

**IODP-MI
Operations Task Force
Meeting Report**

**Barceló Edinburgh Carlton
Hotel**

**Edinburgh, Scotland
May 16th - 17th 2012**

**May 16th – 17th
Meeting**

Location

Barceló Edinburgh Carlton Hotel, Edinburgh, Scotland

Agenda

16th May (from 9:00 to 17:00)

1. Introduction
2. Reports (recent development)

SIPCOM	(de Leeuw)	10min
PEP	(Kroon)	10min
Proposals residing at OTF	(Kagaya)	10min
Engineering Development	(Kawamura)	10min

+Ongoing activities:

USIO	(Divins)	15min
CDEX	(Eguchi)	15min
ESO	(Gatliff/McInroy)	15min
3. Overview for FY13 & FY14

+Funding expectations:

NSF	(Allan)	15min
MEXT	(Kuramoto)	15min
EMA	(Camoin)	15min

+Operation expectations:

USIO	(Divins)	15min
CDEX	(Eguchi)	15min
ESO	(Gatliff)	15min
4. Review FY13 operation plan

USIO	(Malone)	
CDEX	(Eguchi)	
ESO	(Gatliff/McInroy)	
5. Develop FY14 science plan options

USIO	(Malone)	
CDEX	(Eguchi)	
ESO	(Gatliff/McInroy)	

17th May (from 9:00 to 13:00)

6. Develop FY14 science plan options for SIPCOM June
7. Review the proposals residing at OTF
8. Other

Operation Task Force – OTF

David Divins	IODP-USIO, Ocean Drilling, The Consortium for Ocean Leadership, USA
David McInroy ^{a1}	ECORD Science Operator (ESO), British Geological Survey, UK
Dick Kroon	Proposal Evaluation Panel, The University of Edinburgh, Scotland
Michael Strasser	Proposal Evaluation Panel, ETH Zurich, Switzerland
Nobuhisa Eguchi ^{a2}	Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Richard Arculus*	Proposal Evaluation Panel, Australian National University, Australia
Robert Gatliff*	ECORD Science Operator (ESO), British Geological Survey, UK
Timothy Bralower	Proposal Evaluation Panel, Pennsylvania State University, USA
Yoshinori Takano	Proposal Evaluation Panel, JAMSTEC, Japan
Wataru Azuma*	Center for Deep Earth Exploration (CDEX), JAMSTEC, Japan
Yoshi Kawamura (Chair)	IODP Management International, Japan

Liaisons, Guests, and Observers

David Smith	ECORD Science Operator (ESO), British Geological Survey, UK
Gilbert Camoin*	ECORD Managing Agency (EMA), France
Issa Kagaya	IODP Management International, Japan
Jamie Allan	National Science Foundation (NSF), USA
Jan de Leeuw	Science Implementation and Policy Committee, Royal Netherlands Institute for Sea Research, Netherlands
Mitch Malone	IODP-USIO, Texas A&M University, USA
Shingo Shibata*	Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan
Shinichi Kuramoto ^{a3}	Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan
Thomas Janecek	National Science Foundation (NSF), USA

***Unable to attend**

a1 –Alternate for Robert Gatliff and Gilbert Camoin

a2 –Alternate for Wataru Azuma

a3 –Alternate for Shingo Shibata

PREFACE

This report provides a summary of the IODP-MI Operations Task Force (OTF) meeting in Edinburgh on May 16th - 17th 2012. This meeting focused on confirming schedule of *Chikyu*, *JOIDES Resolution* and *Mission Specific Platform* for FY13 and identifying the operation/expedition options for FY14.

At the beginning of the meeting, Yoshi Kawamura (Chair, IODP-MI) explained the agenda of the meeting and Issa Kagaya (IODP-MI) introduced the logistics.

1. Reports (recent development)

SIPCom Report

Jan de Leeuw (SIPCom Chair)

Jan de Leeuw (SIPCOM Chair) reported that all of SIPCom duties and activities include following four major/related to OTF tasks will be transferred to other IODP entities for post 2013 program.

- Monitoring science plan delivery
To IODP Forum and individual Facility Governing Boards with assistance from Proposal Evaluation Panel (PEP)
- Long-term planning
To IODP Forum which monitors progresses and makes advices to individual Facility Governing Boards.
- Regional planning
To IODP Forum which monitors progresses and makes advices to individual Facility Governing Boards.
- General operational performance assessment
To individual Facility Governing Boards

PEP Report

Dick Kroon (PEP Chair)

Dick Kroon (PEP Chair) reported that IODP-MI received 25 proposals (18 new) at April 1st 2012 and those proposals had been reviewed at PEP #2 meeting prior to OTF meeting. Dick expressed the number of submitted proposals was increased comparing to previous submission date and is good indication for the future/new IODP. Several new proposals in Indian Ocean had received. Those are making good impact on future IODP expedition scheduling. Dick also commented that 2 CPP proposals in PEP are increasing the importance in new IODP.

Proposals residing at OTF

Issa Kagaya (IODP-MI)

Issa Kagaya explained th status of OTF proposals and some of the discussion points and issues are;

- SSDB needs system modification as well as proponents need education, the current data storage system makes SCP incorrect data evaluations.
- Many of non-riser proposals have issues associated with high operation cost, 3rd party funding, and/or clearance/security. And those issues have not been considered by SAS, while conducting the proposal evaluation.

- Proposals with any long term observation such as CORK installation, should be included data retrieving and maintenance plan.
- Technical/Engineering feasibility checking system for SAS (SPC/PEP) proposals has not been clearly implemented. Former EDP had some part of the function but the timing was not relevant.

Engineering Development Yoshi Kawamura (Chair, IODP-MI)

Yoshi Kawamura explained the current status of IODP engineering developments.

- Motion Decoupled Hydraulic Delivery System (MDHDS) has been fabricated and functions/operations tested on land. JR sea trial (final deployment/operation test) is scheduled on 4-8 Jun 2012 (Exp.342 Newfoundland S.D.)
- Simple Cabled Instruments for Measuring Parameters In-Situ (SCIMPI) has been fabricated and functions/operations tested on land. JR sea trial (final deployment/operation test) has been discussed and will be in FY13

2. Overview for FY13 & FY14

+Funding expectations: Key points

NSF Report

Jamie Allan (NSF)

- Securing same level of JR operation budget as FY12 for FY13 & 14, expecting 3~4 expeditions depend on individual operation costs, duration of transition between expeditions and number of CPP proposals.

MEXT Report

Shinichi Kuramoto (MEXT)

- JAMSTEC will receive same level of budget as FY12 for FY13 IODP operations.
- In FY12, Chikyu has been and will be conducting a RRD-proposal and a CPP. Both proposals are partly supported by other fund sources.
- Chikyu operation budget of FY14 has not been discussed and very much uncertain.

EMA Report

David McInroy (ESO)

- Securing FY13 Baltic Sea expedition budget. The MSP tendering process is ongoing.
- ECORD member countries are now discussing ECORD membership of after FY14 and their contribution level.
- 6 Russian scientists will be invited to Baltic Sea expedition on board MSP, to encourage Russia be a part of ECORD.

+Operation expectations:

USIO

Mitch Malone (USIO)

FY12-13 Schedule

Expedition	#	Start Port	Dates
Non-IODP		Curaçao	17 April–2 June
Newfoundland	342	Bermuda	2 June–1 Aug
Non-IODP		St. Johns	1 Aug–23 Oct
CRISP-2	344	Balboa	23 Oct–11 Dec
Hess Deep	345	Puntarenas	11 Dec–12 Feb
Non-IODP		Balboa	12 Feb–25 May
SCIMPI		Victoria	25-29 May
S.Alaska	341	Victoria	29 May–29 July
Transit		Victoria	29 July–20 Aug
Asian Monsoon	346	Hakodate	20 Aug–28 Sept

- FY13 APP developed for 4 expeditions schedule, but there is contingency plan (3 expeditions) in case of budget shortage. Budget-short may cause the delay of Exp.346 Asian monsoon
- The start port for Exp.346 is set tentatively, under discussion based on related cost.
- SCIMPI sea trail is scheduled at Cascadia before Exp.341 S. Alaska. Expecting 4 days operation and Neptune program commits for supporting post-installation operations include maintenance.

FY14 Operation Options

	30-Sep	7-Oct	14-Oct	21-Oct	28-Oct	4-Nov	11-Nov	18-Nov	25-Nov	2-Dec	9-Dec	16-Dec	23-Dec	30-Dec	6-Jan	13-Jan	20-Jan	27-Jan	3-Feb	10-Feb	17-Feb	24-Feb	2-Mar	9-Mar	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr	20-Apr	27-Apr	4-May	11-May	18-May	25-May	1-Jun	8-Jun	15-Jun	22-Jun	29-Jun	6-Jul	13-Jul	20-Jul	27-Jul	3-Aug	10-Aug	17-Aug	24-Aug	31-Aug	7-Sep	14-Sep	21-Sep	28-Sep
	FY14																																																				
Option 1	Dry Dock/Non-IODP		Non-IODP		Bengal Fan (47 d Ops)		South China Sea* (46 d Ops)		IBM (695) (52 d Ops)		IBM (697) (52 d Ops)																																										
Option 2	Dry Dock/Non-IODP		Non-IODP		South China Sea* (51 d Ops)		IBM (697) (52 d Ops)		IBM (695) (51 d Ops)		Bengal Fan (40 d Ops)																																										
Option 3	Dry Dock/Non-IODP		Non-IODP		*South China Sea (51 d Ops)		IBM (697) (52 d Ops)		IBM (695) (51 d Ops)		IBM (696) (51 d Ops)																																										

Operational days dependent on finalization of ports

USIO proposed three FY14 operation options, based on OTF proposals, PEP proposals, budget expectations, and JR ship track as above option 1 to 3. Some points are:

- FY14 expected budget can support 3~4 expeditions, and if there will be a CPP, the budget will cover 4 expeditions.
- JR needs to conduct 5-year inspection at the beginning of FY14.
- USIO has considered proposal 735 South China Sea in PEP/External review to help the budget conditions.
- Other proposals in the area were not considered as option, due to long term observation issues including 3rs part fund and technical preparation readiness.

A few discussion points for FY14 and beyond JR operations among OTF:

- Conducting number of IBM expeditions as a package in FY14 would make good impact on new IODP program and to stimulate petrology community leading/encouraging new participants.
- 2 of IBM (proposal 695& 697) expeditions might be challenging, due to hard rock drilling and coring operations.
- Depend on the future proposal submission and pressure, FY15-16 operations in Western Pacific and Indian Ocean would be best scenario for new IODP and JR ship track. And in FY17, JR may sail toward to South America (off coast of Brazil?) through Southern Ocean.
- Proposal pressure at Indian Ocean is increasing but some of proposals in PEP need to be pushed and should be submitted revised ones at Oct 2012 proposal submission.

OTF consensus/action item:

The OTF recommends JOIDES Resolution FY14 operation plan as 735-CPP2: South China Sea, 697-Full3: Izu Bonin Mariana Rear Arc Crust, 695-Full2: Izu Bonin Mariana Pre-Arc Crust, and 696-Full4: Izu Bonin Mariana Forearc as above option 3.

OTF consensus/action item:

The OTF endorses that long range ship track of JOIDES Resolution will be in FY15-16 at Western Pacific and Indian Ocean, and in FY17 at Southern Ocean toward to South America and encourages that IODP SAS will announce the information as soon as feasible.

OTF consensus/action item:

Kroon writes a statement to explain long range ship track of JOIDES Resolution and to encourage IODP community building proposal pressure at Western Pacific, Indian Ocean and Southern Ocean.

ESO

David McInroy (ESO)

FY14-15 Options

FY12		
581	Late Pleistocene Coralgall Banks (drilling trial)	Forwarded March 2010, SPC ranked #10 Drilling trial part funded by ECORD
FY13, next MSP		
672	Baltic Sea Basin Paleoenvironment	Forwarded March 2011, SPC ranked #2 Planned implementation Spring/Summer 2013
FY14 / FY15 options		
548	Chicxulub K-T Impact Crater	Forwarded March 2010, SPC ranked #4 First MSP of the new program, 2014?
758	Atlantis Massif Seafloor Processes	Forwarded March 2011, SPC ranked #1 2014-2015? Depends on seabed drill readiness
FY16 and beyond, current options		
716	Hawaiian Drowned Reefs	Forwarded March 2009, SPC ranked #6
581	Late Pleistocene Coralgall Banks (full expedition)	Forwarded March 2010, SPC ranked #10
637	New England Shelf Hydrogeology	Forwarded March 2009, SPC ranked #4 In holding bin with technology and cost issues
Plus new MSP proposals forwarded by PEP, possibly in the Arctic		

ESO presented above MSP future plan. Some points are:

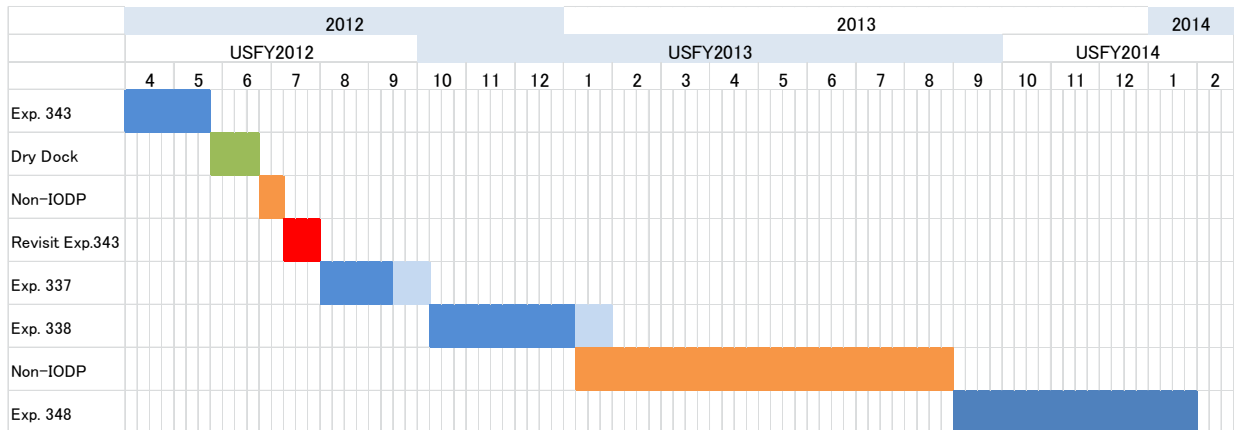
- FY12 drilling test had planned at spring, but delayed due to Fugro's platform availability, still chance to do it in summer. The fund has been secured and the permit already granted by the Bureau of Ocean Energy Management, Regulation and Enforcement.
- For FY13Exp.374 Baltic Sea, MSP platform tender process is ongoing. At the initial inquiry, six companies expressed their interest, and at least one can provide a platform to tackle/drill and core all requested sites. Expecting start the expedition at spring 2013, and 60 days operation.
- For FY14, there are two options, either Proposal 548: Chicxulub Impact Crater or Proposal 758: Atlantis Massif Seafloor Processes. The final decision will be made at mid FY13, based on the readiness of projects and FY14 budget. Chicxulub will be required hazard survey in FY13, and Atlantis Massif will need some technical development. One not implemented in FY14 will be FY15 option/plan.
- FY16 and beyond, ESO/ECORD aims for one expedition per year.

OTF consensus/action item:

The OTF recommends MSP FY14 operation plan as either one of two proposals, 548: Chicxulub Impact Crater, or 758: Atlantis Massif Seafloor Processes. ESO should report the progress and final decision at appropriate timing.

CDEX
FY12-14 Schedule

Nobu Eguchi (CDEX)



CDEX presented FY12-14 revised schedule. Some points are;

- For FY12, Chikyu will revisit JFAST site in July 2012 to drill and install observatory (3 weeks operation), due to very high demand from Japanese public. Adding JFAST revisit operation, Exp.337 Shimokita and Exp.338 NanTroSIZE schedule will be shifted 3 weeks. However, original operation days at drilling sites of both Exp.337 and Exp.338 are not affected by this change.
- For FY13, the original (at last OTF) Exp.338 NanTroSEIZE Plate Boundary Deep Riser – 2 has been modified and accepted by NanTroSEIZE PMT prior to this OTF. The main reason is the Japanese government budget shift, due to 3.11 Tohoku Earthquake (for damage recovery). It also makes delay of FY13 2nd NanTroSEIZE expedition.

There are a few discussion points and concerns for CDEX plan.

- Modified operation plan keeps same scientific target (to reach 3,600mbsf casing point and aim to reach mega-splay fault: 5,200mbsf in FY14) but its operation window had been compressed and the operation seems riskier than the original.
- There is a great concern of using Logging & Reaming While Drilling (LRWD) technique for the expedition. This technique seems not common in offshore drilling and it is first time to use it in IODP.
- FY13 budget for NanTroSEIZE VSP survey is currently secured in NSF, but it is difficult but possible to keep the fund beyond FY13, if CDEX can provide the confirmation of NanTroSEIZE schedule
- CDEX/MEXT could not present any Chikyu plan beyond FY14 NanTroSEIZE expedition (starting at the end of FY13).
- MEXT is planning an international workshop to discuss New IODP long term plan for Chikyu in early next year. MEXT (or JAMSTEC) will provide detail information at next SIPCom meeting in June 2012.

OTF consensus/action item:

The OTF endorses Chikyu FY12 - 14 operation schedule modification; Exp.343 JFAST observatory installation, Exp.337 Shimokita, Exp.338 NanTroSIZE Deep Riser 2, and Exp.XXX NanTroSIZE Deep Riser 3.

OTF consensus/action item:

OTF requests CDEX to include risk assessment for Exp.338 operation especially newly introduced drilling technique and future NanTroSEIZE project plan and its commitment based on the result of FY13 plan (case study) in FY13 APP.

3. Other

Cost, Clearance and Security issue for OTF proposals

- NSF has great concern that many of current OTF proposals have high operation cost due to CORK installation), 3rd-Party funding certainty, site clearance and site security issues. OTF understands that those proposals are difficult to schedule in future, if the current situations will not be changed.
- CORK funding support from NSF will be more difficult in future program and proponents need to understand the situation and to seek outside funding for CORK fabrication, installation, data retrieving, and maintenance with clear plan.

OTF consensus/action item:

IODP-MI sends a letter to OTF residing proposal proponents, and expresses OTF concerns stopping implementation and asks their status and plan to solve issues. IODP-MI will write draft of letter and it will be reviewed by OTF members..

Next meeting

This is the last OTF meeting in the current IODP, the OTF tasks including FY15 operation planning should/will be transferred to each Facility Governing Board at FY13 Q3.