent: Neville Exon

Objectives:

-Identify the leading scientific ideas, hypotheses and questions for this region that are

pressing and require ocean drilling.

Draft meeting minutes for #1 SIPCOM 19-20 January 2012

- Review the latest work in the region, briefly outline possible future IODP expeditions,

coordinate activities associated with scheduled and proposed geoscience research cruises in

the area, and set up working groups to develop proposals for post-2013 IODP expeditions

- Identify synergies between the active and deactivated South Pacific proposals, improve

interaction, discuss additional opportunities and establish the robust international alliance.

Requested funding: \$30000

Watchdog: Kawahata

Watchdog's comment: Recommend full funding

Kroon commented that the South Pacific becomes very important in the next couple of

years for the proposed pressure that the long-term plan needs. He suggested expanding this

workshop to include the IBM workshop. De Leeuw replied that that is a possibility.

Murray indicated that it could be problematic since there was already a fund allocated to a

similar workshop (Indian Ocean Drilling Workshop, Goa, India, Oct 2011), but he agreed on

recommending this workshop because this is a very important area to steer the program. De

Leeuw agreed, and commented that connections and collaborations between the major

institutes in the regions are also appealing.

SIPCOM Motion 1201-15: SIPCOM has reviewed the IODP Workshop Proposal of

"Southwest Pacific Ocean" and strongly recommends funding for this workshop because this

area is important and this proposal tries to develop the new phase of IODP.

Kawahata moved, Murray seconded, 15 in Favor (Becker, de Leeuw, Dunbar, Escartin,

Hayashida, Iryu, Ishiwatari, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe,

Yamamoto), 0 opposed, 0 abstained, 3 non-voting (Kim, Sharma, Yeats).

The motion passed.

========

Workshop title: ULTRA-DEEP DRILLING INTO ARC CRUST: genesis of continental

crust in volcanic arcs

Lead Proponent: Shuichi Kodaira

Objectives: Bring together geophysicists, geologists, geochemists and petrologists interested

in the nature of arc crust, how it is modified in collision zones and preserved in continental

crust and to discuss the best place for ultra deep drilling into arc crust (Izu-Bonin-Mariana,

IBM).

Requested funding: \$30000

<u>Watchdog:</u> Paul Wilson (absentee), Jan de Leeuw (deputy presenter)

Watchdog's comment:

• A suitably organized workshop with involvement of key people (e.g., Kelemen) well-placed

to comment on the relative merits of various deep drilling projects (e.g., IBM, MoHole)

might help resolve some of these major issues

• The WS proposal would appear to incorporate some nice scientific themes and questions.

SIPCom would benefit from expert evaluation of the scope of topics to be discussed and the

list of possible speakers. Preferably this input might be sought from someone with

experience of IBM proposal nurture (e.g., an existing or former watchdog from the science

evaluation panel).

De Leeuw asked Larsen how much is available for new workshops. Larsen replied that MI

has \$200K for FY12. However, since some workshops budgeted for FY11 were actually held

in early FY12, there is still uncertainness until MI secures the carry forward budget to FY12.

Becker commented that he didn't see if their workshop is to develop new proposals or to do

another endorsement of the existing proposals.

Kroon noted that the proponents have their proposal in the system and PEP evaluated it as

"excellent" and "ready to drill", therefore he questioned the necessity of having this

workshop at this stage. Larsen commented that it might not be a bad idea to have further

information from the workshop before implementing the expedition. Kroon commented

that if the workshop helps to answer unsolved issues, he could support it, but he did not like

to delay the implementation too much. Quinn commented that if the unsolved issue is

technological feasibility, a DPG could look into it with no need for using MI's budget. Becker

agreed with Kroon and Quinn. He commented that what they need now is not a thematic but technological workshop. Azuma offered to coordinate a technology session in the workshop. Murray appreciate Azuma's offer, but he suggested evaluating only what the proponents proposed, because Azuma's offer was not a part of the proposal.

Kroon pointed out that the proponents probably did not know that PEP rated their proposals as "excellent" when they submitted this workshop proposal. He suggested asking them to re-submit a new proposal based on PEP's feedback. Quinn agreed on the resubmission but on the condition that the new proposal focuses on technological challenges and potential partner or colleagues.

SIPCOM Motion 1201-16: SIPCOM declines the request of funding for the "Ultra Deep Drilling Into Arc Crust" workshop proposal and, in light of the overall high scientific status of the closely associated scientific proposal at PEP, further recommends that the proponents consider developing a focused workshop addressing the technical and engineering aspects of the proposed drilling, as well as a technical/engineering risk analysis (e.g., what scientific objectives would be compromised by drilling to less than proposed depths).

Murray moved, Dunbar seconded, 14 in Favor (Becker, de Leeuw, Dunbar, Escartin, Hayashida, Iryu, Kawahata, Kroon, Murray, Quinn, Sharma, Stein, Tauxe, Yamamoto), 0 opposed, 1 abstained (Ishiwatari), 3 non-voting (Kim, Sharma, Yeats). The motion passed.

13. IODP program developments

13.1 New IODP website

Larsen provided an update on renewal of the IODP web site.

IODP-MI is managing the renewal with a selected commercial vendor to:

- 1. Upgrade CMS (Content Management System) to a new open-source CMS
- 2. Increase navigability using information architecture methods
- 3. Improve outreach to target audiences, particularly the general public through re-design (pages/content)
- 4. Implement a stable platform for the IODP.org site that can smoothly transfer to

post-2013 IODP

[Design change concept]

-"clean," "friendly," "professional"

- Provide access to critical community information resources while improving the ability of

IODP.org website to capture the mission of IODP

- Front page will have far fewer links than the current front page.

- Second tier pages provide a landing area for main target audiences

- Quick Links will provide easy access to most commonly accessed resources

[Time lines]

-The project is scheduled for completion in April 2012.

Tauxe asked if the web site will be migrating into a new form gradually, or suddenly switched someday in April. Larsen replied that MI was updating the contents in the existing structure, but at a certain point of time the old system will be cut off with migration of all contents to switch to the new system.

13.2 New Proposal guidelines

De Leeuw commented that the proposal guideline and primer currently on the web were already approved by SASEC, and there was no need to change the text in there. But he suggested combining the workshop guideline with the proposal guideline. Larsen agreed.

Yeats suggested adding an explanation of PEP's rating system to the guideline. Murray agreed with Yeats. Larsen commented that the criteria of PEP evaluation are already included, and that should be enough.

13.3 Program Archive

Larsen reported that the on-going program archive project was for:

- -Easily accessible, permanent archives through a common data portal
- Replicated databases and web-based front-end in Japan, USA, Europe
- Documents and multimedia repositories (CMS archive?)
- Sample materials (i.e., cores/samples) inventories
- Possible library-based digital archive of IODP publications

Tauxe commented that free access to all published papers related to IODP would be helpful to everyone in the community. De Leeuw replied that he agreed but there is nothing SIPCOM can do. Larsen reminded that we have free access to expedition-related publications. Murray commented that it's a great help that USIO scans papers and updates their library. Larsen commented that a digital library is far more than a collection of digital copies. For example, TAMU Library had decided not to host a digital ocean drilling library. Divins confirmed.

14. Scoping of BEAM mantle drilling

Kiyoshi Suyehiro provided BEAM report.

BEAM stands for Borehole into Earth's Mantle. This is not about the actual project but it is about scoping on engineering to drill into the mantle.

The scoping project is funded by the Sloan Foundation for two years and will end in mid-2013. This two year BEAM activity is an intermediate planning step for the eventual goal of the 10 year project. At the end of the term of Sloan Foundation support, the following documents are expected.

- 1. BEAM Science Plan
- 2. Preliminary Technical Implementation Plan
- 3. Public Engagement Plan
- 4. Risk Assessments and Management Plan

One of the important objectives of this activity is to attract the science community and engineers. IODP-MI have been posting advertisements to call people in discussion, and the first meeting during the AGU on December 7th had 40 participants, showing this project filtering into the community.

IODP-MI will have a SWOT (strength/weakness, opportunities/threats) exercise to analyze the risks of the mantle drilling and to brainstorm on management strategy, and eventually come up with a list of recommendations for the next step.

Kroon asked if Suyehiro had some timelines of the mantle drilling. Suyehiro replied that the proponents of the future mantle drilling proposal had a meeting and agreed to submit the proposal for April 1 deadline. Larsen confirmed it and commented that the proponents are a group of 20+ international scientists.

15. Role of SAS in long range planning (post 2013)

De Leeuw suggested a platform-wise discussion about workshops which could be ingredients of the post-2013 program.

----- MSP

Stein, Escartin and Iryu left due to their conflict of interest.

De Leeuw suggested selecting promising proposals and areas for 2016-2017. He noted that the Arctic must be the highest priority area because of the excellent Arctic proposals in the system. Kroon commented that Bering Strait is a good candidate for a workshop area as there are two potential proposals in the system. He pointed out that however, they could come up sooner than 2016, and he could not see yet how many other Arctic proposals will be submitted and how strong the competition will be beyond 2016.

Quinn commented that beyond 2016 long term planning will be a task for the IODP Forum and/or FGBs. Camoin explained that the Forum sees the long-term planning from a thematic point of view, while FGB plans ship schedules platform by platform. De Leeuw commented that SIPCOM acts as if it continues after 2013 for a smooth transition to the Forum and the FGBs. Quinn agreed that there should not be a hiatus in advice from executive committees at the end of 2013. However, beyond FY16 the territory is still wide open, and it's premature to make firm decisions. Dunbar and Becker agreed. Janecek commented that his point about monitoring and advising on long-term planning is not particularly dealing with the specifics of proposals, but only in the sense of finding any critical science missing from the planned program achievement. Thus, it is too early to act. He suggested just monitoring what is scheduled in the next few years, and making recommendations if SIPCOM sees that something critical is missing.

Kroon commented that if SIPCOM is not involved in planning beyond FY16, they still should encourage workshops about the Arctic or Bering Strait or somewhere in a sense that those are highly important in the new science plan. De Leeuw agreed. Becker suggested recommending Arctic workshops including the Bering Strait. Larsen commented that there is a disconnection between the groups of Arctic and Bering Strait proponents, because Bering Sea drilling in general does not need ice breaking facilities, in fact is primarily MSP proposal because of water depth, whereas the high Arctic drilling does need icebreaker capability for both drilling and site survey, and that proponent have a tendency to organize themselves according to logistics.

Yeats commented that PEP, which has a thorough knowledge of the proposals and can detect where more proposal pressure is needed, should be more involved in calls for workshop proposals. Kroon agreed with Yeats, and commented that even if there are enough pre-proposals for the Arctic at the moment, PEP cannot tell if those will end up as excellent full proposals. PEP can advise the FGBs to watch and stimulate the community in that area. De Leeuw commented that SIPCOM can also proactively encourage the community to submit Arctic workshop proposals as we already know that the Arctic is very important in the new science plan. Janecek agreed with de Leeuw, and commented that if the call for workshops would be based on the science plan, this discussion did not have to

be platform by platform.

Becker commented that analysis on the active proposals in the system is needed to decide where we need workshops. Yeats agreed with Becker. Dunbar suggested doing homework and discussing the long-term plan again in the next June meeting. De Leeuw suggested forming a subcommittee to do that homework. Yeats commented that PEP is more effective. Murray asked if PEP reviews OTF proposals for FY16. Kroon replied no and noted that in the current rule, OTF proposals are reviewed by OTF. Kroon suggested inviting PEP subchairs to that homework, and PEP will review it and report to SIPCOM.

SIPCOM Action Item 1201-17: SIPCOM asks PEP to summarize the scientific and regional distribution of pre-proposals, proposals, CPPs, and APLs at PEP and OTF, to enable SIPCOM at their June 2012 meeting to evaluate future coverage of the post-2013 IODP Science Plan.

Stein, Escartin and Iryu came back in the room.

----- JR

De Leeuw invited member's comments on where JR should go for FY 14,15 after the Asian monsoon expedition. He commented that SIPCOM already noticed that there was a dense population of proposals in the Western Pacific.

Kroon noted that the South China Sea CPP proposal was not well received by PEP but has a high potential. The Izu-Bonin-Mariana Deep Forearc Crust (P696) and South Pacific Paleogene (P567) proposals are also promising. They are implying a possible JR track from Asian monsoon expedition to the West Pacific, then to the South Pacific.

Larsen suggested discussing this issue at the next June meeting because the situation will be clearer after the next proposal deadline April 1st and the next PEP and OTF meetings. Quinn agreed with Larsen.

Divins commented that USIO was going to start scheduling for FY14 in three months, and

cannot wait until the next April proposal deadline and the next PEP reviews. After picking up some proposals for FY14, there are not many left for FY15. USIO wants to see a world map with all proposed drilling sites. SIPCOM could then solicit proposals to fill the gaps on the map, then USIO can have something to choose for FY15.

Kawamura explained that the FY14 schedule is already drafted but is not fixed yet, and that's why the OTF meeting is scheduled in March. After the March OTF meeting, SIPCOM can approve or endorse the outcome from the OTF. What USIO asked was more proposals to have options for the FY15 JR schedule. De Leeuw agreed.

SIPCOM Consensus 1201-18: Regarding the long-term planning of JR (post FY14) it is recognized that, following probable work in the Western Pacific, additional proposal pressure at the OTF level is required to facilitate and optimize JR operations and transits, while maximizing scientific return. A recent Indian Ocean Workshop and a planned SW-Pacific workshop may increase the number of drillable targets in these areas. To encourage future proposal pressure in the South Atlantic, Circum-Antarctic, and Indian Ocean, which are possible routes for the JR in the long term, SIPCOM requests that future proposal calls for both drilling projects and workshops specifically solicit submissions concerning these areas.



Kroon commented that he didn't see any shortage of excellent proposals for Chikyu. Quinn commented that he read from Kroon's presentation that IBM is the next one. Becker added that CRISP in the Eastern Pacific is also a good choice.

Becker questioned if CDEX needs guidance from SIPCOM in terms of science priority versus logistical priority, which the FGB will deal with at some point. De Leeuw concluded that SIPCOM did not need to take any action at this stage.

16. Linkages to other programs (PAGES, OOI, etc.)

De Leeuw provided a report on IODP-PAGES collaboration.

[Overlap in both science plan]

- High resolution paleoenvironmental and paleoclimatic reconstruction
- Ocean Biogeochemistry
- Proxy development
- Model-Proxy record integration
- (Paleo-) Biodiversity
- Sub-seafloor life communities
- Human evolution and climate
- Outreach and Education
- New Technologies and Modeling
- Workshops aiming to submit proposals

[What IODP can offer to PAGES?]

- Mean to obtain SUPERB continuous long marine sediment cores
- State of art on-board and on-shore facilities
- Data management facilities
- Outreach facilities (SD?)
- WS support

[What PAGES can offer to IODP?]

- High quality Drilling Proposals (e.g. ultra-high resolution, land-sea correlation)
- New community and expertise
- Direct link to the IGBP(International Geosphere-Biosphere Program) frame

[Challenge]

- Policy in IODP: in principle only researchers from IODP member countries can participate

IODP expeditions

[How to proceed]

-Joint workshop to create a IODP proposal

IODP-MI and each IODP member nation have budget for workshops

-Need of MoU?

Becker asked if PAGES has workshop budgets. De Leeuw replied that they have a quite

substantial budget for workshops.

Singhvi commented that IODP-India will hold the next open science meeting of the PAGES in

Goa (13-16 Feb 2013), which is a once-in-4 year big event, and suggested organizing an IODP

presentation at that meeting.

Tauxe asked if PAGES was aware of the way to submit proposals to IODP. De Leeuw replied

no, and commented that only a few members of the PAGES scientific steering committee

knew about IODP. Kroon suggested submitting workshop proposals to both programs to

create a virtual joint workshop. Dunbar commented that he has been involved in PAGES

from the year it was created, and has seen five or six high-resolution sediment archive

workshops. There have been some years when every single member of the steering

committee knew well about IODP and a third of them had actually participated, and it would

happen again through cycle of people. He didn't think SIPCOM needs to stimulate

collaboration, but he suggested making them aware that there is workshop funding

available, and that IODP looks favorably upon linkages with other groups, and that

co-funding of workshops is the right thing to do. De Leeuw agreed and he will communicate

back to PAGES.

Becker wondered what SIPCOM can do more about linkages to the observatory projects like

NEPTUNE-Canada and DONET(Japan). De Leeuw commented that SIPCOM may await the answer as the outcome from the observatory workshop, and suggested coming back to this issue at the next meeting.

17. ICDP-IODP linkages update

Larsen reported about ICDP-IODP linkage.

Larsen and Kroon had a meeting with some ICDP members in San Francisco, and it was confirmed that they wanted to continue joint activities and joint publication on Scientific Drilling.

IODP and ICDP programs have scientific overlap in all of four themes. In the past, there were some joint projects in which IODP covered deep drilling and ICDP covered shallow drilling. ICDP also has considered funding ocean drilling in the Barents Sea to study an impact crater clearly visible in seismic data. However, such joint operations have never fully developed because of differences in the process of proposal submission and evaluation. Now that IODP has a streamlined SAS system, it should be easier to build a joint proposal evaluation system. Kroon added that a joint annual meeting was suggested.

Gatliff commented that ESO has been also organizing the links with ICDP on the technology side, and envisages a European infrastructure to support scientific drilling, where ESO and

ICDP will work together to implement and develop new technologies.

Stein noted that there was the IODP-ICDP "Climate-Human Evolution" Joint Program Planning Group, and asked how it went and if this planning group still exists. Murray replied that nothing has happened as far as he remembered.

SPC consensus statement 1003-7: SPC recognizes the high scientific value and widespread societal interest in understanding how—or whether—climate influenced the early stages of human evolution on the African continent. Addressing this issue requires a much more detailed understanding of the regional and local climates in which hominids and hominins evolved, and this understanding will require a coherent and integrated approach to

recovering detailed climate records from terrestrial (former lake) sequences, from present day lakes in Africa, and from the ocean basins surrounding Africa. SPC invites the ICDP community to join with the IODP community to establish a Joint Program Planning Group charged to plan an integrated onshore, lake, and ocean drilling program that would dramatically enhance scientific understanding of how past climates may have influenced the early stages of our evolution.

Escartin suggested using a joint workshop to get ICDP involved more. Dunbar informed that there has been a joint IODP-ICDP workshop or colloquium every year since about 2006, and suggested encouraging this kind of activity to continue. He also commented that it's hard to imagine what more we can do proactively. Larsen suggested having a joint discussion about a joint review mechanism. Dunbar and de Leeuw agreed with Larsen. Yeats commented that if we have a discussion on joint reviews, PEP chair should be the main speaker, because PEP is the only evaluation panel in IODP. Kroon suggested having PEP and ICDP meetings in parallel in separate rooms but with a joint session at some time during the two days. Becker informed that IWG+ planned to invite an ICDP liaison to IODP Forum, and commented that that would help to accomplish the joint evaluation plan.

Iryu asked who would pay for the joint operation in the joint mechanism, and pointed out that in the current system, IODP proponents don't have to pay for expeditions because the program pays for it, but ICDP proponents have to pay by themselves.

Murray commented that IODP needs to be more aggressive to reach out to ICDP whenever SIPCOM or PEP spots a potential linkage. Quinn commented that a check box in the proposal form to show if the proposal is related to ICDP might help to find future collaboration. Murray and de Leeuw agreed.

18. Review of action items, motions, and consensus statements

Panel members walked through the drafts of the consensus statements and discusses motions, action items, and wording.

Draft meeting minutes for #1 SIPCOM 19-20 January 2012

19. Review of any additional action items, motions, and consensus statements

SIPCOM Consensus 1201-19: SIPCOM expresses its gratitude to Dr. Dhananjai K Pandey

and NCAOR, our local hosts for this meeting in Goa, India. The first-class hotel and

meeting facilities provided a superb venue for a productive meeting. Meeting participants

enjoyed the nightly dinners, which featured a dazzling array of Indian food, drink, and

music. Meeting participants will not soon forget their time in Goa.

SIPCOM Consensus 1201-20: SIPCOM wishes to recognize Hans Christian Larsen for his

years of dedicated service to scientific ocean drilling, most recently as Vice President of

IODP-MI. Hans Christian's steady hand proved critical to the success of IODP as it

originated and went through its many changes. Hans Christian travelled the world in

support of IODP and his institutional knowledge of the proposals in the system never ceased

to amaze. SIPCOM wishes Hans Christian the best in his (semi) retirement and thanks him

for all of his years of service to IODP.

---- Next SIPCOM Meeting

Place: Washington DC, USA

Date: 19-20 June 2012

20. Closing Remarks

De Leeuw adjourned the meeting at 17:15.

ADJOURN

EMA Outreach activities

- Meetings:

IWG+ & SIPCom: Goa, India, Jan. 12

ECORD E&O Task Force: Granada, Spain, Feb. 12

ESO: Edinburgh, UK, Feb. 12

EMA-MEXT: Aix-en-Provence, France, Mar. 12

DS₃F Conference : Sitges, Spain, Mar. 12 ECORD-IMAGES : Sitges, Spain, Mar. 12

ECORD Executive: Aix-en-Provence, France, Mar. 12

« ECORD-IODP day » : Haifa, Israel, Mar. 12 IODP France days : Paris, France, Apr. 12 ECORD-IMAGES France : Paris, France, Apr. 12

ESO: Bremen, Germany, Apr. 12

EGU: Vienna, Austria, Apr. 12 (Session on observatories; IODP-ICDP booth; IODP-ICDP

Townhall Meeting)

ESSAC : Aarhus, Denmark, May-Jun. 12 ECORD Council : Helsinki, Finland, Jun. 12 IWG+ & SIPCom : Washington DC, USA, Jun. 12

- ECORD-IMAGES meetings and contacts:

ECORD-IMAGES meeting: AGU/San Francisco Dec. 11

Participants - ECORD : C. Mevel ; IMAGES : L. Peterson, I. Hall, R. Zahn

ECORD-IMAGES meeting: Sitges (DS3F Conference) Mar. 12

Participants - ECORD : G. Camoin, M. Borissova, R. Gatliff, D. McInroy, U Roehl, S.

Davies: IMAGES: I. Hall, R. Schneider, R. Zahn

IMAGES meeting: Cambridge Mar. 12

ECORD-IMAGES France meeting: Paris, Apr. 12

ECORD-IMAGES meeting: Vienna, Apr. 12

Participants - ECORD : G. Camoin, M. Borissova, R. Gatliff, D. McInroy, U Roehl, A. Fehr; IMAGES : L. Peterson, I. Hall, R. Schneider, R. Zahn, Min-Te-Chen; NSF : B. Haq.

- Collaboration with industry:

Contacts with TOTAL, Paris, Apr. 12. Meetings are planned later this year.

Contacts with G. Marquette (INSU-CNRS industrial collaboration). Paris, Apr. 12. A meeting is planned later this year.

- European Infrastructure :

Visit to the Responsible for 'Large Research Infrastructures' Unit General Directorate for Research and Innovation French Ministry of Higher Education and Research, Paris, Jan 12.

- ECORD (potential) new members :

* Israël:

IODP day in Haifa (27/03/12):

The Dr. Moses Strauss Department of Marine Geosciences, The Charney School of Marine Sciences invites you to The Dr. Moses Strauss Department of Marine Geosciences, The Charney School of Marine Sciences invites you to

SECOND CIRCULAR SYMPOSIUM PROGRAM 09:30-10:10 Welcome reception and gathering The Haifa Symposium on 10:10-10:30 Welcome greetings, Prof. Aaron Ben-Ze'ev, President of the University of SCIENTIFIC OCEAN DRILLING 10:30-11:00 Welcome greetings, Prof. Zvi Ben-Avraham, Head of the Charney School of Marine Sciences 11:00-11:40 Dr. Gilbert Camoin, Director of ECORD: "ECORD activities / role of ECORD in the Next Program" Under the auspice of the 11:40-12:20 Dr. Carlota Escutia Dotti, Chair of ESSAC: "ESSAC activities and scientific opportunities" **EUROPEAN CONSORTIUM FOR** 12:20-13:30 Lunch break OCEAN RESEARCH DRILLING (ECORD) 13:30-14:10 Prof. Robert Gatlif, ECORD Science Operator Manager: "Participation in ECORD IODP Expeditions: from proposal to completion" Tuesday, March 27th 2012 14:10-14:50 Dr. Gilbert Camoin and Dr. Carlota Escutia Dotti: "Climate issues: IODP achievements and New Science Plan on that topic" Welcoming reception: 9:30 14:50-15:50 Prof. Dominique Weis, ECORD Distinguished Lecturer, University of British Columbia, Canada: "What do we know about mantle plumes and what The symposium will take place at more can we learn by IODP drilling" the Senate Room, 29th floor Eshkol Tower 15:50-16:20 Coffee break 16:20-17:20 Prof. Kai Uwe Hinrich, ECORD Distinguished Lecturer, MARUM, Germany: "Benthic archaea - the unseen majority with the importance to the global carbon cycle revealed by IODP drilling" Concider using public transportation, parking is restricted. Places are limited, please confirm participation to: hhanoon@univ.haifa.ac.il **EC**®RD **EC**®RD IODP INTEGRATED OCEAN IODP

* Russia:

- Contacts with VSEGEI (Dr Oleg Petrov)
- ECORD Newsletter #18

European Consortium for Ocean Research Drilling (ECORD)

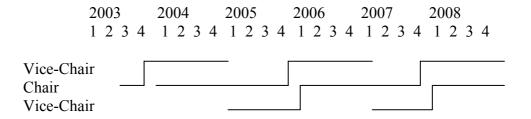
MEMORANDUM OF UNDERSTANDING
of
European and Other Funding Organisations
on
Membership and Operation of ECORD
in the
Integrated Ocean Drilling Program (IODP)

ANNEX D

ECORD Science Support and Advisory Committee (ESSAC) Terms of Reference

A. Representation

- 1. The ECORD Science Support and Advisory Committee (ESSAC) consists of a national delegate and an alternate from each participating country in the European Consortium for Ocean Research Drilling (ECORD) appointed by the respective Member Organization(s). Alternates can attend, when in addition to delegates, as non-voting members. Additional non-voting representation may be invited on an ad hoc basis. Terms of office of Committee members will be reviewed every three years. It is advised that there is rotation where possible and that no more than one-third of the membership is replaced each year. The first rotation will be in 2005 after an appointment of 2 years. Terms of office will normally begin in October.
- 2. A Chair and Vice-Chair shall be elected from among ESSAC members and approved by the ECORD Council. The incoming Chair serves one year as Vice-Chair followed by two years as Chair and rotates off as Vice-Chair during the fourth year (see diagram below). They may not self-succeed. The Chair shall be responsible for reporting to the ECORD Council and liaising with the European Managing Agency (EMA) and European Science Operator (ESO).



3. ESSAC's representation in the Science Planning Committee (SPC) should as a minimum comprise the Chair or the Vice-Chair.

B. Division of membership benefits

- 1. The IODP assigned quota of Leg participants granted to ECORD shall reflect the financial contributions of each member country and specific interests of each participating country over a rolling three-year period.. ESSAC, in consultation with EMA, shall annually review the division effective as of 1 October 2004 and make recommendations in view of the above target ratio and of specific drilling interests.
- 2. The delegates and alternates on IODP Science Advisory Structure (SAS) panels shall be designated by ESSAC based on national nominations, authorised by ECORD Council and reflect the financial contribution of each participating country: for the first four years the contribution specified in the MOU and thereafter the contribution over a rolling three year period. Normally all ECORD representatives on SAS bodies shall serve for a three-year period and may not be re-appointed for a second consecutive term.

C. Obligations of ESSAC delegates

- 3. To ensure that all IODP and ECORD meetings are attended by the delegates or by their alternates. If neither can participate the relevant committee shall be informed and, if possible, a substitute nominated.
- 4. To ensure that the scientific interests of ECORD as a whole are presented by whoever attends SAS meetings on behalf of ECORD.
- 5. To ensure that minutes of meetings are distributed to their alternate and to the ECORD bodies.
- 6. To submit a short written report to ESSAC within two weeks of the meeting.
- 5. To be prepared to attend ECORD workshops and report to ESSAC when requested.

D. Voting

A quorum is required before decisions can be taken. There is no power of attorney for absent members. A quorum requires the presence of a majority of the members. Where possible ESSAC shall proceed by consensus; if this is impossible there shall be a majority vote. Each delegate present has one vote and the Chair has a casting vote. If no decision is reached, the issue will be passed to ECORD Council.

E. Secretariat

The Secretariat shall be determined by the ECORD Council and located with the ESSAC Chair. It will be funded from the budget of the EMA. It shall rotate, on a two-yearly basis, with the Chair of ESSAC. The budget shall be sufficient to provide for a science coordinator with a scientific background, the full cost of maintaining an office and resources to compensate the Chair.

F. Tasks

ESSAC is responsible for the scientific planning and coordination of Europe's contribution to and participation in IODP. The main purpose of ESSAC is to maximize ECORD's scientific and technological contribution.

ESSAC is responsible for:

- Advising ECORD funding organisations on IODP issues.
- Responding to the ECORD Council on requests for evaluation of its activities and initiation of evaluations of the European scientific input to IODP.
- Interacting with the appropriate IODP bodies, in particular the IODP scientific bodies
- Reporting to the ECORD Council.
- Liaising with the EMA and ESO.
- Nominating representatives (delegates and alternates) on SAS panels.
- Co-ordinating applications, nominating shipboard participants and reviewing the division of the quota of shipboard scientists between participating countries.
- ESSAC shall assist the ESO in preparing a Science Operations Plan for MSP Operations.
- Assist and advise EMA on the formulation of proposals for funding European related infrastructure.
- Initiating and monitoring Workshops and syntheses of European IODP programs.
- Providing stimulation and guidance for the writing of drilling proposals in accordance with the IODP Initial Science Plan and encouragement of IODP-related activities among participating countries.
- Encourage (a) innovative science and technology development, and (b) the formulation of long-term integrated IODP studies.
- Assist and advise the EMA and ESO on the public outreach.
- Assist and advise the EMA on extending the scientific base of the consortium to non-member countries.

G. Proceedings

- 1. ESSAC shall meet a minimum of two times each year. Meetings are called at the request of ECORD Council, at the initiative of the Chairman, or at the request of one-fourth of the members. The ordinary agenda shall include:
 - Reports from recent SAS meetings;
 - Staffing nominations, progress and evaluation;
 - Planning of ECORD initiatives for forthcoming SAS meetings;
 - Reports from completed legs;
 - Any other task as set down above.
- 2. ESSAC can implement working groups and define their terms of reference.

	Wed	Thu	Fri	Sat	Sun	Mon	Tue
	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul
AM-1	Introduction to Past Climate Variability: Tempo and Scales (von der Heydt)	Age Models I: Time and Stratigraphy (Schellenberg, Leckie)	Carbon Cycle: Dynamics and Patterns I (Ridgwell)		Field Excursion (all instrcutors present)	Past Climate Variablity and Orbital Forcing (Raymo)	Stable Isotopes I: Theory and Systematics Spero, Zachos
AM-2	Paleoclimate Archives (Leckie)	Age Models II: Biomagnetostratigraphy of PETM (Schellenberg, Leckie)	Carbon Cycle: Dynamics and Patterns II (Ridgwell)	FREE DAY (Optional Carbon Cycle Investigation in AM)	(all institutions present)		Stable Isotopes II: Theory and Systematics Spero, Zachos
PM-1	Primer on Stable Isotopes (Spero)	Age Models III: Cyclostratigraphy Theory (Lourens)	Carbon Cycle: Dynamics and Patterns III (Ridgwell)			Age Models IV: Cyclostratigraphy Exercise Lourens	Stable Isotopes III: Problem Set and Data from Field Sections Spero, Zachos
PM-2	Forams as Geochemical Information carriers (Jorissen)	Age Models III: Cyclostratigraphy Theory (Lourens)	Carbon Cycle: Dynamics and Patterns IV (Ridgwell)				Stable Isotopes IV: Problem Set and Data from Field Sections Spero, Zachos
Night							
	Wed	Thu	Fri	Sat	Sun	Mon	Tue
	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul
AM-1	The Mesozoic Greenhouse World (Jenkyns)	Discussion and Integration: Age Models, Isotopes, Carbon Cycle, and Earth History	Proxies IV: Marine Biota (Cronin)	Parallel Session I			Discussion and Integration: Proxies, Parallel Sessions, and Cioppino
AM-2	The Paleogene Greenhouse World (Sluijs)	Proxies I: Marine Inorganic (Rosenthal/Reichart)	Proxies V: Terrestrial (Bowen)	Parallel Session II	Cioppino Conference	FREE DAY	Geochemical Modeling I: (Zeebe/Dickens)
PM-1	Greenhouse to Icehouse Transition and the Icehouse State (Zachos)	Proxies II: Marine Inorganic (Rosenthal/Reichart)	Proxies VI: Organic Chemistry Principles (Pagani, Pancost)	Parallel Session III	(Dickens, Brinkhuis)		Geochemical Modeling II: (Zeebe/Dickens)
PM-2	Quaternary and Holocene (Rosenthal)	Proxies III: Marine Biota (Schellenberg)	Proxies VII: Organic Chemistry Proxies (Pagani, Pancost)	Parallel Session IV			Geochemical Modeling III: Calculations and Simulations (Zeebe/Dickens)
Night			Polar adventures (Brinkhuis)		Cioppino Banquet		
	Wed	Thu	Fri	Sat	Sun	Mon	Tue
	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul
AM-1	Climate Models I: Principles and Practices	Climate Models III: Cretaceous (Deconto, Huber, Valdes)	Climate Models VII: Cryosphere Dynamics and sea level Vermeersen/Stocchi	Tipping Points in Climate (Skinner)		Past to Future I: Meet The Anthropocene (DeMenocal)	Past to Future V: TBD
AM-2	(Deconto, Huber, Valdes)	Climate Models IV: Paleogene (Deconto, Huber, Valdes)	Climate Models VIII: Cryosphere Dynamics and sea level Vermeersen/Stocchi	Pliocene Dyamics (Ravelo)	FREE DAY	Past to Future II: Global Warming (Huber)	Past to Future VI: Biotic Responses (Middelburg)
PM-1	Climate Models II: Calculations and Simulations	Climate Models V: Miocene-Pliocene (Deconto, Huber, Valdes)	Climate Models IX: Quaternary/Holocene Climate Models (Deconto, Valdes)	TBD		Past to Future III: Sea Level Rise (Vermeersen)	Past to Future VII: Paleoclimatology, Politics, Policy (Deconto/DeMenocal)
PM-2	(Deconto, Huber, Valdes)	Climate Models VI: Biosphere Dynamics (Deconto, Huber, Valdes)	Discussion and Integration: Geochemical and Climate Modeling	Ocean Acidification (Caldeira)		Past to Future IV: Panel and Discussion	Past to Future VIII: Panel and Discussion
Night							
							-
	Parallel Session	Parallel 1	Parallel 2	Parallel 3			
	Parallel Session I	Planktonic foraminifera (Premoli)	High-Resolution Skeletal Archives (Schellenberg)	Cretaceous Oceanic Anoxic Events (Slomp)			
	Parallel Session II	Dinocysts (Sangiorgi)	Frontiers in Organic Geochemistry (Pancost/Pagani)	Rampino			
	Parallel Session III	Cacalreous Nannofossils (Hendericks)	Frontiers in Inorganic Geochemistry (Reichart/Rosenthal)	PETM and Hyperthermals (Sluijs)			
	Parallel Session IV	Benthic Foraminifera and Ostracods	TBD	E/O Boundary			
	T drailer occorrie	(Cronin)		(Wade)			

				Ī]	
						scholarship
	Name	e-maila		Position	Affiliation	request
	Arienzo Monica	marienzo@rsmas.miami.edu	IA	T .	1	
	Batista Fabian	fbatista@ucsc.edu	IA	PhD	UCSC	NSF
	Baumgarten Henrike	henrike.baumgarten@liag-hannover.de	IA		Hannover	ECORD
	Bolaski Benjamin	bebolaski@plymouth.edu	IA	MsC		NSF
	Cook Carys Eduardo Eduardo	c.cook09@imperial.ac.uk	IA IA		Imperial	
	hahn annette	emchamarro@gmail.com hahnette@hotmail.com	IA			
	Hertzberg Jennifer	jhertzberg@ocean.tamu.edu	IA			
	Jacobel Allison	jacobel@ldeo.columbia.edu	IA			
	Knudson Karla	kknudson@ucsc.edu	IA	MsC		NSF
	Landers Jordan	jlanders@ldeo.columbia.edu	IA			
57	Laurence Bird	laurence.bird06@imperial.ac.uk	ΙA			
43	Maxbauer Daniel	dmaxbauer@wesleyan.edu	IΑ			
103	Muschitiello Francesco	muschitiello@msn.com	ΙA			
107	Pabich Stephanie	stephanie.pabich@uni-muenster.de	ΙA			ECORD
41	Schoffelen Niels	n.j.schoffelen@students.uu.nl	IΑ			
86	Segura Miguel	m.segura@exeter.ac.uk	ΙA			
101	Steinocher-Scherer Jacquelyn	jacqstein@aol.com	ΙA			
3	Suleiman Chaanda Mohammed	mohammed.chaanda@plymouth.ac.uk	ΙA			
80	Vanden Berg Beth	beth_vb@hotmail.com	ΙA			
9	Weber Tobias	tobias.weber@gfz-potsdam.de	ΙA			
	Yirgaw Daniel Gebregiorgis	danaddis2001@yahoo.com	ΙA			
	Abella Jose	joseluisabella@gmail.com		PhD	CICESE Mexico	
77	Acosta Rene Paul	rpacosta07@gmail.com		PhD	Purdue	NSF
	Alvarez Castro M. Carmen	mcalvcas@upo.es		PhD	Pablo Olavide	ECORD
	Armstrong McKay David	d.armstrong-mckay@noc.soton.ac.uk		PhD	Southampton	ECORD
_	Balmer Sven	balmer@gpi.uni-kiel.de		PhD	Kiel	ECORD
	Baronas Jotautas	jotautas.baronas@gmail.com		PhD	South Calif. Univ.	
	Besseling Marc	m.a.besseling@students.uu.nl		MsC	Utrecht	ECORD
	Blaser Patrick	pblaser@iup.uni-heidelberg.de		MsC	Heidelberg	ECORD
	BOSCOLO GALAZZO FLAVIA	galazzo.flavia@hotmail.it		PhD	Padova	ECORD
	BOUSSAHA Myriam	myriam.boussaha@geo.ku.dk		PhD	Coopenaghen	
	Bradshaw Catherine	c.bradshaw@bristol.ac.uk		PhD	Bristol	ECORD
	Brocas William	willbrocas@hotmail.com		PhD	MARUM	
	Caballero-Gill Rocio	rocio_caballero@brown.edu		PhD	Brown	
	Cavas Isramy	cdcavaleiro@gmail.com jcaves@stanford.edu		Researcher	LNEG Portugal	NCE
	Caves Jeremy Chaanda Mohammed	, -		PhD PhD	Stanford Plymouth	NSF
	Chabangborn Akkaneewut	chaandamohammed@gmail.com akkaneewut.c@geo.su.se		PhD	Stockholm	
	Chamales Kimberly	kchamales@rsmas.miami.edu		PhD	Miami	NSF
	Chrystal Abbey	abbey.chrystal@gmail.com		PhD	UCSC	NSF
	Clark Nicola	nc118@le.ac.uk		PhD	Leicester	ECORD
	Cliff Leah	lec306@soton.ac.uk		PhD	Southampton	ECORD
	Crichton Katherine	kcrichton@lgge.obs.ujf-grenoble.fr		PhD	Grenoble	2002
	Crompton Octavia	quatratavia@gmail.com		PhD	Harvard	NSF
	Cui Ying	cuiying00@gmail.com		PhD	Penn State	NSF
	Datema Mariska	m.c.datema@uu.nl		PhD	Utrecht	ECORD
	de la Vara Fernández Alba	delavarafernandez@uu.nl		PhD	Utrecht	
	Dennis Kara	kdennis@macalester.edu		PhD	Syracuse	NSF
58	EDIANG OKUKU	ediang2000@yahoo.com		Chief Meteo		
56	Egger Matthias	eggerm87@gmail.com		PhD	Utrecht	ECORD
38	Farmer Jesse	jfarmer@ldeo.columbia.edu		PhD	Lamont	NSF
81	Foan Amanda	a.g.foan@sms.ed.ac.uk		PhD	Edinburgh	
	Fox Bethany	bethany.fox@otago.ac.nz		PhD	Otago	ECORD
	Frieling Joost	j.frieling1@uu.nl		PhD	Utrecht	ECORD
	Gambacorta Gabriele	gabriele.gambacorta@unimi.it		PhD	Milano	
	Girihagama Lakshika	Ing09@my.fsu.edu		PhD	Florida State Univ.	NSF
	Greene Sarah	sarah.greene@bristol.ac.uk		Post-Doc	Bristol	
	Grothe Arjen	a.grothe@uu.nl		PhD	Utrecht	ECORD
	Heinze Mathias	mathias.heinze@zmaw.de		PhD	Max Plank	ECORD
	Hoetzel Sebastian	shoetzel@marum.de		PhD	MARUM	
	Howell Fergus	eefwh@leeds.ac.uk		PhD	Leeds	
11	Inglis Gordon	gordon.inglis@bristol.ac.uk	l	PhD	Bristol	ECORD

49	Karak Gourab	gourabkarak@gmail.com	MsC	India	
70	Kemppinen Krista	kmsk2@cam.ac.uk	PhD	Cambridge	
100	Khazmutdinova Karina	kk11m@my.fsu.edu	PhD	Florida State Univ	. NSF
42	Lang Dave	d.lang@noc.soton.ac.uk	PhD	Southampton	ECORD
39	LIU XITING	xliu@marum.de	PhD	MARUM	
2	Lowery Chris	chris.lowery09@gmail.com	PhD	Umass	NSF
32	Marr Julene	julene.marr@vuw.ac.nz	PhD	Wellington	
96	Martin Calvo Maria	m.martin-calvo@imperial.ac.uk	PhD	Imperial	
111	Marzocchi Alice	marzocchi.alice@gmail.com	PhD	Bristol	
112	Modestou Sevasti	s.modestou@gmail.com	MsC	Glasgow	
44	Moebius Iris	moebius@em.uni-frankfurt.de	PhD	Frankfurt	ECORD
63	Munz Philipp	philipp.munz@uni-tuebingen.de	PhD	Tuebingen	ECORD
65	MUSSARD Mickaël	mmussard@ipgp.fr	PhD	IPGP - Paris	ECORD
54	Oakes Rosie	rosie.oakes@utoronto.ca	MsC	Toronto	ECORD
104	Parker Andrew	parkerao@geos.tamu.edu	PhD	Texas A&M Univ	NSF
75	Peterson Carlye	carlye.peterson@gmail.com	PhD	UCSB	NSF
108	Poirier Robert	rkpoir@udel.edu	MsC	Delaware	NSF
62	Port Ulrike	ulrike.port@zmaw.de	PhD	Max Plank	
34	Prentice Katherine	k.prentice11@imperial.ac.uk	PhD	Imperial	ECORD
61	RAJASEKARAN SARAVANAN	saravanan8800@gmail.com	Researcher	India	
94	ROUSSELLE Gabrielle	gabrielle.rousselle@upmc.fr	PhD	Pierre et Marie C.	ECORD
22	Rugenstein Maria	m.a.a.rugenstein@uu.nl	PhD	Utrecht	ECORD
84	russo emmanuele	russoemmanuele@hotmail.it	MsC	Catania	
5	Sibert Elizabeth	esibert@ucsd.edu	PhD	Scripps	NSF
8	skonieczny charlotte	charlotte.skonieczny@univ-lille1.fr	Post-Doc	Lille	ECORD
92	Stern Joseph	jstern@umail.ucsb.edu	PhD	UCSB	NSF
51	Struve Torben	t.struve11@imperial.ac.uk	PhD	Imperial	ECORD
79	Super James	superjamesrobert@gmail.com	PhD	Yale	NSF
74	Tigchelaar Michelle	mtigch@hawaii.edu	PhD	Manoa	
48	Voigt Janett	jvoigt@geomar.de	PhD	GEOMAR-Kiel	ECORD
18	Warden Lisa	lisa.warden@nioz.nl	PhD	NIOZ	ECORD
73	Wei Jeremy	jhwei@geo.umass.edu	MsC	Umass	
87	Weidle India	imw28@cam.ac.uk	PhD	Cambridge	
14	Whipple Matthew	glymw@bristol.ac.uk	PhD	Bristol	
	YAMMANI SRINIVASARAO	yammani@gmail.com	Ass.Prof.	India	
33	Yanchilina Anastasia	nyanchil@ldeo.columbia.edu	PhD	Lamont	NSF
29	Zhang Yige	yige.zhang@yale.edu	PhD	Yale	NSF
	Zirkel Jessica	zirkel@em.uni-frankfurt.de	PhD	Frankfurt	
113	Christian Ohneiser	christian.ohneiser@otago.ac.nz	PhD	Otago	INGV
	Angue Minto'O, Charlie	charlie.angue-mintoo@univ-perp.fr	•	-	ECORD
	Ausín González	b_ausin@usal.es			ECORD
	Azpiroz, Maria	emeazeta@gmail.com	MsC		ECORD
	Sayed Sinoussy, Khaled	Ksnosy@yahoo.com	MsC		ECORD
	Continuous Maria	manhla Amail m			CODD

in red students that applied for an ECORD scholarship but did not send us an application

cooper.staecy@nrcan.gc.ca

marlies van der schee @gmail.com

manbka@mail.ru

dsprenk@uni-koeln.de

IA are incomplete applications. They are students registered as users on USSP website that did not fill in the application form

Decesare
McGregor
Owens
Scherer

Smirnova, Maria Sprenk, Daniela

Stacey, Cooper

Van der Schee, Elisabeth

1st year MA Queens College 1st year MS Syracuse MS, 2nd year Riverside MS, 2nd year UT, San Antonia

MsC

MsC

ECORD

ECORD

ECORD

ECORD

Yellow highlighted students that applied for a NSF scholarship but did not send us an application

18th ESSAC Meeting DS3F Summary Report

Milena Borissova

1. DS3F Background

The DS3F Project has evolved from a series of scientific collaborations, a symposium and several workshops. The DS3F's EU funded Coordination Support Action (CSA) holds the proposition for a European initiative, which addresses the deep-sea ecosystem research, drilling and sub-seafloor sampling, and the development of a better prediction mechanisms for "the response of deep-sea ecosystems to environmental change." Professor Achim Kopf is the project coordinator.

The project has stated several key goals:

- a. "Integrate the multi-disciplinary Deep-Sea Frontier community and experts in scientific drilling and subseafloor processes"
- b. "Identify the most important issues concerning (i) deep-seated fluids fuelling life in extreme environments, (ii) marine geohazards and how they affect ecosystems, (iii) processes affecting natural climate change, and (iv) the sustainable use of subseafloor resources."
- c. "Provide a link for various deep-sea, observatory & sub-seafloor frontier projects underway across Europe"
- d. Produce a White Paper for the research priorities in deep-sea seafloor research opportunities.
- e. Document instances of synergy between science and industry and how these links are developed.

DS3F website:

http://www.deep-sea-frontier.eu/

2. DS3F Participants

Approximately 250 experts participated in the DS3F Sitges Conference. A wide range of experts also participated in the Work-Package collaborations. The DS3F program has worked closely with several projects across Europe, some of which include "MARCOM; ECORD; EMSO and ESONET; HERMES and HERMIONE; Census of Marine Life, the Deep Carbon Initiative and PANGEA." The Program's institution project partners are the: MARUM Research Centre, University of Bremen – Germany; Center for Geomicrobiology Aarhus – Denmark; Institute Francais de Recherche pour l'Exploitation de la Mer (IFREMER) – France; INGV, Rome - Italy IPG Paris - France Max Planck; Institute for Marine Microbiology, Bremen – Germany; National Oceanography Centre, University of Southampton – UK; University of Barcelona – Spain; University of Tromsø – Norway.

3. The DS3F Mission

The DS3F has defined its mission with the following items: to develop strategies in sustainable ocean management, learn more about the deep sea geological processes, and emphasize the significance of the deep biosphere and the value of the seabed in revealing the paleo-environmental conditions and future climate change conditions. The DS3F community aims to advance the results of its collaborative work to the policymakers' attention.

4. The DS3F Work Packages

Nine Work Packages (WP) have brought together experts in seafloor and deep-seafloor ecosystem sciences, policy makers and industry.

The following topics are covered:

- WP 1: Lithosphere-biosphere interaction and resources
- WP 2: Sedimentary seafloor and sub-seafloor systems
- WP 3: Deep biosphere
- WP 4: Sediment Dynamics and Geo-hazards
- WP 5: Geo-fluids and gas hydrates
- WP 6: Climate change and response of deep-sea biota
- WP 7: Mission-specific sub-seafloor sampling
- WP 8: Infrastructure and synergies
- WP 9: Management and Science-policy interfacing

5. The DS3F Sitges Conference

After DS3F's starting point in Brussels 2010, and a scientific session at the EGU in Vienna 2011 amongst several other events, an international DS3F conference was organized in Sitges, Spain in 2012. The DS3F Sitges Conference was key ground for the discussion and initiation of the writing process of a White paper that covers the abovementioned work package topics. The paper would be finalized and assembled in June 2012. The foresight paper would provide expert guidance and emphasize the importance on the topics of climate, ecosystems, geo-hazards and resources.

The presenters discussed the importance of furthering deep-sea research and finding a sustainable use of the ocean. The talks thus emphasized the need "to develop sub-seafloor sampling strategies for enhanced understanding of deep-sea and sub-seafloor processes by connecting marine research in life and geosciences, climate and environmental change, with socio-economic issues and policy building." Related to these issues, the presenters elaborated on the need to expand deep-sea research to include the themes of "climate change feedbacks, impacts of natural and anthropogenic events, exploitation of living, mineral and energy resources and carbon sequestration and their impacts on marine ecosystems."

Under the topic of "Current Drilling Technologies and Associate Infrastructures," several speakers addressed the state of current research strategies and tools. For instance, the existence of sub-sea platform innovation along with access to sustained drilling facilities for borehole monitoring, the availability of sensors and *in situ* measurements for key oceanographic parameters were mentioned, amongst several items, as necessary for the progress of deep-sea research.

6. High Societal Relevance of Deep Sea Research

The DS3F project points out that over half of the European territories are covered by water, a large portion of which is represented by the deep sea. Europe's deep-sea fisheries, oil and gas exploration have been moving into this territory as the potential new natural resources of gas and oil still remain to be accessed. In the meantime, a new industry sector of blue biotechnology has emerged, where the deep-sea's genetic biodiversity has become an important source of new products. Lastly, the deep sea also holds great relevance in the understanding of geo-hazards such as earthquakes and tsunamis.

7. Deep -Sea Research and the EC

At the conference's conclusion, the EC Project Officer Ana-Teresa Caetano's presentation addressed the importance and the implications of science progress and further societal and industrial involvement for Europe. Ms. Caetano also discussed the possibilities of future project funding through the new and upcoming EU Framework and Research Innovation Program Horizon 2020. The EC has defined Horizon 2020 as a "financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness." The program would run from 2014 to 2020 and will have an € 80 billion budget. Some of the program's main features include its simplified rules and bringing the work of three current funding programs under the same umbrella.

While on the agenda as a research-funding source, Ms. Caetano reminded that Horizon 2020 is not fully developed yet and its rules and scientific participation procedures remain to be specified. The European Commission has published the following projected Horizon 2020 timeline:

- **Ongoing:** Parliament and Council negotiations on EU budget 2014-20 (including overall budget for Horizon 2020)
- **Mid 2012:** Final calls under 7th Framework Program for Research to bridge gap towards Horizon 2020
- **By end 2013:** Adoption of legislative acts by Parliament and Council on Horizon 2020
- 1/1/2014: Horizon 2020 starts; launch of first calls

The presentation highlighted that some of the key policy drivers are the current issues of a research-efficient Europe, adapting to climate change, an EU sustainable development strategy, integrating maritime European policies, and eco-innovation action plans, amongst numerous other topics.

In terms of acquiring funding for offshore missions, it was clarified that 'shiptime' is not funded by the EC and the proponents would have to seek funding elsewhere.

Ms. Caetano concluded her presentation by encouraging the scientists' participation in the upcoming Horizon 2020.

Geophysical Research Abstracts Vol. 14, EGU2012-1824, 2012 EGU General Assembly 2012 © Author(s) 2012



Future scientific drilling in the Arctic Ocean: Key objectives, areas, and strategies

R. Stein (1), B. Coakley (2), N. Mikkelsen (3), M. O'Regan (4), and C. Ruppel (5)

(1) Alfred Wegener Institute, Geosciences, Bremerhaven, Germany (ruediger.stein@awi.de), (2) University of Alaska, Fairbanks, USA, (3) Geological Survey of Denmark and Greenland, Copenhagen, Denmark, (4) Department of Earth and Ocean Sciences, Cardiff University, Wales/UK, (5) US Geological Survey, Woods Hole/MA, USA

In spite of the critical role of the Arctic Ocean in climate evolution, our understanding of the short- and long-term paleoceanographic and paleoclimatic history through late Mesozoic-Cenozoic times, as well as its plate-tectonic evolution, remains behind that from the other world's oceans. This lack of knowledge is mainly caused by the major technological/logistic problems in reaching this permanently ice-covered region with normal research vessels and in retrieving long and undisturbed sediment cores.

With the Arctic Coring Expedition – ACEX (or IODP Expedition 302), the first Mission Specific Platform (MSP) expedition within IODP, a new era in Arctic research began (Backman, Moran, Mayer, McInroy et al., 2006). ACEX proved that, with an intensive ice-management strategy, successful scientific drilling in the permanently ice-covered central Arctic Ocean is possible. ACEX is certainly a milestone in Arctic Ocean research, but – of course – further drilling activities are needed in this poorly studied ocean. Furthermore, despite the success of ACEX fundamental questions related to the long- and short-term climate history of the Arctic Ocean during Mesozoic-Cenozoic times remain unanswered. This is partly due to poor core recovery during ACEX and, especially, because of a major mid-Cenozoic hiatus in this single record. Since ACEX, a series of workshops were held to develop a scientific drilling strategy for investigating the tectonic and paleoceanographic history of the Arctic Ocean and its role in influencing the global climate system:

- "Arctic Ocean History: From Speculation to Reality" (Bremerhaven/Germany, November 2008);
- "Overcoming barriers to Arctic Ocean scientific drilling: the site survey challenge" (Copenhagen/Denmark, November 2011);
- Circum-Arctic shelf/upper continental slope scientific drilling workshop on "Catching Climate Change in Progress" (San Francisco/USA, December 2011);
- "Coordinated Scientific Drilling in the Beaufort Sea: Addressing Past, Present and Future Changes in Arctic Terrestrial and Marine Systems" (Kananaskis, Alberta/Canada, February 2012).

During these workshops, key areas and key scientific themes as well as drilling and site-survey strategies were discussed. Major scientific themes for future Arctic drilling will include:

- The Arctic Ocean during the transition from greenhouse to icehouse conditions and millennial scale climate changes:
- Physical and chemical changes of the evolving Polar Ocean and Arctic gateways;
- Impact of Pleistocene/Holocene warming and sea-level rise on upper continental slope and shelf gas hydrates and on shelf permafrost;
- Land-ocean interactions;
- Tectonic evolution and birth of the Arctic Ocean basin: Arctic ridges, sea floor spreading and global lithosphere processes.

When thinking about future Arctic drilling, it should be clearly emphasized that for the precise planning of future Arctic Ocean drilling campaigns, including site selection, evaluation of proposed drill sites for safety and environmental protection, etc., comprehensive site survey data are needed first. This means that the development of a detailed site survey strategy is a major challenge for the coming years.

Here, an overview of perspectives and plans for future Arctic Ocean drilling will be presented.

References

Backman, J., Moran, K., Mayer, L.A., McInroy, D.B., and the Expedition 302 Scientists, 2006. Proc. IODP 302; doi:10.2204/iodp.proc.302.2006.