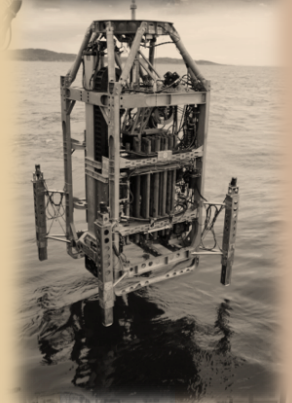
ECORD

EUROPEAN CONSORTIUM FOR
OCEAN RESEARCH DRILLING



MINUTES

ECORD Council - ESSAC Meeting #5

October 24th-25th, 2017

Southampton, UK



TABLE OF CONTENTS

ROSTER

ECORD COUNCIL	*NAME*	*EMAIL*
Austria	Bernhard Plunger	Bernhard.Plunger@oeaw.ac.at
Canada	Dominique Weis *	dweis@eos.ubc.ca
Canada	John W. Jamieson (Alternate)	jjamieson@mun.ca
Denmark	Lars Christensen *	lach@ufm.dk
Denmark	Katinka Stenbjoern (Alternate)	kas@ufm.dk
Finland	Minna Räisänen	minna.raisanen@aka.fi
France	Eric Humler	Eric.HUMLER@cnrs-dir.fr
Germany	Guido Lüniger (Vice-Chair)	guido.lueniger@dfg.de
Ireland	Koen Verbruggen	Koen.Verbruggen@gsi.ie
Italy	Marco Sacchi	marco.sacchi@iamc.cnr.it
Netherlands	Bernard Westerop	b.westerop@NWO.NL
Norway	Heidi Roggen *	hero@rcn.no
Norway	Markus Engelhardt	men@rcn.no
Portugal	Luis Menezes Pinheiro *	lmp@ua.pt
Portugal	Antje Voelker (Alternate)	antje.voelker@ipma.pt
Spain	Jose Ramon Quintana Sanchez	jose.sanchezq@mineco.es
Sweden	Magnus Friberg	magnus.friberg@vr.se
Switzerland	Martina Kern-Lütschg *	martina.kern@snf.ch
Switzerland	Gretchen Früh-Green (Alternate)	frueh-green@erdw.ethz.ch
UK	Michael Webb (Chair)	mweb@nerc.ac.uk
ESSAC	***NAME***	***EMAIL***
Austria	Werner Piller *	werner.piller@uni-graz.at
Austria	Michael Strasser (Alternate)	michael.strasser@uibk.ac.at
Canada	Dominique Weis *	dweis@eos.ubc.ca
Denmark	Marit Solveig Seidenkrantz	mss@geo.au.dk
Finland	Outy Hyttinen	outi.hyttinen@helsinki.fi
France	Georges Ceuleneer	georges.ceuleneer@get.obs-mip.fr
Germany	Jan Behrmann (Chair)	jbehrmann@geomar.de
Ireland	Xavier Monteys	Xavier.Monteys@gsi.ie
Italy	Andrea Argnani	andrea.argnani@bo.ismar.cnr.it
Netherlands	Lucas Lourens	llourens@geo.uu.nl
Norway	Helga F. Kleiven	kikki@uib.no
Portugal	Antje Voelker	antje.voelker@ipma.pt
Spain	Carlota Escutia	cescutia@ugr.es
Sweden	Jorijntje Henderiks	jorijntje.henderiks@geo.uu.se
Switzerland	Gretchen Früh-Green	frueh-green@erdw.ethz.ch
UK	Antony Morris (Vice-Chair)	A.Morris@plymouth.ac.uk
LIAISONS	***NAME***	***EMAIL***
EMA	Gilbert Camoin	camoin@cerege.fr
EMA	Nadine Hallmann	hallmann@cerege.fr
EMA	Patricia Maruéjol	maruejol@crpg.cnrs-nancy.fr
ESO	David McInroy	dbm@bgs.ac.uk
ESO	Robert Gatliff	rwga@bgs.ac.uk
ESO	Carol Cotterill	cjcott@bgs.ac.uk
ESO	Ulrike Prange *	uprange@marum.de
ESO - EPC	Sarah Davies	sjd27@leicester.ac.uk

ESO - EPC	Sally Morgan	sm509@leicester.ac.uk
ESO - BCR	Ursula Röhl	uroehl@marum.de
ECORD FB	Gilles Lericolais *	gilles.lericolais@ifremer.fr
ESSAC Office	Hanno Kinkel	essac@geomar.de
IODP Forum	James Austin	jamie@ig.utexas.edu
JR Facility Board	Anthony Koppers *	akoppers@ceoas.oregonstate.edu
SEP	Steve Bohaty	S.Bohaty@noc.soton.ac.uk
USSSP	Carl Brenner	cbrenner@ldeo.columbia.edu
NSF	Rick Murray	rwmurray@nsf.gov
NSF	James Allan	jallan@nsf.gov
NSF	Tom Janecek *	tjanecek@nsf.gov
ANZIC	Leanne Armand	leanne.armand@anu.edu.au
MEXT	Tatsuya Watanabe	tat-wat@mext.go.jp
CDEX-JAMSTEC	Nobu Eguchi	neguchi@jamstec.go.jp
CDEX-JAMSTEC	Shin'ichi Kuramoto	s.kuramoto@jamstec.go.jp
OBSERVERS & GUESTS	***NAME***	***EMAIL***
ICDP	Uli Harms *	ulrich@gfz-potsdam.de
Univ. Southampton	Lisa McNeill (*from offshore*)	lcmn@noc.soton.ac.uk
LDEO	Donna Shillington (*from offshore*)	djs@ldeo.columbia.edu
BGR - IODP Germany	Jochen Erbacher	Jochen.Erbacher@bgr.de

* *Apologies*

October 24th, 2017

INTRODUCTION

1 Self introduction and logistical information (M. Webb)

(9:05)

M. Webb opened the meeting and let all the participants begin self-introductions. N. Hallmann presented the logistical information.

2 Approval of the agenda (M. Webb/G. Camoin)

(9:12)

G. Camoin presented the agenda and the ECORD Council approved the agenda.

ECORD Council Consensus 17-10-01:
The ECORD Council approves the agenda of the ECORD Council-ESSAC Meeting #5.

3 Objectives of the meeting (M. Webb/J. Behrmann/G. Camoin)

(9:16)

M. Webb presented the main objectives of the meeting: 1) the approval of ECORD's budgets; 2) ECORD's evaluation: summary and Council decisions; 3) ECORD's partnership; 4) the 2019-2013 ECORD MoU and the 2018-2023 MSP operational plan (Agenda Item 16: Closed Session).

4 ECORD actions and consensus since the Council-ESSAC #4 meeting (N. Hallmann/G. Camoin/M. Webb/J. Behrmann)

(9:17)

All actions and consensus statements since the ECORD Council-ESSAC meeting #4 that was held in October 2016 in Bremen, Germany, can be found in the agenda book (pages 14-20). N. Hallmann summarized action items, which have not been completed.

Update on the status of non-completed action items:

ECORD Council-ESSAC meeting #4:

Action Item 4: ESSAC

To cross-check the number of publications over the last five years, which are based on material from DSDP-ODP-IODP programmes in each ECORD member country.

Action Item 5: ESSAC delegates

To provide the number of publications and PhDs over the last 5 years for their respective country to the ESSAC Office until January 2017.

H. Kinkel: Action Items 4 and 5 were part of ECORD's evaluation and they are in continuous progress.

ECORD Council Spring meeting #3:

Action Item 3: ESO

To reflect the funding offer to support the first high profile open access publication in its letter to participants and to share the proposed revised letter with the ECORD Council for comment.

D. McInroy: This action item is still in progress and will be done soon.

Action Item 5: MagellanPlus Committee

To include a geomicrobiologist on the MagellanPlus Steering Committee.

G. Camoin: Action Item 5 is done. Verena Heuer from Bremen was nominated as member of the MagellanPlus Steering Committee.

Action Item 6: MagellanPlus Committee

To inform through an ECORD Headline the scientific community that the ECORD Evaluation has identified that the deep biosphere theme is not covered as well as other IODP themes and, therefore encourages the community to develop more deep biosphere related activities to fill this gap.

G. Camoin: The Deep Biosphere theme will be included in the next MagellanPlus call for workshop proposals.

Action Item 8: ESSAC

1) To consider scrupulously the ECORD Council's recommendations regarding the necessary changes in the ESSAC ToRs and to revise them accordingly.

2) To come up with a rotation scheme for ESSAC sub-groups that is in line with what the ECORD Council considers as best practice.

J. Behrmann: Both items were discussed during the ESSAC meeting that was held on October 23, 2017. A consensus was reached concerning the ESSAC ToRs and a rotation scheme for the ESSAC sub-groups was set.

Action Item 9: ESSAC Chair

To routinely report to the ECORD Council on the length of terms of all members of ESSAC to allow for Council to monitor, and discuss when required, the rotation of members.

J. Behrmann: Since the ECORD Council Spring meeting #3 there was no rotation.

COMMENT on ESFRI:

One missing action item is the application for the ESFRI Roadmap to become a European Research Infrastructure (M. Friberg). The French Ministry proposed to wait for a new set of infrastructures with a call for applications in 2018 (G. Camoin).

ECORD BUDGET, MEMBERSHIP AND MANAGEMENT

5 ECORD Evaluation and Council decisions (M. Webb)

(9:25)

An external ECORD Evaluation Committee (EEC) consisting of eight members was set up. Seven EEC members have met on 6-8 June 2017 and the EEC sent a final report to EMA in July 2017.

Mandate of the EEC: The EEC mandate will primarily concern the production of a high-level review focused on 1) the achievements of ECORD within IODP, 2) the impact of MSPs in particular, and 3) the effectiveness/efficiency of the ECORD entities.

M. Webb summarized EEC statements and recommendations and the respective ECORD Council decisions:

ECORD Science and Partnership: The EEC stated that the scientific achievements of ECORD within IODP are excellent and that ECORD delivers highly significant science on a relatively modest budget. ECORD scientists are primary proponents on a high number of successful proposals for all IODP platforms. The EEC recommended 1) to publish a first high impact paper 12-18 months after completion of the cruise; 2) to improve the documentation of bibliometric data; 3) to consider an open access publication strategy in high-level journals; and 4) to actively encourage workshops in the field of "Biosphere Frontiers". For ECORD Council decision see ECORD Council consensus statement 17-06-04 (ECORD Council Spring meeting, June 2017 in Amsterdam).

MSP Expeditions: The EEC announced that the MSPs are a success story and mentioned that ECORD has introduced IKCs, which can be provided by funding organizations that are external to ECORD and IODP. ECORD entities have shown their ability to handle MSP expeditions, which introduce significant flexibility in the overall international goals to be achieved by IODP. The EEC recommended 1) to perform MSP cruises with high scientific potential than having exactly one expedition per year; 2) to strengthen the financial contribution to MSPs (clear need for IKCs); 3) to inform the science community on MSP expeditions during and soon after the expeditions; and 4) to strengthen cooperation with other sciences programmes. For ECORD Council decision see ECORD Council consensus statement 17-06-05 (ECORD Council Spring meeting, June 2017 in Amsterdam).

ECORD entities: The EEC found that the ECORD infrastructure is highly decentralized and stated that the infrastructure is "owned" by a comparatively large number of countries that are all equally important and actively involved. The ECORD umbrella is multinational. The EEC acknowledged the excellent and highly efficient work of both EMA and ESO. Both entities are of pivotal importance for continuing success of the project. The EEC recommended 1) to maintain the highly cost-effective and efficient organisation of ECORD; 2) to keep the managment with INSU-CNRS for the next phase 2019-2023; and 3) to keep the current ESO structure at least for the next pahse 2019-

2023. For ECORD Council decision see ECORD Council consensus statement 17-06-07 (ECORD Council Spring meeting, June 2017 in Amsterdam).
The EEC recommended to keep the 2-year rotation scheme for the ESSAC Office and to remain the ESSAC delegates for not longer than six years in the ESSAC Committee. For ECORD Council decision see ECORD Council consensus statement 17-06-06 (ECORD Council Spring meeting, June 2017 in Amsterdam).

Outreach and Education: The EEC recommended to broaden the scope of outreach to include decision makers, funding organizations, targeted industry, as well as scientists from adjacent fields. The EEC stated the importance to use popular science journals for the purpose of increasing public awareness. The EEC recommended to strengthen contacts to other organizations active in teacher's education programmes. For ECORD Council decision see ECORD Council consensus statement 17-06-11 (ECORD Council Spring meeting, June 2017 in Amsterdam).

Action Item 1: EMA
to send the ECORD Evaluation Committee Report to all meeting attendees

6 ECORD News (G. Camoin)

(9:42)
G. Camoin presented the ECORD news and the 2017 Ocean Drilling Citation Report.

There are following changes in the ECORD structure:

1) M. Webb (UK) is ECORD Council Chair until December 2017. G. Lüniger (GER) is the incoming Vice-Chair until December 2017 and will become ECORD Council Chair starting on January 1st, 2018.
2) J. Behrmann (GER) is ESSAC Chair until December 31st, 2017. A. Morris (UK) is the incoming Vice-Chair until December 2017 and will become ESSAC Chair starting on January 1st, 2018.

G. Camoin continued to present the rotation scheme for the ECORD Council. G. Lüniger (GER) will become ECORD Council Chair starting on January 1st, 2018 and M. Webb (UK) will be outgoing Vice-Chair during the first half of 2018. A nomination is needed for an incoming ECORD Council Vice-Chair starting on July 1st, 2018. Based on the rotation scheme, the next Vice-Chair should be from France.

Rotation scheme	Chair	Country	Vice Chair
Oct 12 - March 13	Mike Webb	UK	Anne De Vernal
April 13 - Dec 13	Mike Webb	UK	Guido Lüniger
Jan 14 - Jun 14	Guido Lüniger	Germany	Mike Webb
Jul 14 - Dec 14	Guido Lüniger	Germany	Michel Diament
Jan 15 - Jun 15	Michel Diament	France	Guido Lüniger
Jul 15 – Dec 15	Michel Diament	France	Magnus Friberg
Jan 16 – Jun 16	Magnus Friberg	Sweden	Michel Diament
Jul 16 – Dec 16	Magnus Friberg	Sweden	Mike Webb
Dec 16 – Jun 17	Mike Webb	UK	Magnus Friberg
Jul 17 – Dec 17	Mike Webb	UK	Guido Lüniger
Jan 18 – Jun 18	Guido Lüniger	Germany	Mike Webb
Jun 18 – Dec 18	Guido Lüniger	Germany	*TBD*

The ECORD Council core group consists of five members: the Chair, the Vice-Chair and three additional Council delegates. The three major contributors will automatically belong to this core group. The current members of this core group are: M. Webb (UK), G. Lüniger (GER), E. Humler (FRA), M. Friberg (SWE) and M. Sacchi (ITA). M. Friberg (SWE) will rotate off at the end 2017. A nomination for a fifth member starting on January 1st, 2018, is needed.

G. Camoin summarized the ECORD memberships (Table 1). At the moment ECORD has 15 member countries. Besides Canada, all ECORD member countries are committed until the end of FY18. Since 2014 ECORD lost four member countries: Iceland, Belgium, Israel and Poland. Potential newcomers are encouraged to form a national consortium before joining ECORD.

Table 1: ECORD member countries and their commitments

Germany	>FY18
France	>FY18
UK	>FY18
Norway	>FY18
Switzerland	>FY18
Sweden	>FY18
Netherlands	>FY18
Italy	>FY18
Spain	>FY18
Denmark	>FY18
Ireland	>FY18
Austria	>FY18
Portugal	>FY18
Finland	>FY18
Canada	>FY17

Canada, Belgium and Israel are working on a renewed membership.

ECORD is negotiating with Turkey and discussing with Argentina concerning a potential membership.

ECORD is in contact with scientists from the University of Athens, Greece, and plans to organise an ECORD-IODP Day in Athens in early 2018.

Spain is back in ECORD since January 1st, 2016.

G. Camoin continued to summarize ECORD's partnership with the US and Japan. ECORD contributes $7 M USD to the annual funding of the *JOIDES Resolution* and about $1 M USD to the annual funding of the *Chikyu*. The JAMSTEC-ECORD MoU will be effective until September 30th, 2023 and the NSF-ECORD MoU until September 30th, 2019. Usually eight ECORD scientists are sailing on a *JR* expedition and at least three ECORD scientists are sailing on a *Chikyu* expedition. In addition, one ECORD member is member of the *JR* Facility Board and the *Chikyu* IODP Board. Concerning the MSP expeditions, 8 US and 5 associated members, 4 Japanese and at least 10 ECORD scientists are sailing. In addition, 1-3 berths are reserved for co-funded projects. At the moment, Co-chief scientists, educators and Outreach Officers are not counted against participation levels on all IODP expeditions.

ECORD renewal post FY18:
ECORD's renewal will mostly rely on 1) science results measured against the Science Plan over the first phase of IODP, 2) the success of ECORD's financial model for all IODP platforms during the first phase of IODP, 3) the operational plans for all IODP platforms during the second phase of IODP and 4) ECORD's position in the international research landscape and collaboration with other science programmes.

The ECORD renewal will be at the national level. The ECORD MoU has to be revisited and ECORD's IODP partnership has to be renegotiated. In July 2017, EMA started to update the ECORD MoU by revising the general principles of ECORD/IODP, and the ECORD Council, EMA, EFB and OETF sections. Early September a draft of the ECORD MoU has been sent to the ECORD Council and the Executive Bureau members. In November/December the ECORD MoU will be finalized and in early 2018 the funding agencies will receive the ECORD MoU for approval and signature. The CNRS Legal Department will conduct a final check. Decisions by the ECORD funding agencies are expected in summer 2018.

2017 Ocean Drilling Citation Report: ECORD contributed about 7900 publications related to all ocean drilling programs (1969-2017). The number of completed theses and dissertations based on Program Science is much lower compared to the United States (100 vs. 307 dissertations between 1969 and 2017). However, theses and dissertations are underreported to the AGI [American Geosciences Institute – GeoRef database]. Publication records for expeditions 301-368 (2003-2017) show the relative high number of publications for MSP expeditions. Like for the number of theses and dissertations, the number of publications is underreported. MSP Expeditions 302 and 310 are among the most cited IODP Expeditions. High-impact papers in journals such as *Nature*, *Science* and *Geology* are published on the ocean drilling programmes. Based on the number of publications, Earth Connections is the primary theme (2013-2017). Dedicated expeditions on the "Deep Biosphere" are required.

Action Item 2: EMA
to send the 2017 Ocean Drilling Citation Report to all meeting attendees

G. Camoin presented the content of the ECORD Annual Report 2017. The call for contributions will be distributed in early December 2017. The deadline for submission of contributions will be on January 15th, 2018. The review of all sections will be done until January 31st and the further editing until the end of February. Printed copies will be sent on March 16th, 2018.

G. Camoin listed the upcoming ECORD and IODP meetings.

An EGU Union Symposium on 50 years of International Ocean Drilling will be organised at the EGU 2018. The conveners will be H. Weissert, G. Panieri and G. Camoin.

7 ECORD FY17 and FY18 budgets (G. Camoin)

(10:11)

Usually, the ECORD budget ranges from $17M to 19M USD. Germany, France and the UK represent 80% of the ECORD budget. The annual contributions from the other countries range from $30,000 to $1.1 M USD. Additional project-based cash and in-kind contributions are not included in this calculation. Compared to the end of the previous IODP programme, ECORD lost about $3 M USD of its annual budget. ECORD spends every year $1.1 M USD for science, education, outreach and management. The fixed operational costs are of $2 M USD per year. More than 80% of the ECORD budget is spent on IODP Expeditions, i.e. $7 M USD for the *JR*, $1 M USD for the *Chikyu* and $6-7 M USD for MSP operations. The annual national IKCs and science costs are of about $7 M USD.

G. Camoin summarized the ECORD budget situation for FY17 (Tables 2, 3) and FY18 (Tables 4, 5).

FY16 ended with a positive balance of $10 M USD, which was carried over to FY17. Together with the FY17 member contributions of $17.67 M USD (Table 2), the FY17 income yields $27.67 M USD. Table 2 shows the relative percentages of the contributions to ECORD and asterisks indicate countries paying in their own currency. The expenses are of $18.51 M USD. The payment for the *Chikyu* could be delayed to 2019. The ESO FY17 expenses include the implementation of Expedition 381 'Corinth Active Rift Development'. FY17 should finish with a positive balance of $9.16 M USD (Table 3). Potential additional contributions (cash, IKCs) are not considered in this calculation.

Table 2: FY17 member contributions

	USD	%
Germany	5,600,000	31.7 %
France *	4,600,000	26.03 %
UK *	3,500,000	19.81 %
Norway	1,100,000	6.23 %
Switzerland	600,000	3.4 %
Sweden	528,000	2.99 %
Netherlands	500,000	2.83 %
Italy	500,000	2.83 %
Spain *	177,000	1 %
Denmark *	152,000	0.86 %
Ireland *	111,000	0.63 %
Austria	100,000	0.57 %
Portugal	90,000	0.51 %
Finland	80,000	0.45 %
Canada	28,500	0.16 %
TOTAL	17,667,000	

** Contributions in other currencies*
Exchange rates : 1€=1.19$

Table 3: ECORD FY17 budget

	FY17 Income (USD)	FY17 Expenses (USD)
FY 16 balance	10,002,265	
FY 17 contributions	17,667,000	
ECORD-NSF MoU		7,000,000
ECORD-JAMSTEC MoU		0 *
ESO		10,500,000
EMA		274,400
MagellanPlus		78,400
ECORD Outreach		63,300
ESSAC		276,783
BCR		313,642
TOTAL	27,669,265	18,506,525
FY 17 balance	9,162,740	

Exchange rate : 1€=1.19$

** Payment delayed to 2019*

The Amounts in USD are subjected to exchange rate fluctuations

G. Camoin gave an overview of the process and timeline for the payment of the member contributions. In January and February the member countries receive the ECORD Annex K2 from EMA and send two signed copies back to EMA who will also sign and forward this document to the INSU. In March and April the INSU issues the invoices to the member countries which should pay their contribution until the end of June. At the end of June 2017 seven payments were not received. The Annex K2 can also be signed for several years so that the INSU can issue the invoice already in January.

The FY18 contributions will be of $17.67 M USD (Table 4). Together with the positive FY17 balance the FY18 income will yield $26.83 M USD. The expenses will be of $10.09 M USD. FY18 should finish with a positive balance of $16.74 M USD (Table 5). Additional contributions are not considered in this calculation.

Table 4: FY18 member contributions

	USD
Germany	5,600,000
France *	4,600,000
UK *	3,500,000
Norway	1,100,000
Switzerland	600,000
Sweden	528,000
Netherlands	500,000
Italy	500,000
Spain *	177,000
Denmark *	152,000
Ireland *	111,000
Austria	100,000
Portugal	90,000
Finland	80,000
Canada	28,500
TOTAL	17,667,000

** Contributions in other currencies*
Exchange rates : 1€=1.19$

Table 5: ECORD FY18 budget

	FY18 Income (USD)	FY18 Expenses (USD)
FY 17 balance	9,162,740	
FY 18 contributions	17,667,000	
ECORD-NSF MoU		7,000,000
ECORD-JAMSTEC MoU		0 *
ESO		2,000,000 **
EMA		300,600
MagellanPlus		100,000
ECORD Outreach		65,900
ESSAC		294,158
BCR		332,093
TOTAL	26,829,740	10,092,751
FY 18 balance	16,736,989	

Exchange rate : 1€=1.19$

** Payment deferred to 2019*
*** Fixed operational costs*

The Amounts in USD are subjected to exchange rate fluctuations

COMMENT on carryover:
J. Austin asked for how long the funds can be carried over. If there is a new MoU in 2018, the funds can be carried over until the end of the programme in 2023 (G. Camoin).

EMA proposed to explore external funding opportunities (donations, sponsoring). EMA could pursue this objective if approved by the ECORD Council. Funds could be collected by the private sector of the Aix-Marseille University. The use of funds should be decided by the ECORD Council on an annual or multi-year basis. For this approach, the production of material by the OETF, such as an image video and a brochure for the general public and decision makers, is needed.

COMMENT on collection of external funds:
M. Webb asked how much budget is needed to create material for collecting external funds. G. Camoin estimated the required budget at 7,000-8,000 €. The budget includes the production of a 3-4 minutes video, which is based on images and videos that already exist, i.e. no additional filming is required (G. Camoin).

ECORD Council Consensus 17-10-02:
The ECORD Council mandates the ECORD Managing Agency to set up plans to raise external funding in support of ECORD activities.

Action Item 3: EOTF
to present a budget to the ECORD Council by the end of 2017 for the production of material, such as an ECORD image video and a brochure, to reach the general public, stakeholders, etc.

8 EMA FY18 budget (G. Camoin)

(10:24)

G. Camoin presented the composition of the EMA office and the people working for ECORD at the INSU in Paris. P. Maruéjol will retire in 2019. A call for an EMA Outreach Officer will be opened in 2018. G. Camoin summarized the mandate of EMA and he presented the breakdown for the EMA FY18 budget of $300,560 USD (Table 6).

Table 6: EMA FY18 budget

	in €	in $	Comparison FY18-FY17 (€)
Compensation for the Director	50,000	59,000	0
EMA Salaries			
Outreach Coordinator	47,000	55,500	0
Assistant Director	68,000	80,300	+ 14,000
Total EMA salaries	115,000	135,800	+ 14,000
Travels EMA CEREGE	50,000	59,000	0
Travels ORC (2)	2,000	2,400	-7,000
ECORD Meetings	10,000	11,800	+ 5,000
Consumables	2,500	3,000	0
SEP June meeting	5,000	5,900	-2,500
TOTAL	234,500	276,960	
Overheads CEREGE	20,000	23,600	0
GRAND TOTAL	254,500	300,560	+ 9,500 (+ 3 %)

Exchange rate : 1€ = 1.18 $ (27/09/17)

ECORD Council Consensus 17-10-03:
The ECORD Council approves the EMA FY18 budget of $300,560 USD to be administered by EMA Aix-en-Provence, France.

(10:35)
coffee break
(11:04)

9 ESSAC News and FY18 budget (J. Behrmann/A. Morris)

(11:04)
The ESSAC Office will move from the GEOMAR, Kiel, Germany to the University of Plymouth, UK and the new ESSAC Chair A. Morris will start on January 1st, 2018.

The current terms of SEP members from ECORD countries were extended to achieve a more balanced scheme of rotation with respect to rotations of US members. Three SEP Science members will rotate off by May 2018: M. Godard, M.-A. Gutscher and S. Bohaty. A call will be issued soon to replace these three SEP members. In May 2019 three SEP Site members need to be replaced.

A joint session was organised by ECORD/IODP and ICDP at the EGU 2017 with more than 40 oral and poster contributions. There are plans for a joint ECORD/IODP-ICDP session at the EGU 2018 similar to the format and scope of the EGU 2017 session.

In 2017 ESSAC organised calls for the ECORD Training Course, three ECORD Summer Schools, ECORD Research Grants, ECORD Distinguished Lecturer Program and eleven expeditions (8 *JR*, 2 MSPs and 1 *Chikyu*).

Summer Schools – Scholarships: The ECORD Training Course 2017 « Virtual Drillship Experience » (MARUM, Bremen, March 2017) was supported with 6,500 €. The Urbino Summer School in Paleoclimatology (July 2017) was funded with 10,000 € and nine scholarships with 1,200 € each were given. The ECORD Bremen Summer School (August 2017) on «Current-controlled seafloor archives: coral mounds and contourites» was supported with 10,000 €. The ECORD Petrophysics Summer School (Leicester, June/July 2017) was funded with 10,000 € and five scholarships with 800 € each were given.

Research Grants: Sixteen high-quality proposals from young scientists to work on DSDP-ODP-IODP cores or data were received with a large spread of disciplines and ECORD member countries. The overall budget is 18,000 € and the budget per proposal ranges from 2,414 to 3,000 €. Six research grants were awarded to young researchers from five different countries.

A. Morris presented the ESSAC FY18 budget (Table 7). The position for the next ESSAC Science Coordinator starting on January 1st, 2018 is advertised.

Table 7: ESSAC FY18 budget. Exchange rates (October 10th, 2017): 1 € = $1.18 USD, 1 GBP = 1.12 €, 1 GBP = $1.32 USD.

ESSAC Budget for FY 2018, University of Plymouth, UK	Budget FY18 USD	Budget FY18 EUR	Budget FY17 USD	Budget FY17 EUR	2017-18 %
Salary Costs:					
Science Coordinator (Grade 8/43)	80,578.00	68,369.00	81,049.00	68,686.00	-0.60
Chair, Compensation	59,000.00	50,000.00	59,000.00	50,000.00	0.00
Subtotal Salaries	**139,578.00**	**118,369.00**	**140,049.00**	**118,686.00**	**-0.34**
Non-Salary Costs:					
Travel and Subsistence					
Science Coordinator	7,080.00	6,000.00	7,080.00	6,000.00	0.00
Chair	17,700.00	15,000.00	17,700.00	15,000.00	0.00
Office Costs					
General Office Costs	7,080.00	6,000.00	7,080.00	6,000.00	0.00
Meetings					
ESSAC May Meeting	2,950.00	2,500.00	2,950.00	2,500.00	0.00
ESSAC October Meeting	2,950.00	2,500.00	2,950.00	2,500.00	0.00
Travel Support Invited Speakers to Meeting.	3,540.00	3,000.00	3,540.00	3,000.00	0.00
Travel Support ESSAC Liaison to SEP Meeting	3,540.00	3,000.00	3,540.00	3,000.00	0.00
Conference Travel Support	4,720.00	4,000.00	4,720.00	4,000.00	0.00
Education and Outreach					
ECORD DLP Support	14,160.00	12,000.00	14,160.00	12,000.00	0.00
ECORD Summer School Support	35,400.00	30,000.00	35,400.00	30,000.00	0.00
ECORD Training Course	7,670.00	6,500.00	7,670.00	6,500.00	0.00
ECORD Summer School student support	17,700.00	15,000.00	17,700.00	15,000.00	0.00
ECORD Research Grants	21,240.00	18,000.00	21,240.00	18,000.00	0.00
Teachers at Sea, travel support	8,850.00	7,500.00	8,850.00	7,500.00	0.00
Subtotal Non-Salary Costs	**154,580.00**	**131,000.00**	**154,580.00**	**131,000.00**	**0.00**
Total ECORD Contribution	**294,158.00**	**249,369.00**	**294,629.00**	**249,686.00**	**-0.16**

ECORD Council Consensus 17-10-04:
The ECORD Council approves the ESSAC FY18 budget of $294,158 USD to be administered by the University of Plymouth, UK.

ECORD Council Consensus 17-10-05:
The ECORD Council thanks Jan Behrmann for his dedicated services as ESSAC Chair over the last two years. We will miss him as we will miss his quota tables during our ECORD and IODP meetings.

10 News from ECORD member countries (Council & ESSAC Delegates)

(11:18)

ECORD Council and ESSAC delegates presented the news from their respective country.

B. Plunger (**Austria**): Young Austrian scientists sailing on IODP Expeditions are from different universities. M. Strasser is lead proponent for IODP proposal #866 "Japan Trench Paleoseismology" and received the Asahiko Taira International Scientific Ocean Drilling Research Prize for his work at the University of Innsbruck. G. Auer received a post-doctoral research fellowship from JAMSTEC. A core facility for logging, scanning, drilling and coring will be opened at the University of Innsbruck at the beginning of November 2017. W. Piller will remain SEP member.

J. Jamieson (**Canada**): Next year J. Jamieson will take over as Chair of the Canadian community. Canada's contribution has been below $30,000 USD per year for the past few years because in 2013 the programme that was funding Canada's contribution was cancelled by the previous government. Since then individual scientists provided funds from their research budgets. In the next 1-2 years Canada could get a commitment for funding levels prior to 2013. In 2018 J. Jamieson will participate in IODP Expedition 376 "Brothers Arc Flux". An application for ship time on a research vessel from Canada will be submitted and Canada's contribution to ECORD could be provided through this process. A commitment from the Research Council is needed to get funding levels back to the previous level. In November 2017 there will be more information concerning future funding.

M. Solveig-Seidenkrantz (**Denmark**): One Danish scientist was sailing and one Danish Co-chief scientist just came back from an IODP Expedition. Denmark is still benefitting from IODP Expedition 347 "Baltic Sea Paleoenvironment". There is a huge Danish interest in IODP research.

K. Stenbjoern (**Denmark**): There will not be any budget changes until the end of the current ECORD MoU.

M. Räisänen (**Finland**): Finland is willing to continue its participation until the end of the programme in 2023. The cancellation of the Arctic Expedition was very disappointing as there were three applications from Finnish scientists.

O. Hyttinen (**Finland**): There is ongoing research related to IODP Expedition 347 "Baltic Sea Paleoenvironment". Finland works on encouraging young scientists to work on topics that are not related to the Holocene or the Scandinavian area.

G. Ceuleneer (**France**): At the end of November 2016 IODP France Days were successfully held in Paris. The main problem for France is the heterogeneity of applications for IODP expeditions. For example, for some expeditions like for the

"Corinth Active Rift Development" expedition many French applications were received, but for other expeditions there were no applications. The problem is that many young scientists who would like to apply for an expedition have no Postdoc funds. The CNRS decided to fund two Postdoc salaries per year and in addition IODP France saved funds to offer one Postdoc position. Thus, two young scientists were supported to sail on Expedition 381 'Corinth Active Rift Development' and another young scientist will sail on the IODP Hikurangi Expedition. An IODP booth was organised at the International Meeting of Sedimentology, which was held from October 10-12, 2017 in Toulouse. Several French Educational Officers were sailing and a lot of effort was spent on making their post-cruise activities more efficient. A group is now in charge of producing documents and material for teachers in classrooms.

G. Lüniger (**Germany**): Germany is currently in the process of renewing its participation to ECORD and ICDP. Final results can be presented at the next ECORD Council Spring meeting. Germany hopes to keep the current level of funding.

J. Erbacher (**Germany**): A. Bornemann got a new position at BGR and left the IODP Germany Office. His successor will be L. Egger, who joins the team in December. The administration will also change soon and a new person (E. Uzar) will start on January 1st 2018. There will be three German Co-chief scientists: U. Röhl, K. Gohl and M. Weber.

X. Monteys (**Ireland**): A new generation of scientists keen on participating in IODP activities started. Two Irish senior researchers will sail on IODP Expedition 372 "Creeping Gas Hydrate Slides and Hikurangi LWD". Young researchers were encouraged to work on archive material of the scientific ocean drilling programmes. These projects can be funded by the Geological Survey of Ireland. IODP proposals with industry participation mainly on the climate theme are in preparation for potential *JR* Expeditions in the Northern Atlantic in 2020.

A. Argnani (**Italy**): There is a lot of interest in IODP by the Italian community, especially by young scientists. Since the beginning of 2017 fourty applications were submitted by Italian scientists. Five scientists sailed on four IODP Expeditions and there was one Italian Teacher at Sea. One scientist was invited to sail on IODP Expedition 375 "Hikurangi Subduction Margin" and L. De Santis will be sailing as Co-chief on IODP Expedition 374 "Ross Sea West Antarctic Ice Sheet History". IODP booths were organised at a couple of research meetings in Italy, for example, at a national meeting of the Italian Society of Mineralogy and Petrology and at the Past Antarctic Ice Sheet Dynamics (PAIS) Conference in Trieste. In June 2017, a MagellanPlus workshop on "Tyrrhenian Magmatism & Mantle Exhumation" was organised in Bologna and a proposal was submitted a few weeks ago. For the first time an IODP Day will be organised in mid-January 2018 to illustrate the Italian participation in past IODP expeditions and to stimulate the submission of new IODP drilling proposals for the Mediterranean Sea. At the beginning of 2018 a procedure for Research Grants will be

finalized to give an opportunity to young scientists to participate in IODP.

M. Sacchi (**Italy**): Currently, Italy's contribution to ECORD is $500,000 USD. The FY19 Italian contribution is secured at the same level. Italy is confident that the level of contribution can be kept for the next five years of the programme. A buffer is available to support scientific activities, the preparation of proposals and IODP related research.

B. Westerop (**Netherlands**): The Netherlands is developing a strategy to secure its contribution to ECORD.

L. Lourens (**Netherlands**): In 2017 one Dutch scientist was sailing on IODP Expedition 371 "Tasman Frontier Subduction Initiation and Paleogene Climate" and another Dutch scientist will sail on IODP Expedition 374 "Ross Sea West Antarctic Ice Sheet History". In general, the application pressure for IODP Expeditions is high. In early 2018, a White Paper will be submitted within the new organisation of the Netherlands Organisation for Scientific Research (NWO). The request is to continue but also to increase the Dutch contribution to ECORD. The annual, national ICDP-IODP meeting will be organised on November 10th, 2017, which will be held at the Royal Netherlands Institute for Sea Research (NIOZ). The ScienceMedia.nl team of Dan Brinkhuis won a silver medal for their documentary on IODP Expedition 370 "Temperature Limit of the Deep Biosphere off Muroto" at the Annual Dutch Film Festival.

M. Engelhardt (**Norway**): Norway is the 4th largest contributor to ECORD and is very interested in Arctic and Antarctic research. The cancellation of the Arctic Expedition is unfortunate and Norway can not guarantee to continue its contribution to ECORD at the same level.

H. Kleiven (**Norway**): IODP activities in Norway are increasing to new groups and new generations. There is a huge age turnover at the universities. Three Norwegian scientists participated in IODP Expedition 381 "Corinth Active Rift Development" (1 offshore and 2 onshore). Ten Norwegian scientists applied for the Arctic Expedition that was just cancelled. Norway just recently agreed to fund an enormous Arctic programme with 800 M kroner [about $100 M USD]. There is also a lot of interest for Antarctic research. Many publications related to IODP are coming out and many theses are produced. A lot of research is developed around IODP and that is a legacy, which Norway has to continue.

A. Voelker (**Portugal**): Sofia Cordeiro is the new ECORD Council Alternate. Portugal is optimistic to continue its contribution to ECORD for the next five years of the programme. Research is actively pursued on material from previous IODP expeditions. Young scientists are also getting more active. The ESSAC Alternate Cristina Veiga-Pires involved high school students in summer school activities and organized an exhibition related to the Asteroid Day (see ECORD Newsletter).

J. R. Sánchez Quintana (**Spain**): Spain wants to maintain its participation to ECORD and wants to get a long-term agreement.

C. Escutia (**Spain**): The Spanish community is very active. In 2016 and 2017 four Spanish scientists participated in IODP expeditions. Five applications were submitted for IODP Expeditions 374 "Ross Sea West Antarctic Ice Sheet History", 382 "Iceberg Alley Paleoceanography & South Falkland Slope Drift" and 378 "South Pacific Paleogene Climate". Applications are from young, non-IODP scientists from seven different Spanish institues and universities. Carlota Escutia was invited as Co-chief scientist on Expedition 373 "Antarctic Cenozoic Paleoclimate". Participation in educational activities is very important for the Spanish Ministry. Spanish scientists were well represented in the ECORD Summer Schools and they were active at the Past Antarctic Ice Sheet Dynamics (PAIS) Conference, which was held in Trieste in 2017.

J. Henderiks (**Sweden**): The Swedish community continues to actively participate in IODP through post-cruise research. Swedish scientists participated in several IODP expeditions over the past four years and they contributed to high-impact publications. At the moment there are several applications to sail on IODP Expeditions, for example, for Expedition 382 "Iceberg Alley Paleoceanography & South Falkland Slope Drift". Sweden is making an effort to reach out to the new generation. The Swedish research community needs to be informed about all IODP opportunities, i.e. not only on how to sail but also on the ECORD Scholarships and Summer Schools, etc. Recently, the Swedish Scientific Drilling Programme (SSDP) webpage on ocean and continental drilling was updated (https://www.ssdp.se).

M. Friberg (**Sweden**): Sweden is committed until the end of the IODP programme but at a slightly lower level, probably on the order of $400,000 USD.

G. Früh-Green (**Switzerland**): Switzerland is committed until the end of FY18. The science community has to submit a new proposal by April 1st, 2018, but a decision will be made by the end of September 2018. This decision will include the commitment for FY19 as well as a future commitment for three or five years and the level of contribution to ECORD. Swiss Drilling links continental and ocean drilling, and ICDP will submit a proposal at the same time to continue their membership. In September 2017 a Swiss Drilling Day, linking ICDP and IODP, was organised with over 50 people from different universities in Switzerland. The number of Swiss applicants is relatively stable. Most of the scientists who sailed on IODP Expeditions were early-career scientists. There is a strong interest of organic geochemists and microbiologists. Two Swiss microbiologists of M. A. Lever's team at the ETH Zurich sailed. Recently, most of the scientists participating in IODP Expeditions have been from the ETH Zurich, but IODP will also be spread to other universities to get a better balance between Swiss universities. M. Kern-Lütschg stated that the cancellation of the Arctic Expedition is unfortunate.

M. Webb (**UK**): The Research Council has just started an evaluation process. The evaluation panel will meet in March 2018 and Damon Teagle of the University of Southampton will lead the drafting of the evaluation report. This report will also use some outcomes of ECORD's external evaluation. By summer 2018 a proposal will be submitted to NERC and a decision on UK's contribution to ECORD for the next phase of the programme from FY19 to FY23 will be made very quickly after that. The funding until the end of the current phase is in place and there will be no change.

A. Morris (**UK**): The UK community has strong interest in all aspects of IODP/ECORD science. Candidates applying for IODP expeditions are strong and good applications for ECORD Research Grants and Scholarships were submitted. Post-cruise funding is provided by NERC and helps to promote science. On November 3rd, 2017 the UK-IODP Annual Science Meeting will be held at the Royal Geographical Society in London with a strong participation of young scientists.

DISCUSSION on IODP proposal writing by early-career scientists:
J. Austin mentioned that the total number of active proponents slightly decreased over the past few years. Ways have to be explored to involve young scientists in writing IODP proposals. The next generation has not only to be involved in sailing, but also in writing proposals (J. Austin). In the UK this risk was already identified a few years ago and during a 1-2 national meeting possibilities were explored together with young researchers of how to develop an IODP proposal (M. Webb). G. Camoin suggested to the MagellanPlus Committee to advertise a call for workshops on how to write an IODP proposal. Such a workshop was held in the US and involved senior and young scientists working on ideas for IODP proposals (J. Austin). At the end of the ANZIC long-range planning workshop young scientists could be on proponents teams (J. Austin). Senior and young scientists have to work together and young scientists should take the lead (J. Austin). A few years ago G. Camoin organised such a workshop on IODP proposal writing in Bremen, which was very successful. ECORD has to organise such a workshop (G. Camoin). During the ECORD Bremen Summer Schools, one day is always dedicated to train IODP proposal writing (U. Röhl). The ECORD Training Course "Virtual Drillship" also dedicates time to help young scientists in IODP proposal writing (X. Monteys).

MSP OPERATIONS & ECORD FACILITIES

11 ESO Report and FY18 budget (D. McInroy)

(12:10)

D. McInroy summarized the 2017 activities.

IODP Expedition 357 "Atlantis Massif Serpentinization and Life": A second post-expedition meeting was held on September 4th-7th, 2017. Publications will be published soon.

IODP Expedition 364 "Chicxulub Impact Crater": The moratorium ended on October 15th, 2017. A documentary was aired in the UK (BBC), France and Australia. A second US version (NOVA) will be aired in December 2017. Over 100 media articles have been written. Numerous conference special sessions have been arranged and numerous high-impact manuscripts are anticipated.

IODP Expedition 381 "Corinth Active Rift Development": The Drilling services contract was signed with Fugro Geoservices on May 19th, 2017. The offshore phase just started on October 22nd from Corinth and will last until December 2017. The estimated duration for this expedition is 47 days with up to nine days for contingency, i.e. the maximum duration will be 56 days. The main mobilisation was done in Falmouth, UK on October 3rd-7th and a second mobilisation was done in Corinth, Greece on October 16th-22nd. The vessel *Fugro Synergy* is equipped with a permanent rig and a *Seadevil* template. This template grips the drill string and controls the weight and the penetration. The Onshore Science Party will be held from January 31st to February 2018.

COMMENT on Seadevil template:

The US is paying close attention to the Corinth Expedition as the use of the template has relevance on what could possibly be next after the JR (J. Allan).

IODP Expedition 377 "Central Arctic Paleoceanography": The tender exercise was conducted and a compilant and affordable drillship was found. This summer a detailed ice management consultation was initiated. The secondary icebreaker was an IKC from the AWI, the vessel *Polarstern*, and it was swapped with the Swedish *Oden* as a result of the detailed ice management. A Co-chief meeting was held in August 2017 and a call for scientists was issued. The critical IKC from Russia, the lead icebreaker, was not offered. Consequently, ESO cannot implement ArcOP in 2018 with the current budget. An extra $5 M USD would be needed to cover the lack of the IKC. Russian icebreakers are likely to be available for commercial hire in the August-September window. ESO tries to get more feedback from Russia on what went wrong. On December 5th, 2017 ESO will attend a one-day conference hosted by the NERC Arctic Office and the Moscow British Embassy on strengthening the engagement of UK based researchers in the Russian Arctic. The Director General of the Russian Geological Research Institute is keen to discuss future ArcOP opportunities.

For the future, ESO could impose earlier deadlines for commitment of IKCs and a guarantee of IKCs is needed before scheduling.

Future options for MSP expeditions 2018 onwards:
After the cancellation of ArcOP there are two options: 1) to reschedule ArcOP in 2019 and to have no expedition in 2018, and 2) to schedule an alternative expedition in 2018 and not to implement ArcOP in 2019. For option 1) a higher budget would be needed in case IKCs do not emerge. The *Oden* is available but it needs effort from the Swedish scientific community to apply for ship time. Alternative 2018 expeditions are*: Expedition 373 "Antarctic Cenozoic Paleoclimate", Proposal 716 "Hawaiian Drowned Reefs", Proposal 730 "Sabine Bank Sea Level" and Proposal 637 "New England Shelf Hydrogeology". Proposal 637 is currently being re-formulated as an ADP.
Seafloor drill options: Academic drills (RD2 and MeBo) did not perform well on Expedition 357 "Atlantis Massif Serpentinization and Life". The RD2 has been upgraded, but it is still untested to a satisfactory level. The MeBo is not available until at least 2020. Therefore, ESO have obtained up-to-date rates and capabilities for commercial seafloor drill systems. A continuing disadvantage of commercial systems is the lack of downhole logging capability.

COMMENT on seafloor drills:
M. Friberg asked when the seafloor drilling is ready to use. The RD2 will be tested in summer 2018 and the MeBo will not be available before 2020 (D. McInroy).

COMMENT on the vessel Oden:
M. Friberg asked if the IKC offered by the AWI, the R/V Polarstern, will be still available. Sweden has to save funds if the Oden is given as an IKC to ECORD. This cannot be done until 2020 as all icebreaker funds were already used in 2017 and funds are always saved over three years (M. Friberg).

(12:40)
lunch break
(13:41)

SCIENCE TALK: IODP Proposal #866: Japan Trench Paleoseismology (M. Strasser)

* See confidential annex.

12 EPC Report (S. Davies/S. Morgan)

(14:27)

S. Davies presented the activities of the European Petrophysics Consortium (EPC): equipment & measurements, post-expedition activities, preparation for upcoming expeditions, education and outreach.

The European Petrophysics Consortium (EPC) comprises three universities in Leicester, Montpellier and Aachen. The EPC provides petrophysics staff scientists and petrophysicists, and expertise in downhole logging and core petrophysics programmes. The EPC has dedicated equipment for core logging and discrete measurements. Furthermore, the EPC is involved in data calibration, quality control, evaluation and interpretation of these data. As part of ESO, the EPC is involved in post-expedition activities, the preparation of upcoming expeditions, capability development and training for IODP MSP expeditions and other key activities, including education and training.

IODP Expedition 357 "Atlantis Massif": The EPC Lead and one Expedition 357 Petrophysics Staff Scientist attended the Expedition Review Meeting that was held on October 24th-25th, 2016 in Bremen.

IODP Expedition 364 "Chicxulub Impact Crater": The EPC worked together with the MARUM on QA/QC reports on core physical properties and downhole logging datasets. A Petrophysics Staff Scientist from Montpellier attended the Editorial Meeting on March 27th-31st, 2017 at College Station. EPC contributed to the expedition review document and attended the Expedition 364 Review Meeting on June 20th, 2017 in Lisbon.

Preparation for upcoming MSP operations includes in-house Techlog and external Python scripting training, offshore survival training, MSCL training, radiation safety training and portable Appliance Testing.

Capability development: A 10' logging-dedicated container providing essential environmental protection during logging at high latitudes was developed in Montpellier and is now offshore Corinth. In addition, a new winch with a higher depth of deployment was developed.

IODP Expedition 381 "Corinth Active Rift Development": EPC participated in the expedition webinar. A Petrophysics Staff Scientist visited the D/V *Fugro Synergy* together with other ESO staff. EPC attended the Expedition 381 Project Management Team meeting in Edinburgh. A permit for the use of a radioactive source in Greek territorial waters was secured. A proposed logging programme was developed in association with the Co-chiefs. The EPC proposed the integration of geotechnical measurements into the core flow in collaboration with the MARUM and the Expedition Project Manager and Co-chiefs. The winch and logging tool testing is completed and the shear strength method was agreed. The stackable ultra-slimline tools will be used again

as it was very successful during IODP Expedition 364. Ephemeral properties and natural gamma radiation measurements will be done offshore using extended capabilities. During the pre-onshore measurement phase thermal conductivity will be measured. The start date will depend on the arrival of the cores. During the Onshore Science Party moisture & density (MAD), discrete P-wave measurements, digital linescans, color reflectance spectrophotometry and geotechnical measurements will be performed.

Education, training & outreach: EPC is present on the Social Media and has its own blog. In 2017, EPC was involved in the ECORD Summer School in Bremen and hosted the second ECORD Petrophysics Summer School in Leicester. Thirty participants from 25 different institutions and 17 countries attended the Petrophysics Summer School. The duration of this Summer School was increased by one day and several new activities were introduced. Scholarships were provided by ECORD (5), UK-IODP (2) and USSSP (9).

EPC produces an Annual Report and has a website (http://www.le.ac.uk/epc).

13 Bremen Core Repository Report and FY18 budget (U. Röhl)

(14:40)

U. Röhl gave an update on the Bremen Core Repository (BCR). Core curation includes the documentation, preservation and protection of the cores as well as the promotion of the responsibility of taking samples from the cores for scientific puposes. The BCR currently archives 154 km of cores from the Atlantic Ocean, Arctic Ocean, Mediterranean Sea, Black Sea and Baltic Sea. Since 1969 more than 1.6 M samples have been taken from BCR cores.

Curation and sampling: Since October 2016 42,046 samples have been taken. The BCR successfuly dealt with sample requests backlog and continued to acquire digital overview scans of the BCR thin section collection. The importance of archiving cores is demonstrated by the relatively high number of sample requests for older cores.

Data management: The new Repository Database 'CurationDIS' version is routinely used. IGSN numbers have been generated for previous MSP expeditions. The BCR is working on long-term storage for expedition data in PANGAEA. The CoreWall System was upgraded and a new cloud system is used for expedition data. IT hardware was upgraded.

IODP Expedition 364 "Chicxulub Impact Crater": Since November 2016, 663 samples were taken for 21 requests. A total of 191 archive core half sections were described for either shear faults or trace fossils. XRF scanning was done on 110 archive half sections. A rotating scheme was developed for 261 shipboard thin sections shared between seven Science Party members.

IODP Expedition 381 "Corinth Active Rift Development": The BCR helped preparing the offshore phase by organizing curation equipment and consumables, working on sampling planning and handling the sample requests.

Education & Outreach: A German TV team was filming at the BCR (ZDF show Terra X). The broadcast date was postponed to spring 2018. Members of the ECORD Evaluation Committee visited the BCR in June 2017 and participants of the GeoBremen conference toured the BCR in September 2017. A session on "Advances in scientific drilling in oceans and on continents" was organised at the GeoBremen 2017 and U. Prange presented a talk on "International Outreach within ECORD". A live event with the *JR* was organised during the Bremen Summer School. Furthermore, filming was done at the BCR by an image and video artist (Armin Linke). His video was part of an exhibition on oceans in Oldenburg in July/September 2017 and it will be part of the weekend of oceanic performances, installations and panels on "Fishing for Islands" in Berlin at the end of October 2017. At the moment, there is a Press Tour at the BCR on "Seas and Oceans" organised by the German Academic Exchange Service.
This year is the 11th year of the Bremen ECORD Summer School. In 2017 the topic of the Summer School was "Current-controlled Sea Floor Archives: Coral Mounds & Contourites". The Summer School combines lectures and interactive discussions on the main themes of IODP with practical 'shipboard' methodologies. The topic for the 2018 ECORD Bremen Summer School will be " Sub-seafloor Fluid Transport and Gas Hydrate Dynamics". In March 2017, the third ECORD Training Course was held at the MARUM with 30 participants from 12 different countries. The participants were prepared for future IODP expeditions. The 4th ECORD Training Course is planned for 2018.

Cores from the *JR* for XRF Scanning: More than 3 km of cores from IODP Expedition 363 "Western Pacific Warm Pool" were temporarily stored at the BCR from March to September 2017. XRF scanning was undertaken at the MARUM and the University of Kiel. The data will be project data and not expedition data.

Milestones in 2018 are:

- sampling of more recent expeditions (342, 347, 357, 364),
- Update of the CurationDIS to integrate new data types from X364 and X381,
- Data transfer from ExpeditionDIS-364/-381 to CurationDIS,
- Update the IODP-related publications SEDIS catalogue (*manually*) including incremental XML update (from AGI) with IODP-related publications for SEDIS publications index,
- Participating in a variety of meetings.
- Planning of core workflow and compilation of sampling plans for future MSP expedition(s).
- ECORD Training Course 2018 (Apr) / ECORD Summer School 2018 (Sept)

U. Röhl continued to present the BCR FY18 budget (Table 8).

Table 8: BCR FY18 budget (January 1-December 31, 2018)

Core Curation	TOTAL
Salary and Fringes 1.6 FTE	$ 272,621.00
Travel	$ 2,974.00
Supplies	$ 3,304.00
Shipping	$ 18,998.00
Student workers	$ 13,546.00
CurationDIS update	$ 4,956.00
SEDIS maintenance 24/7 & upgrades 0.08 FTE	$ 15,694.00
Total Core Curation	$ 332,093.00

ECORD Council Consensus 17-10-06:
The ECORD Council approves the Bremen Core Repository (BCR) FY18 budget of $332,093 USD.

14 ECORD Facility Board Report and X364 Review (G. Camoin for G. Lericolais)

(15:01)

G. Camoin gave an update on the ECORD Facility Board (EFB) activities. The EFB members with voting rights are 1) the six Science Board members: EFB Chair Gilles Lericolais (FRA), EFB Vice-Chair and incoming Chair Gabriele Uenzelmann-Neben (GER), Gretchen Früh-Green (CHE), Ellen Thomas (USA), Stephen Gallagher (AUS) and Fumio Inagaki (JPN); 2) the members of the ECORD Executive Bureau: ECORD Council core group members, the Director of EMA, the ESO Chair and Manager and the ESSAC Chair; and 3) NSF and MEXT with one representative each.

Changes in EFB membership: New members in 2017 are Gabriele Uenzelmann-Neben (GER), Gretchen Früh-Green (CHE) and Ellen Thomas (USA). The three-years term of the EFB Chair Gilles Lericolais (FRA) will end in December 2018.

G. Camoin presented the current MSP expeditions schedule*:

2013-14	2015	2016	2017	2018	2019	2020	2021	2022	2023
347 Baltic *Drillship*	357 Atlantis *Seabed drills (MeBo & RD-II)* $ IKC	364 Chicxulub *Lift boat (L/B Myrtle)* $$	381 Corinth *Drillship* $$	No expedition ?	N.N. ? $	N.N. ? $	373 Antarctic *Seabed drill (RD-II) ?* $$	N.N. *Seabed drill ? (MeBo)* $	N.N. $$/$$$

At its next meeting the EFB should consider to schedule expeditions only if the IKCs are secured.

G. Camoin gave an overview of the MSP proposals at the EFB:

Proposal	type	Short Title	PI	Country	Exp.	
637	Full2	*New England Shelf Hydrogeology*	Person	USA		
708	Full	*Central Arctic Paleoceanography*	Stein	ECORD (Germany)	377	ON HOLD
716	Full2	*Hawaiian Drowned Reefs*	Webster	ANZIC (Australia)		
730	Full2	*Sabine Bank Sea Level*	Taylor	USA		
813	Full	*Antarctic Cenozoic Paleoclimate*	Williams	USA	373	SCHED
879	Full	*Corinth Active Rift Development*	McNeill	ECORD (UK)	381	IMPL

Scheduled expeditions*:

IODP Expedition 381 "Corinth Active Rift Development": currently implemented (October - December 2017); three primary and three alternate sites with a drill ship.

IODP Expedition 373 "Antarctic Paleoclimate": The expedition was initially scheduled for early 2018 and finally postponed to early 2021.

MSP proposals in the EFB waiting room*:

IODP Expedition 377 "Arctic Paleoceanography": The expedition was scheduled for the Arctic summer 2018. One site will be drilled with a drill ship.

637-Full2 "New England Shelf Hydrogeology": The expedition costs will be revised after their workshop.

* See confidential annex.

716-Full2 'Hawaiian Drowned Reefs': The proponents are willing to wait for either drilling option (seafloor drill or geotechnical ship).
730-Full2 'Sabine Bank Sea-Level': RD2 or MeBo may be used.

G. Camoin summarized the MSP proposals at the SEP:

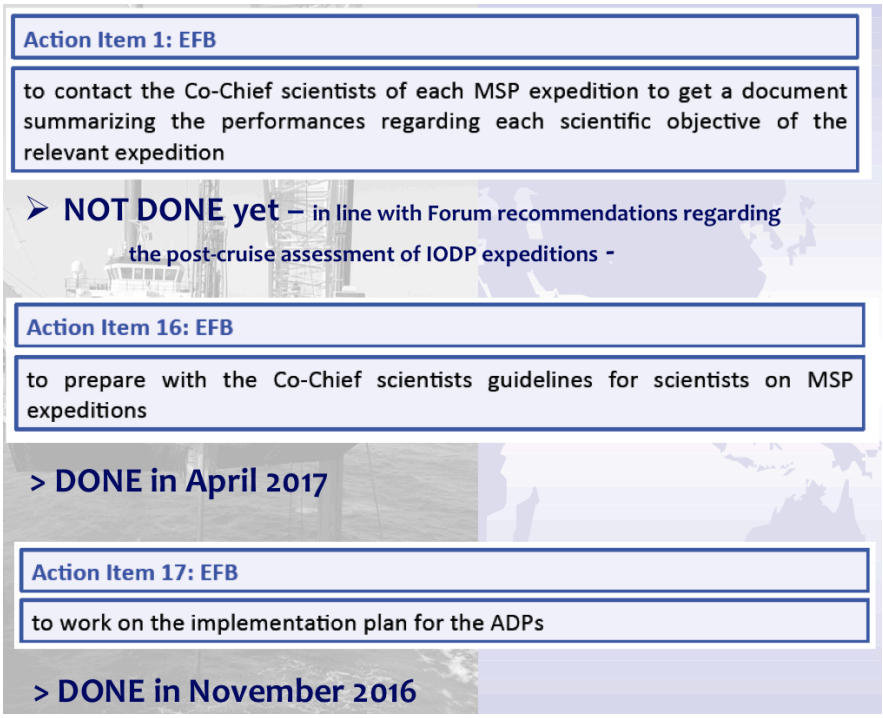
Proposal#	type	Short Title	PI	Country
796	ADP	NADIR - Nice Amphibious Drilling	Kopf	ECORD - Germany
797 *	Pre	Alaska Beaufort Margin	Ruppel	USA
806 *	Pre	Beaufort Gas Hydrate	Paull	USA
812 *	Pre	Ross Sea Glacial History	Wilson	USA
863	MDP	ISOLAT - Southern Ocean Paleoclimate	Peterson	USA
866	Full2	Japan Trench Paleoseismology	Strasser	ECORD - Switzerland
915	Pre	North Atlantic Fjord Sediment Archives	Giraudeau	ECORD - France

* No recent activity

G. Camoin reported on the Expedition 364 Operational Review Committee Meeting that was held on June 20, 2017 in Lisbon. The two external reviewers were Ken Miller (Rutgers University, USA) and Agnes Kontny (Karlsruhe Institute of Technology, GER).

The Review Committee stated that IODP Expedition 364 "Chicxulub Impact Crater" was very successful. It was the first IODP drilling expedition targeting an impact crater and high-quality core material and logging data have and will significantly contribute to answer the main targets of the project. The first scientific outcome was published in *Science*. The review panel proposed nine recommendations to improve next equivalent expeditions (see agenda book pages 71-72).

G. Camoin reported on the status of EFB action items of the ECORD Council-ESSAC meeting #4:



The next EFB meeting will be held on March 6th-7th, 2018 in Venice, Italy. During this meeting, the EFB will work on the 2019-2023 MSP operational plan, the policy regarding IKCs for MSP expeditions, the policy regarding CPP for MSP expeditions, the planning of the Expedition 381 "Corinth Active Rift Development" Operational Review and the EFB action on post-expediion assessments (IODP Forum consensus 17-03).

ECORD Council Consensus 17-10-07:
The ECORD Council accepts the Operational Review report of Expedition 364 "Chicxulub Impact Crater" and supports the recommendations therein.

ECORD RENEWAL

15 NSF view regarding the second phase of IODP (R. Murray) and 2019-23 NSF-ECORD MoU (J. Allan/G. Camoin)

(15:18)

G. Camoin presented the timeline for the *JR* Facility Renewal and ECORD's renewal post FY18 (Figure 1). A Facility Review was done in February 2017 and a report was produced in May 2017. A U.S. Community Workshop was held in September 2017 with the goal to evaluate the effectiveness of the *JR* toward achieving the Science Plan Challenges. In 2018 the Partner Memoranda will be prepared. A formal Memoranda review by the agencies and the signing of the MoUs will be done in 2019.

Following ECORD's evaluation, the ECORD MoU will be updated during the second half of FY17. The funding agencies will agree during the first half of FY18. At the end of FY18 until the beginning of FY19 the IODP MoUs will be reviewed and they will be signed in summer 2019.

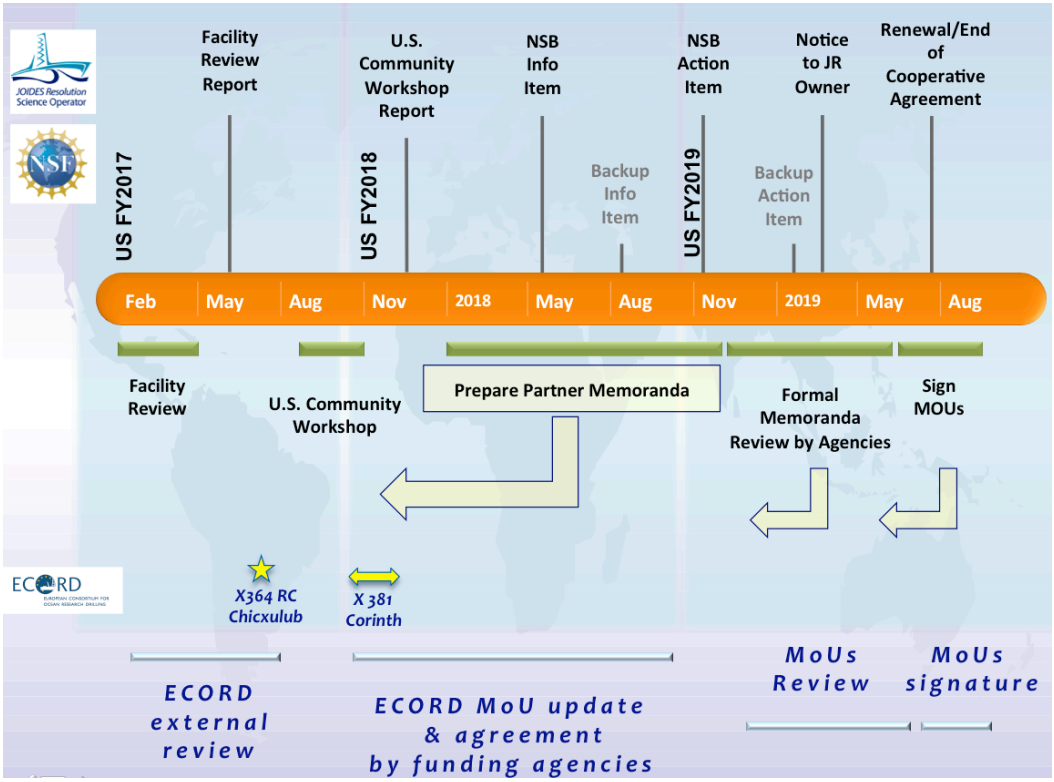
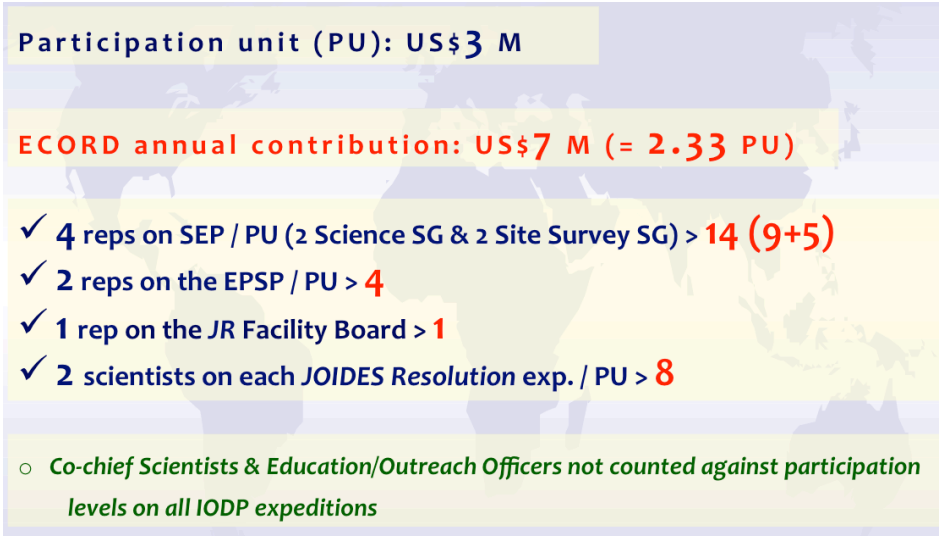


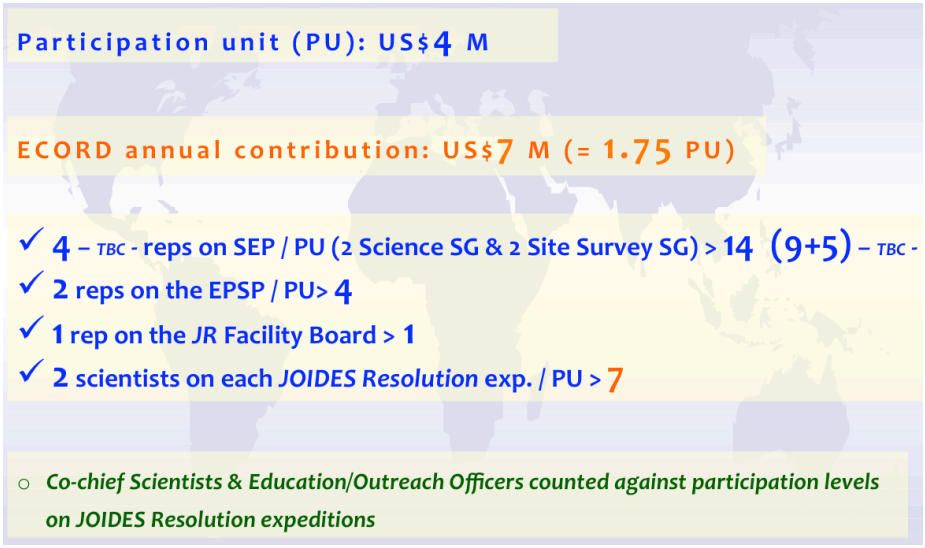
Figure 1: Timeline for the *JR* Facility Renewal and ECORD's renewal post FY18.

G. Camoin gave an overview of the current situation (October 1st, 2013 - September 30th, 2019) concerning ECORD's financial contribution and participation:



There are berths for eight US scientists and five scientists from the other *JR* consortium members available for each MSP expedition. Co-chief scientists and Education/Outreach Officers are not counted against participation levels on all IODP expeditions. ECORD stated in its MoU the use of diverse drilling and coring systems.

G. Camoin continued to summarize the <u>future situation</u> (October 1st, 2019 - September 30th, 2023) concerning ECORD's financial contribution and participation:



There will be berths for eight US scientists and five scientists from the other *JR* consortium members available for each MSP expedition. Co-chief scientists and Education/Outreach Officers will not be counted against participation levels on all IODP expeditions (ECORD Council consensus 17-06-02). ECORD will state in its MoU the use of diverse drilling and coring systems.

<u>DISCUSSION on the second phase of IODP:</u>
Flexibility is needed for the selection of <u>panel members</u> (J. Allan). The Chairs have to select members for the science and site survey subgroups (J. Allan). It has to be made sure that the panels have the right expertise (G. Camoin). Members with data and science expertise are needed on the panels (J. Austin). Communication between the PMOs and the SEP Chairs is important (G. Camoin).
The exchange of berths and the credit for running the BCR are part of the equation and the US will be consistent with all its partners (J. Allan).
J. Erbacher asked how the <u>Education/Outreach Officers</u> are handled. In the current memoranda there are no rights for Education/Outreach Officers (J. Allan). It has to be made sure that they operate in the proper chain of command and that their work fully reflects the rights of the Science Party (J. Allan). The best way is to pay for an Education/Outreach Officer berth and to clarify the framework on how they work onboard (J. Allan). The JRSO put together responsibility documents. Co-chiefs on a JR expedition need a commitment for financial support.

R. Murray summarized the NSF view regarding the second phase of IODP. NSF is very pleased that the content, tone and timing of the MoUs have gone so smoothly. NSF is optimistic that this renewal process is going well. The timeline has slid by one cycle of the overview body due to an enhanced degree of oversight. Preliminary conversations were initiated. IODP is highly regarded within NSF and IODP is seen as a model on how international cooperation can succeed. IODP is strong and has widespread community support, however, IODP also has to give attention to the way operating after 2023. At the Forum level, J. Austin is keeping track of overall successes and gap analysis of fulfilling the Science Plan. The US has to do this kind of analysis in the context of post FY23.

The meeting was closed at 15:43.

16 CLOSED SESSION (ECORD Council and ECORD Executive members only)

2018-2023 MSP operational plan

ECORD Council Consensus 17-10-08:
In light of the cancellation of the ArcOP expedition and based on time and budget constraints, the ECORD Council decides not to implement any MSP expedition in 2018.

ECORD Council Consensus 17-10-09:
The ECORD Council decides to keep the upper budget limit previously defined for the Antarctic and ArcOP expeditions.

ECORD Council Consensus 17-10-10:
The ECORD Council tasks the ECORD Facility Board to define at its March 2018 meeting viable scenarios for future MSP expeditions, to be presented at the 2018 ECORD Council Spring meeting.
For these scenarios, the ECORD Council recommends to avoid a 2-years gap in the 2018-2023 MSP operational plan and any further cancellation or postponement of MSP expeditions.

ECORD Council Consensus 17-10-11:
The ECORD Council encourages the science community to work with ESO to identify potential in-kind-contributions related to the implementation of the ArcOP expedition. Such an IKC must be secured before the 2018 ECORD Council Spring meeting if the ArcOP expedition is to be implemented in 2019.

ECORD MoU

ECORD Council Consensus 17-10-12:
The ECORD Council decides that Co-chiefs and Outreach Officers will not be counted against participation level on MSP expeditions implemented between 2019 and 2023. The selection of Outreach Officers by the ECORD Outreach Task Force will have to follow an open call for applications.

ECORD Council

ECORD Council Consensus 17-10-13:
The ECORD Council approves the nomination of Markus Engelhardt (Research Council Norway) as new member of the ECORD Council core group from January 1st, 2018 onwards.

ECORD Council Consensus 17-10-14:
The ECORD Council approves the nomination of Eric Humler (CNRS, France) as incoming ECORD Council Vice-Chair starting on July 1st, 2018.

ECORD Council Consensus 17-10-15:
The ECORD Council tasks EMA to explore venues at major airport hubs for the 2018 ECORD Council Spring meeting to be held during the last week of June.

ECORD Council Consensus 17-10-16:
The ECORD Council decides that the ECORD Council-ESSAC meeting #6 will be held in The Hague on November 7th and 8th, 2018.

October 25th, 2017

(9:11)
M. Webb opened the meeting and presented the ECORD Council consensus items of the closed session.

IODP NEWS

17 IODP Forum (J. Austin)

(9:16)
J. Austin presented the general purpose of the IODP Forum. It's a venue for exchanging ideas and views on the scientific progress of the programme. The IODP Forum meets once a year and the participation is open to everybody. The most recent meeting took place in September 2017 in Shanghai, China. The next IODP Forum meeting will be held in Goa, India in September 2018.
The IODP Forum Chair maintains a document on the progress of IODP towards fulfillment of the 2013-2023 Science Plan (http://www.iodp.org/iodp-forum).

J. Austin presented the progress on 2015-2017 Forum consensus items (see agenda book pages 76-78).

18 MEXT (T. Watanabe)

(9:32)
T. Watanabe summarized changes in the staff, the JAMSTEC budget allocation since FY11 and the Japanese Renewal Plan.

JAMSTEC budget allocation: The annual JAMSTEC budget was slightly decreasing since 2011 but remained stable over the past two years.

Review Process in Japan: In 2017 until early 2018 J-DESC is in a streamlining process. The Basic Plan on Ocean Policy of Japan is under review and will be renewed as 3rd Plan in early 2018. JAMSTEC 3rd Mid-term Targets and Activities Plan will be assessed and renewed in FY18. The 4th term is FY19-23.

19 ANZIC (L. Armand)

(9:39)
L. Armand presented the ANZIC personnel, panel representative changes, a strategy for the 2019/20 Bid Development, recent and future ANZIC activities. L. Armand took over Neville Exon's position within ANZIC and will therefore cease to be the ANZIC-ECORD liason.

Strategy for 2019/20 Bid Development: The Governing Council meeting will be held on December 1st, 2017. Strategy Plan Development starts for the renewal. New consortium membership fees are taken into account and consortium partnership renegotiations will start soon. The themes of interest are the Biosphere Frontiers theme, technology developments, national seismic capabilities, international collaboration, external funding sources and outreach targets.

Recent ANZIC activities:
The Australasian IODP Regional Workshop, a proposal planning workshop was held in Sydney in June 2017. This workshop was designed to help to develop strong drilling proposals for this broad region, especially for when the *JR* could potentially return in 2022. The workshop was attended by 100 scientists and many new or revised proposals will be developed. The workshop report can be found on http://iodp.org.au/.
Three ANZIC scientists have been aboard IODP Expedition 371 "Tasman Frontier Subduction Initiation and Paleogene Climate" and one Australian sailed in an education and outreach role.
Three ANZIC scientists are sailing on IODP Expedition 369 "Australia Cretaceous Climate and Tectonics".

Future ANZIC activities:
IODP Expedition 372 "Creeping Gas Hydrate Slides and Hikurangi LWD" will be implemented at the end of 2017 in the Australia-New Zealand region. For 2018 four IODP Expeditions are scheduled in the region:

- IODP Expedition 374 "Ross Sea West Antarctic Ice Sheet History" will start in January 2018.
- IODP Expedition 375 "Hikurangi Subduction Margin" will start in March 2018.
- IODP Expedition 376 "Brothers Arc Flux" will start in May 2018.
- IODP Expedition 378 "South Pacific Paleogene Climate" will start in October 2018.

A book on the Australian and New Zealand achievements in the first phase of IODP (2008-2013) was launched by N. Exon: "Exploring the Earth under the Sea". This book targets the public. The digital version can be downloaded from https://press.anu.edu.au/publications/exploring-earth-under-sea.
An annual 5-10 day Marine Geoscience Masterclass is held for outstanding science undergraduates.
Future IODP-related conferences in Australia: The Australian Geological Conference will be held in Adelaide on October 14-18, 2018. The 13th International Conference on Paleoceanography (ICP13) will be held in Sydney on September 1st-6th, 2019.

20 NSF (J. Allan)

(9:53)

J. Allan presented the FY18 budget, the timeline for the renewal, the *JR* staffing and the NSF Seismic Solicitation.

FY18 budget: The Congress sets the actual appropriation. The financial situation for the *JR* is stable. For FY18 ten months of operations over five expeditions are planned at $66.8 M USD. Icebreaker support for *JR* operations is additional. The NSF goal is to have 10 months JR operations per year through FY19. International contributions to *JR* operations support FY18 *JR* operations, i.e. South China Sea CPP funds in addition to the $14.8 M USD base contributions.

JR Facility Review: The 5-year Cooperative Agreement for *JR* operation requires annual and mid-award (3rd-year) reviews. These reviews are used for "mid-course" corrections and for input on renewal or re-competition of the Cooperative Agreement. In March 2017, the NSF panel met for the review of FY16 operations. A report from a panelist who attended the Expedition 367 port call and who interviewed Expedition 366 and Expedition 367 scientists and technicians was received. In addition, a report from the FY16 Co-chief review was received.

The *JR* Facility Review panel is an NSF selected panel, in consultation with the JRFB Chair and JRSO. The Panel Review and Scope follows NSF Large Facilities Office (LFO) guidelines for the review of Large Facilities and the NSF JR CA Internal Management Plan. The report is to NSF. The report is confidential and is shared with NSF financial partners and the JRFB, but the NSF response is public. NSF accepted all panel recommendations and the panel was impressed how JRSO had fully addressed the recommendations of the FY15 NSF Panel. NSF has asked the JRSO to address all *JR* Facility and GCR Facility recommendations. NSF will bring staffing and education and outreach concerns to the IODP Forum. The next NSF Panel meeting will be held in February/March 2018 to review FY17 operations.

JR staffing: At the moment, there are ten U.S. Science Party Members on each *JR* expedition including Onboard Outreach Program members. With the new MoU the size of the U.S. Science Party will increase in FY20. Those sailing under the Onboard Outreach Program are considered as members of the Expedition Science Party and they are in the shipboard party chain of command with the Co-chiefs and the EPMs.

In future Memoranda there will be an increase from $3 to $4 M USD for a full membership in the *JR* consortia. NSF would prefer minimal changes in language, and NSF and ECORD agree on financial and staffing details. Co-chief scientists and Onboard Outreach members will be included in total quota rights and all *JR* berths will be treated equally.

J. Allan presented the timeline for the renewal (see Figure 1). The Backup Info Item and the Backup Action Item were slid to a later day. There are no consequences on the overall timing.

JR Facility Renewal: The NSF GEO Directorate will make soon a decision as to whether to pursue facility renewal. The standard renewal is five years (FY20-24). The National Science Board approves the authorization for expenditure of funds for the facility renewal and does not approve the IODP Program. It is too early for NSF to speculate on post-International Ocean Discovery Program, including platforms and program(s).

NSF Seismic Solicitation: There is a solicitation to provide marine seismic capabilities to the U.S. Research Community. This is an up to $50 M USD for 5 years or $10 M USD per year proposal, which was due on August 21, 2017. Proposals are requested for the Cooperative Agreement to provide the U.S. Ocean Science community with marine seismic support that is currently provided by the R/V *Marcus Langseth*. The R/V *Marcus Langseth* could be used or not and it could allow the commercial entity to work with academic or non-profit institutions. The panel will consider solicitation response(s) in November 2017.

COMMENT on NSF Seismic Solicitation:
The panel will meet in November 2017 and there will be a public announcement at the beginning of the new year (R. Murray). If the proposal(s) is/are successful, negotiations have to be started. The goal is to provide the same marine seismic capabilities. This will be with the R/V Marcus Langseth or without (R. Murray). The goal is to retain the capabilities even if it will be without the R/V Marcus Langseth.

ECORD PARTNERSHIP

21 *JOIDES Resolution* Facility Board and Operations (J. Allan for A. Koppers)

(10:14)

J. Allan presented the Facility Board approach, the new *JR* expeditions scheduled for FY19-20, the long-term *JR* track, improvements in the IODP Review Process and in the *JR* Facility.

J. Allan gave an overview of the major achievements since 2012:

- The operational approach was moved to a regionally-planned *JR*.
- Five CPP expeditions were successfully implemented earning back $6 M USD per expedition.
- Operational costs were significantly reduced.
- Proposal review timeline was significantly reduced from 7-10 to 3-4 years.
- Made the *JR* fully utilized again.

JRFB Mandate and Role (see JRFB 1705 Consensus Statement 16): The JRFB reaffirms its primary goal of implementing all proposals that are thoroughly reviewed, scientifically evaluated, and forwarded by SEP, and that have been recommended for approval by EPSP. Decisions on scheduling are principally dependent on the planned regional track of the *JOIDES Resolution*; maximizing the fit and balance of proposals to the IODP 2013-2023 Science Plan; funding and ship time availability; and safety, permitting and other logistical constraints.

The long-term *JR* cruise track will follow a path from the Southern Ocean along the west coast of South America to the Caribbean in order to implement one CPP and probably further proposals (Figure 2). Then the *JR* will go back south along the east coast of South America reaching the South Atlantic in 2020, and implementing another Antarctic expedition. Finally, the *JR* will go north again in 2021 along the West African Coast to reach the North Atlantic in 2022 and finally through the Panama Canal into the Western Pacific Ocean. The JRFB expects that the *JR* will complete its global circumnavigation in the Indo-Pacific in FY23 (JRFB 1705 Consensus Statement 9).

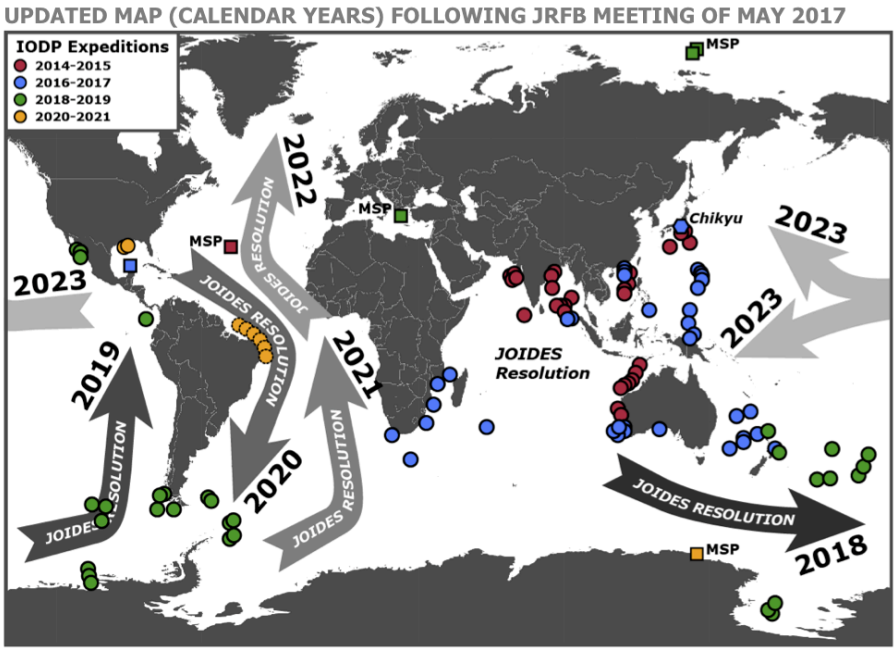


Figure 2: Long-term *JR* cruise track.

Scheduling of the *JR*: Scheduling happens during the May JRFB meeting and it is always done 2-3 years into the future, i.e. in May 2018 the *JR* will be scheduled for FY20-21. Since 2017 the *JR* is at full utilization as it is operating for 10-11 months per year. Since 2014 four CPP expeditions have been implemented and one CPP is planned in the Gulf of Mexico for 2020. An engineering-only expedition will be implemented in 2019. More time and resources have to be allocated to the development of engineering. The JRFB also schedules short and/or hybrid expeditions, such as the Hikurangi expeditions.

J. Allan presented the *JR* expeditions scheduled for FY19-20 (Table 9). This schedule is subject to funding being available for ship operations in FY19-20.

Table 9: *JR* expedition schedule for FY19-20.

Fiscal Year 1 Oct - 30 Sept	Proposal Expedition	Title
FY' 19	Expedition 378	South Pacific Paleogene
FY' 19	Expedition 379	Amundsen Sea Ice Sheet History
FY' 19	P902 + P846-APL	Combined Expedition Iceberg Alley Paleoceanography and Falkland Water Depth Record
FY' 19	P912	Drake Passage Paleoceanography
FY' 19	Transit / Engineering / P769-APL	Transit to the Gulf of California during which various engineering tests and the Costa Rica Crustal Architecture 769-APL will be carried out (no full science party required)
FY' 20	P833	Guaymas Basin Activity
FY' 20	Transit / Tie-Up / Preparation Time	Transit to the Gulf of Mexico, one-month tie-up period for JOIDES Resolution maintenance and repairs, followed by a two-week preparation time window for P887 Gulf of Mexico operations
FY' 20	**P887-CPP**	Gulf of Mexico Methane Hydrates
FY' 20	TBD	Scheduling of at least one expedition in the western tropical Atlantic

Proposal pressure (Figure 3): There are a lot of proposals in the South Atlantic, but not many of those are ready for scheduling. This may change until the 2018 JRFB meeting.

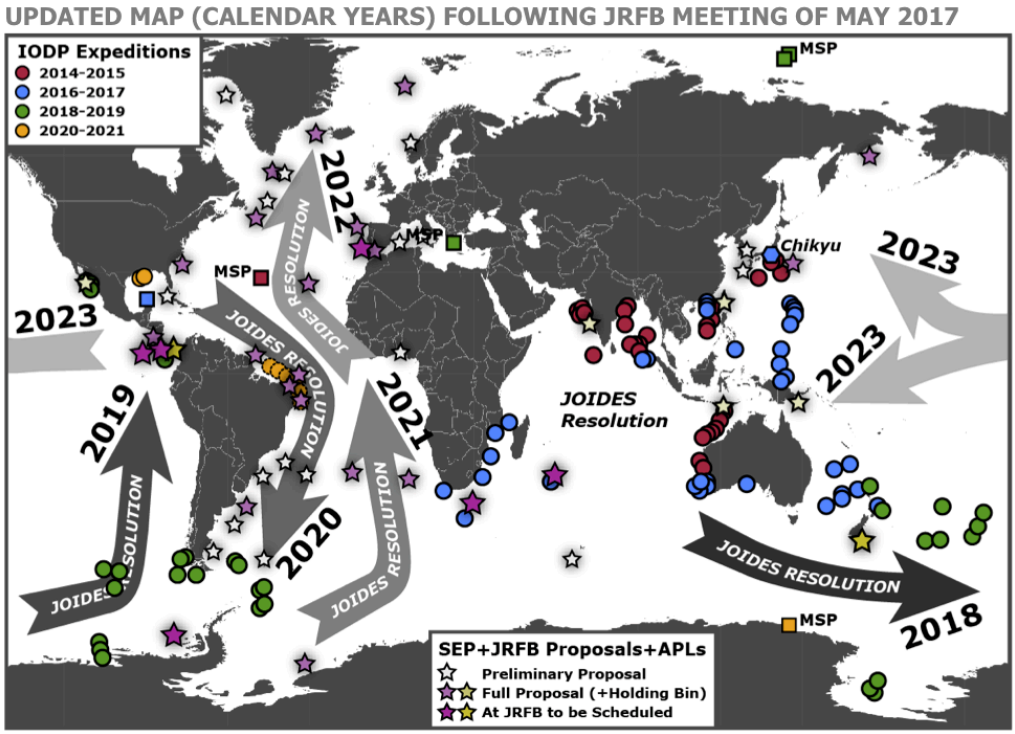


Figure 3: Proposal pressure.

IODP Review Process: J. Allan summarized the two-staged approach of Pre- and Full-proposals. Pre-proposals often get deactivated (48% in IODP-2), but the proponents are encouraged to resubmit their proposal. Typical overturn times are now about 4 years for good/excellent proposals compared to 7-10 years in IODP-1.

Improvements in the *JR* Facility: see JRFB 1705 Consensus Statements 7 and 11 (agenda book pages 92-93). Better risk management is needed for deeper holes. Additional engineering resources are needed to improve the operations.

DISCUSSION on the NSF-ECORD MoU:
L. Lourens expressed concerns about the decrease of the number of berths for ECORD scientists on the JR from 8 to 7. There is not enough proposal pressure in the North Atlantic and this decrease in the number of berths does not encourage ECORD scientists to submit proposals (L. Lourens). The base contributions are $14.8 M USD and the Program Plan is $66.8 M USD, i.e. this imbalance has to be addressed (J. Allan). When ODP was started the funding split of the JR was 50:50. As the JR member countries were unable to increase their contributions the funding split changed to 1/3 and 2/3 for the US. This imbalance further increased and is not sustainable (J. Allan). ECORD will get again a good deal as the aim is to advance science.
Half of the participants of the Sydney IODP Regional Planning Workshop were not from Australia and New Zealand. Proposals were developed by an international community and many proposals were developed because it is an interesting area (L. Armand). Workshops are needed to generate ideas (L. Armand). Only one person from one institute may sail but many scientists from this institute may work on the material.
The JR moved from the implementation of 4 to 5 expeditions per year (G. Camoin). There was a clear message at the JRFB that this will be maintained until the end of the programme. This is a significant effort from the US community and ECORD benefits from this change (G. Camoin). There are more expeditions and more ECORD scientists can sail (M. Friberg). ECORD got more than paid for. On average 8.75 ECORD scientists sailed per JR expedition (G. Camoin).
The numbers in the MoUs are guidelines (J. Austin). For example, the European community benefits most from the Special Calls (J. Austin). The pressure from ECORD scientists to sail is the highest within the whole programme. For ECORD scientists the programme is most competitive and the number of applications from ECORD scientists is rising (J. Behrmann).
NSF wants the best intellectual output from JR expeditions (J. Allan). It has to be an international collaboration and the best scientists may be non-US (J. Allan).

22 Chikyu IODP Board and Operations (N. Eguchi)

(10:48)
N. Eguchi summarized the consensus items from the 2017 CIB meeting (see agenda book pages 94-95).

CIB Project Coordination Team (PCT):
The Lord Howe Rise (LHR) PCT met in Canberra in June 2017. The goal of the meeting was the basic understanding of operation and science of this project, future timeline, action items and the finalisation of the sites selection.
The NanTroSEIZE PCT met in Yokohama in May 2017 and in October 2017.

N. Eguchi summarized the JPFY16 *Chikyu* operations. Two IODP Expeditions were implemented in JPFY16: 1) #365 NanTroSEIZE during which a shallow Megasplay LTBMS was installed and 2) #370 'Temperature Limit of the Deep Biosphere off Muroto'. Furthermore, commercial work was done: Japan Methane Hydrates. A scientific non-IODP expedition was implemented from November 16th to December 15th: Expedition 909 SIP Okinawa HOT III.
Chikyu IODP Expedition 365 is one of the NanTroSEIZE operations. The main aim of this expedition was the installation of observatories systems. It was a technical expedition from March 26th to April 27th, 2016. A GeniusPlug that was installed during IODP Expedition 332 in November 2011 was successfully recovered. A second NanTroSEIZE LTBMS was successfully installed. In addition, 70 m could be cored. Two ECORD scientists were part of the Science Party including one Co-chief scientist.
Chikyu IODP Expedition 370 was implemented from September 10th to November 10th, 2016 and focused on the T-limit of the deep biosphere. The drilling took place in a subduction zone off Muroto where ODP Leg 190 had been implemented in the past, but at that time, the detection limit for cells was at 600 mbsf and 70°C. However, since then the detection limit for cells has been drastically improved. The aim of this expedition was to drill down to the sediment/basement interface at 1210 mbsf where temperatures of up to 130°C are expected. The core recovery was about 76%. A temperature observatory was installed. There were ten ECORD Science Party members including one ECORD Co-chief scientist.

N. Eguchi gave an overview of the JPFY17 *Chikyu* operations. JPFY17 started with a commercial operation from April to July 2017. From July to September about 60 scientists were onboard the *Chikyu* for the analysis of cores from the ICDP Oman drilling project. SCORE Expedition 910 is similar to JR100 and was implemented to encourage the Japanese scientific drilling community to use the *Chikyu* for piston coring of up to 100 mbsf. From October 2017 to January 2018 the *Chikyu* will be in the dry dock for repair and maintainance. From January to February 2018 *Chikyu* IODP Expedition 380 "NanTroSEIZE Stage 3: Frontal Thrust LTBMS" will be implemented. During this operation a shallow LTBMS will be installed at site C6. The LTBMS will be connected to the DONET undersea cable network and will provide real-time pressure, strain and seismological data. There will be two ECORD Science Party members. At the same time a workshop for students and young scientists on Core-Log-Seismic Integration Investigation at Sea will be held onboard the *Chikyu*. They will study the role of the Nankai Frontal Prism in past tsunamigenic earthquakes and slow slip using Expedition

314 LWD data and Expedition 316 cores. There are two options: a 2-week short course or the full session of 40 days. The workshop will include lectures, thematic break-out sessions, laboratory work, data analysis, presentations, discussions and writing publications. Fourteen scientists were selected out of 18 applicants: 5 Japanese, 4 US and 5 from ECORD.

JPFY18 *Chikyu* operations: For March until June 2018, a commercial window was set followed by a repair and maintainance period until the end of September 2018. *Chikyu* IODP Expedition 358 "NanTroSEIZE Plate Boundary Riser 4" will be implemented from October 2018 to March 2019. The aim is to access a subduction plate boundary fault system and its wall rocks at likely seismogenic depths for the first time.

The mid-term period will end on 31 March 2019. No funds can be carried over to the next term and therefore the new mid-term will start with a commercial operation window which will last until February 2020. Another potential IODP window will range from August 2020 to January 2021.

Chikyu Shallow Core Program (SCORE) is a new programme which provides researchers the opportunity to use the Hydraulic Piston Coring System (HPCS) to collect cores up to 100 mbsf. Applicants need a J-DESC membership or they need to form a group led by a researcher with J-DESC membership. J-DESC accepts proposals on a steady basis and evaluates them using a SEP-like procedure. Successful proposals will be submitted to CDEX. CDEX will incorporate the proposals into the *Chikyu* operational schedule to the extent possible.

CDEX outreach: *Chikyu* Open House was held in September 2017. A second event is planned for December 2017. A special exhibition "Deep Ocean 2017" was organised at the National Museum of Nature and Science in Tokyo. Overall, there were 617,062 visitors. Up to 7,811 people visited the exhibition per day, which was a record for the museum.

The next CIB meeting will be held on 19-20 March, 2018.

(11:06)
coffee break
(11:21)

23 PMOs (C. Brenner)

(11:21)

C. Brenner presented the goals of the Program Member Office (PMO) meetings, the consensus items from the 2016 and 2017 PMO meetings, the USSSP personnel and the

USSSP activities.
The goals of the PMO meetings are 1) to inform each other about the activities and mechanisms of each PMO; 2) to determine if there are "best practices" to establish across IODP; 3) to provide new PMOs with options/models as they set uo their offices and and 4) to network on items of common interest.

C. Brenner reviewed the consensus items from the 2016 and 2017 PMO meetings (see agenda book pages 103-106).

USSSP personnel: Since the beginning of 2015, Carl Brenner is PI and Director of the USSSP. Co-PIs are Dave Goldberg and Maureen Raymo. Angela Slagle is Science Program Officer, James Spencer is Logistics Coordinator, Sharon Cooper is Manager of Education and Outreach, Nicole Kurtz is Outreach Coordinator and Lori McCaleb is Business Administrator. In total, there are five full-time employees.

USSSP activities include expedition support, workshop funding, pre-drilling activities, panel member nominations, salary support for US Panel Chairs, Education and Outreach.

USSSP is advised by the US Advisory Committee for Scientific Ocean Drilling (USAC). This panel consists of ten members and is organised into three subcommittees: 1) shipboard staffing; 2) workshops, pre-drilling activities and nominations and 3) Education and Outreach.

Staffing: The largest number of applications (38%) is received from graduate students. Thirty-four per cent of the applications are from professors/senior scientists and 25% are from early-career scientists (Associate Professor, Assistant Professor, Postdoc). Finally, 52.3% of the professors/senior scientists and 42.4% of the early-career scientists are invited. 40% of the Associate Professors, 57.1% of the Assistant Professors and 46.4% of the Postdocs are invited. All groups are equivalent regarding the percentage of invitations.

C. Brenner summarized workshops funded since the last ECORD Council-ESSAC meeting:

Date	Workshop	Lead (US) PI/s
2016.11	Short Course on Shipboard Sedimentology	J. Johnson, K. Marsaglia
2017.01	"Early Career Workshop"	A. Fraass, C. Lowery
2017.04	"Western North Atlantic Slope Stability Workshop"	M. Hornbach
2017.05	"New England Freshwater Resources Workshop"	B. Dugan
2017.06	Australasian IODP Regional Planning Workshop	M. Gurnis
2017.07	"Indian Ocean Regional Synthesis Workshop"	P. Clift
2017.09	*JOIDES Resolution* Assessment Workshop	B. Christensen, J. Jaeger, USSSP
2017.10	Drilling into Young Ocean Crust at Axial Seamount	J. Huber

The "Short Course on Shipboard Sedimentology" was held in November 2016 at College Station, Texas. There was a large applicant pool with many strong candidates. Twenty-two participants were from the US, one from Brazil and one from Japan.

The workshop on "Demystifying the IODP Proposal Process for Early-Career Scientists" was held in January 2017 in Austin, Texas. Fourty-two USSSP-funded early-career scientists attended the workshop. This workshop resulted in some IODP proposals and will probably organised every couple of years.

The IODP-ICDP workshop "Onshore-Offshore Drilling and Sampling to Understand Freshwater Resources along the New England Continental Shelf" was held in May 2017 in Woods Hole, Massachusetts. USSSP funded 14 US participants and the MagellanPlus Programme funded nine international participants. The goal was to develop a new operational plan for Proposal #637-Full2 and to establish an amphibious component.

The "Australasian IODP Regional Planning Workshop" was held in June 2017 in Sydney. USSSP funded 17 US participants and overall 97 participants from 12 different countries attended this workshop.

The "Land-Ocean Interactions Across the Indian Ocean" workshop was held in July in Narragansett, Rhode Island. USSSP supported 27 US participants. The workshop was also co-funded by the MagellanPlus Programme and other sources.

The "*JOIDES Resolution* Assessment Workshop" was held in September 2017 in Denver, Colorado. USSSP supported 63 participants. Three observers from ECORD and one from CDEX attended this workshop. The goal was to assess the ability of the *JR* to accomplish the goals of the Science Plan as well as its ability to continue fulfilling the Science Plan in the future. Prior to this workshop a *JR* Community Survey was conducted. Many ECORD scientists responded to this survey.

Training Courses and Summer Schools:
USSSP funded the attendance of US participants at the ECORD Virtual Drillship Experience and the 2017 Petrophysics Summer School.

COMMENT on USSSP spending:
M. Webb asked about the total annual budget. The total budget for 2018 will be $7.9 M USD (C. Brenner).

SCIENCE

25 IODP Forum - Progress towards IODP Science Plan challenges (J. Austin)

(11:44)

The IODP Forum Chair maintains a document on the progress of IODP towards fulfillment of the 2013-2023 Science Plan (http://www.iodp.org/iodp-forum).

J. Austin presented 2017 Forum consensus items related to the Science Plan (see agenda book page 125).

Forum Consensus Item 17-02 on the need to foster the "Biosphere Frontiers" theme of the decadal Science Plan. The Forum supports a workshop-based approach.

Forum Consensus Item 17-03 on pre-and post-expedition asessments.

Overall, the Science Plan themes and challenges are properly addressed during this phase of the programme. Active and new proposals seem to be adequate to sustain the *JR*, but the flow of MSP and *Chikyu* proposals remains a concern. It has been noted that over the last two years the total number of proponents has gone down. Post-expedition assessments have to be done.

(11:50)
coffee break
(12:00)

SCIENCE TALK: Expedition #381: Corinth Active Rift Development (L. McNeill/D. Shillington)

(12:30)
lunch break
(13:03)

28 Commemorative volume "Scientific Ocean Drilling: Looking to the Future" (C. Escutia)

(13:03)

A Special *Oceanography* issue will be published in December 2018 to celebrate 50 years of scientific ocean drilling. The *Oceanography* Editor will be Ellen S. Kappel and the guest editors will be Anthony Koppers, Carlota Escutia, Fumio Inagaki, Heiko Pälike, Demian Saffer and Debbie Thomas. The overall goal of this special issue is to provide the scientific basis for the ocean sciences community to argue for continuation of

international scientific ocean drilling into the future and post-2023. This special issue targets the general scientific community as well as stakeholders and decision makers. The estimated budget is $90,000 to $100,000 USD. An NSF proposal for $60,000 USD will be submitted in October 2017. Supplemental funding to cover $30,000 to $40,000 USD is needed.

COMMENT on Special Oceanography issue:
How is the process for finding contributors (J. Austin)? At the moment there is a proposal for the table of contents that is revised to see the balance of the topics (C. Escutia). Last week, A. Koppers sent a draft table of contents to all editors and after getting an agreement the contributors will be identified (C. Escutia). The NSF proposal will be submitted as soon as the table of contents is finalized (C. Escutia). Funding from other IODP partners will also be requested (G. Camoin/C. Escutia). The target audience is the large science community and decision makers (G. Camoin/C. Escutia).

ECORD Council Consensus 17-10-17:
The ECORD Council approves the principle of partial funding of the commemorative volume "Scientific Ocean Drilling: Looking to the Future" and is willing to receive a proposed financial contribution after the table of contents has been completed and the proposal to other IODP partners has been submitted.

24 ECORD Expedition staffing and quotas (J. Behrmann)

(13:15)
J. Behrmann summarized expedition staffing and quotas.

Staffing:
Expedition 371 (Tasman Frontier) is fully staffed. Nine ECORD scientists sailed (2 from Germany, 3 from France, 1 from Italy, 1 from Spain, 1 from the Netherlands and 1 from the UK). One scientist came in following a Special Call.
Expedition 369 (Australian Cretaceous Climate and Tectonics) is fully staffed. Ten ECORD scientists are sailing including one UK Co-chief Scientist (1 from Germany, 2 from France, 1 from Italy, 1 from Denmark, 1 from Austria and 4 from the UK) .
Expedition 381 (Corinth Active Rift Development) is almost fully staffed. Currently, 14 ECORD scientists are sailing plus one UK Co-chief Scientist (3 from Germany, 5 from France, 1 from Spain, 3 from Norway and 3 from the UK).
Expedition 372 (Creeping Gas Hydrate Slides and Hikurangi LWD) is fully staffed. Eight ECORD scientists will be sailing (3 from Germany, 1 from France, 2 from Ireland and 2 from the UK).
Expedition 373 (Antarctic Cenozoic Paleoclimate): Nomination and staffing process was stopped because this expedition was postponed. Applicants were informed about a future call and the relevant application process.

Expedition 374 (Ross Sea W Antartic Ice Sheet History) is fully staffed. Eight ECORD scientists plus one Italian Co-chief Scientist will be sailing (3 from Germany, 1 from France, 1 from Italy, 1 from Norway, 1 from the Netherlands and 2 from the UK). A Special Call for a paleomagnetist was issued.
Expedition 375 (Hikurangi Subduction Margin): Staffing is completed. Eight ECORD scientists are ready to sail (3 from Germany, 1 from France, 1 from Italy and 3 from the UK). One scientist came in following a Special Call (UK).
Expedition 376 (Brothers Arc Flux) is fully staffed. Eight ECORD scientists will be sailing (5 from Germany, 1 from Canada and 2 from the UK).
Expedition 380 (NanTroSEIZE Stage 3: Frontal Thrust LTBMS) is fully staffed. Two ECORD scientists (2 from Germany, one scientist came in as a Special Call) will be sailing and five ECORD junior researchers will particpate in the CDEX "Field Work at Sea" workshop.
Expedition 377 (Arctic Paleoceanography) was cancelled. The nomination proposal for ten scientists plus three German IKC berths was forwarded to ESO.
Expedition 378 (South Pacific Paleogene Climate): The call for participation is closed. Many applications were received and ESSAC is in the process of ranking the applications.

There are Co-chief scientist invitations (and acceptances) to several scientists from ECORD countries: L. McNeill from the UK for Expedition 381, R. Stein from Germany for Expedition 377, U. Röhl from Germany for Expedition 378, K. Gohl from Germany for Expedition 379 and M. Weber from Germany for Expedition 382.

Participation (2013-2017: Expeditions 347-372; in total 238 ECORD scientists including 17 Co-chiefs):
The majority of berths goes to young scientists: 73 Postdocs/early-career scientists, 52 Master and PhD students and 96 senior scientists.
The distribution of ECORD scientists by country reveals that 54 scientists are from the UK, 54 from Germany, 47 from France and 66 from other countries.
The majority of the Co-chief scientists is from Germany (6) and the UK (5).
For further information see agenda book pages 120-123.

Quotas:
There is still an imbalance between the quotas of the the large contributors and the smaller contributors (Table 10). The large contributors are 7.9 underquota and the smaller contributors are 7.9 overquota. France is significantly underquota, in contrast, the UK is almost one berth overquota. There are expeditions without any French application. Austria has been very successful in sailing scientists. Canada is strongly overquota. This reflects the great interest from Canadian scientists and their competence and excellence. However, the Canadian system has to take action. The figures for Sweden and Norway would look much better if the Expedition 377 nominations would be included. Dutch scientists have a great interest in IODP, however, the interest is greater than the financial contribution. Italy has a great interest, increased

its contribution and is successfully sailing scientists. Some countries, such as the UK, are very successful in sailing IKC scientists and in responding to Special Calls. Young scientists have to be encouraged to write applications to follow Special Calls.

Table 10: Projected quotas 2014-2018 (Expeditions 349-376 and 380, 381)

Total Berths **invited**	Total Berths **special calls/IKC**	berths entitled - excl. Sp. Calls & Cc	Difference	Total Sailed, incl. co-chiefs	Member	Financial Contribution (%)	total co-chiefs 2014 -
46	1	52,30	-6,30	48	France	25,51%	1
61	3	63,36	-2,36	70	Germany	30,91%	6
46	9	45,23	0,77	62	UK	22,06%	7
153	**13**	**160,89**	**-7,89**	**180**	**Sum**	**78,48%**	**14**
4	1	1,13	2,87	5	Austria	0,55%	0
1	0	0,22	0,78	1	Belgium	0,11%	0
5	0	0,68	4,32	5	Canada	0,33%	0
1	0	1,83	-0,83	2	Denmark	0,89%	1
0	0	0,91	-0,91	0	Finland	0,44%	0
0	0	0,11	-0,11	0	Iceland*	0,06%	0
2	0	1,51	0,49	2	Ireland	0,73%	0
1	0	0,34	0,66	1	Israel	0,17%	0
7	4	4,53	2,47	12	Italy	2,21%	1
8	0	5,66	2,34	8	Netherlands	2,76%	0
9	0	12,45	-3,45	9	Norway	6,07%	0
1	0	0,34	0,66	1	Poland	0,17%	0
2	1	1,02	0,98	3	Portugal	0,50%	0
2	0	0,64	1,36	2	Spain	0,31%	0
4	1	5,97	-1,97	5	Sweden	2,91%	0
5	1	6,79	-1,79	7	Switzerland	3,31%	1
52	**8**	**44,11**	**7,89**	**63**	**Sum**	**21,52%**	**3**
205	**21**	**205,00**	**0,00**	**243**	**TOTAL ECORD**		17
208							

COMMENT by Norway:

The high latitudes are a strength of the research in Norway, however, Norwegian scientists are also sailing, for example, in the Gulf of Corinth and the Western Pacific Warmpool (H. Kleiven). A new generation will start working in Antarctica, which is politically important as Norway has some research stations and a long history in this area. Norway is also pushing for proposals in the Atlantic as the JR will soon come to this region. Recently, a MagellanPlus workshop was held in Bergen for coring in the Arctic. There are a lot of other expeditions to focus on after the cancellation of the Arctic MSP expedition. The number of

publications is very high and there is a legacy to sample archived cores. In Norway there is a huge activity related to investigations of archived cores (H. Kleiven).

COMMENT on Co-chief selection:
G. Ceuleneer asked how the process of Co-chief selection works. For the JR SEP can forward suggested names to the Facility Board and the Facility Board forwards Co-chief nominations to the JRSO (J. Allan). The operator decides and is responsible for building the Science Party (J. Allan). As soon as a proposal is accepted for drilling, it is no longer the Co-chief's proposal.

COMMENT on quotas:
There are 7.9 credits for the smaller partners, but it is a 10-year programme and hopefully this figure will be lower at the end of the programme (M. Webb).

COMMENT on Expedition 377:
M. Webb is concerned about the process of nomination and cancellation of the expedition. The call was issued by ESSAC, applications were collected and evaluated and then nominations were submitted to ESO (J. Behrmann). The applicants got only the acknowledgement of their application. When the expedition was cancelled, ESSAC's involvement was over. At a later stage, the applicants would have received an invitation from ESO (J. Behrmann). The nomination proposal was forwarded to the Co-chiefs (D. McInroy). Co-chiefs started working with the names and then information may leak from the system (J. Behrmann). When it is sure that an MSP expedition is proceeding, the applicants should know if they will be sailing (M. Webb). ECORD should think about this process to avoid any dissatisfaction (M. Webb). Having an IKC secured would help (G. Früh-Green).

26 SEP Report – Highlights on MSP proposals (S. Bohaty)

(13:48)
Membership: Sean Gulick (USA) is the Chair for the site survey sub-group and Ken Miller (USA) is the Chair for the science sub-group.

S. Bohaty gave a panel update. SEP reports to the JRFB and services the EFB and the CIB. There are good communications and relations with SSO, the JRFB and the IODP Forum. SEP has been operating as a single panel for eight meetings. In June 2017, SEP met in Lisbon, Portugal. The next meetings will be held on January 9th-11th, 2018 at the Scripps Institution of Oceanography in La Jolla, USA and on June 26th-28th, 2018 in Potsdam, Germany. It is extremely effective and efficient to have both types of expertise, science and data, in the same room along with the operators (5 watchdogs).

SEP Terms of Reference: SEP is responsible for the selection of the best and most relevant proposals to be forwarded to the Facility Boards. SEP also advises the Facility

Boards and the IODP Forum on any shortcomings of the proposal pool with respect to themes and challenges of the IODP Science Plan and makes suggestions for stimulating proposal pressure in those areas.

Characterizing the Site Survey Data: SEP advises proponents on data that are deemed necessary, reviews all data in the Site Survey Data Bank (SSDB), advises the proponents on the adequacy of the drill site characterisation package and provides an assessment of whether or not the scientific objectives can be accomplished based on the proposal and data package.

S. Bohaty presented the proposal classification system.

At the January 2017 SEP meeting, 16 proposals have been reviewed (Table 11). One proposal was forwarded to the CIB (#871-CPP2). Three full proposals and one APL were forwarded to the JRFB (#833-Full2, #902-Full, #908-APL and #912-Full). #887-CPP2 was also forwarded to the JRFB. One MSP proposal was considered (#907-Pre).

Table 11: Outcomes from the January 2017 SEP meeting. Green: back from external review, orange: revised, blue: new.

Proposal#	Type	Title	PI	Platform	Theme	Result
833	Full2	Guaymas Basin Activity	Andreas Teske	JR	EM	External Review
853	Full2	South Atlantic Transect	Rosalind Coggon	JR	CO	External Review
864	Full	Equatorial Atlantic Gateway	Tom Dunkley Jones	JR	CO	Revise
871	CPP2	Lord Howe Rise Continental Ribbon	Ron Hackney	Chikyu	EC	Forward to CIB
874	Full	Newfoundland Neogene Sediment Drifts	Oliver Friedrich	JR	CO	Revise
875	Full	Brazilian Equatorial Margin Paleoceanography	Luigi Jovane	JR	CO	Deactivate
882	Full	Brazilian Equatorial Margin Tectonics	Paola Vannucchi	JR	EC	Revise
890	Full	Walvis Ridge Hotspot	Will Sager	JR	EC	Revise
902	Full	Iceberg Alley Paleoceanography	Michael Weber	JR	CO	Holding Bin
906	Pre	Rio Grande Rise Formation	Christian Lacasse	JR	EC	Deactivate
907	Pre	Sunda Shelf Sea Level	Karl Stattegger	MSP	CO	Deactivate
908	APL	Costa Rica Megathrust Fluid-Pressure	Nathan Bangs	JR	EM	Addendum
909	Pre	NW Greenland Glaciated Margin	Paul Knutz	JR	CO	Develop Full
910	Pre	Continental Margin Methane Cycling: Rio Grande	Alberto Malinverno	JR	EM	Develop Full
911	Pre	Argentine Margin Paleoceanographic Transects	James Wright	JR	CO	Develop Full
912	Full	Drake Passage Paleoceanography	Frank Lamy	JR	CO	External Review

MSP proposal #907-Pre "Sunda Shelf Sea Level" has been deactivated. Scientific objectives and the approach were not clear. There are complexities in extracting the eustatic record and the drilling strategy was unrealistic. Furthermore, there were concerns about the quality of existing seismic data and drilling in Indonesian waters.

DISCUSSION on #907-Pre "Sunda Shelf Sea Level":
SEP should be focusing on the quality of science and data rather than worrying about Indonesian waters (R. Gatliff). The JR received guidance from NSF not to try to drill in Indonesian waters based on the experience (J. Allan). This was not the primary concern (J.

Austin). SEP partially does an operational consideration (J. Austin). SEP is a panel of the JRFB, which sets the policy and ESO uses SEP by agreement (J. Allan). The drilling strategy was unrealistic and there were a number of other issues besides the Indonesian waters (S. Davies). SEP is balancing science and operations (S. Davies). Territorial permissions were a secondary item (S. Bohaty).

At the June 2017 SEP meeting, 12 proposals have been reviewed (Table 12). One *JR* proposal was placed in the holding bin (#853-Full2). Three *JR* proposals were sent out for external review (#864-Full2, #890-Full2 and #892-Full2). Two MSP proposals were considered (#866-Full and #915-Pre). #866-Full has to be revised and the proponents of proposal #915-Pre have been asked to develop a full proposal. The proponents of proposal #915-Pre plan to organise a MagellanPlus workshop in April 2018 and to submit a full proposal in September 2018. The proponents wanted to use giant piston coring (up to 70 mbsf), but it was said that this is not possible with current technologies. #866-Full2 was submitted for the October 2017 deadline and will be reviewed by SEP in January 2018.

Table 12: Outcomes from the June 2017 SEP meeting. Green: back from external review, orange: revised, blue: new.

Proposal#	Type	Title	PI	Platform	Result
853	Full2	South Atlantic Transect	Rosalind Coggon	JR	HB
864	Full2	Equatorial Atlantic Gateway	Tom Dunkley Jones	JR	External Review
866	Full	Japan Trench Paleoseismology	Michael Strasser	MSP	Full2
882	Full2	Brazilian Equatorial Margin Tectonics	Paola Vannuchi	JR	Deactivate
890	Full2	Walvis Ridge Hotspot	William Sager	JR	External Review
892	Full2	Reykjanes Mantle Convection	Ross Parnell-Turner	JR	External Review
913	Pre	East China Sea Rifting	Deniz Cukur	JR	Deactivate
914	Full	Brazilian Equatorial Margin Paleoceanography	Luigi Jovane	JR	Full2
915	Pre	North Atlantic Fjord Sediment Archives	Jacques Giraudeau	MSP	Full
916	APL	Gulf of California Environmental Change	Ivano Aiello	JR	Deactivate
917	Pre	Florida Straits Gateway Record	Christopher Lowery	JR	Full
918	Pre	Southern Ocean Climate Evolution	Minoru Ikehara	JR	Full

Recently, a workshop on proposal #637-Full2 "New England Shelf Hydrogeology" was held. The proponents descoped their proposal from 6 to 2-3 sites and considered 1-2 additional onshore drilling sites (ICDP).

COMMENT on #637-Full2 " New England Shelf Hydrogeology ":
The proponents will submit an addendum based on the three approved sites. In March the EFB can discuss this proposal (G. Camoin).

SEP recommends deactivation of the following dormant proposals (no proposal activity within the previous five years) with the statement that proponents are encouraged to resubmit: #747-Full, #797-Pre (ADP), #801-Pre, #805-MDP and 806-Pre (ADP).

27 MagellanPlus Report and FY18 budget (L. Lourens)

(14:18)

L. Lourens presented the composition of the MagellanPlus Steering Committee (SC). The Chair is Lucas Lourens and the Vice-Chair is Johan Lissenberg. Verena Heuer (GER) is a new SC member for the Deep Biosphere theme.

Every year there is one call for workshop proposals. For the January 15th, 2017 deadline three IODP-related proposals were submitted. These were ranked during the SC meeting in February 2017 in Cardiff. All three proposals were accepted:

1) Caldera Drilling - Campi Flegrei by Spiess et al. (Germany);
2) Tyrrhenian Magmatism & Mantle Exhumation (TIME) by Zitellini et al. (Italy);
3) Australasian Regional Workshop for building new IODP proposals by Gohl et al. (Germany).

In 2017 four workshops were implemented:

1) Caldera Drilling – Campi Flegrei in Naples, Italy on February 25-28, 2017;
2) Tyrrhenian Magmatism & Mantle Exhumation (TIME) in Bologna, Italy on June 5th -7th, 2017;
3) Australasian Regional Workshop for building new IODP proposals in Sydney, Australia on June 13th -16th, 2017;
4) Carbon Cycling at the Ultraslow Arctic Spreading Ridge System in Bergen, Norway on September 6th -8th, 2017.

There is one upcoming workshop for 2017:

1) Volcanic, tectonic and hydrothermal processes in an island-arc caldera environment: Development of an IODP drilling proposal at the Santorini-Kolumbo marine volcanic system in Athens, Greece on November 21st-23rd, 2017.

Travel grants: The MagellanPlus SC supported travels of ECORD scientists with 7,500 € to attend the workshop "Land-Ocean Interactions Across the Indian Ocean: Toward Regional Integration of Recent Drilling Results" organised by Peter Clift on July 10th - 12th, 2017 in Naragansett, Rhode Island.

The MagellanPlus website has been re-designed.

Publications: Articles regarding MagellanPlus workshops were published in *Scientific Drilling* #20 and the ECORD Newsletters #27 and #28.

Two new initiatives were suggested to the MagellanPlus SC:
1) Two preparatory workshops should be advertised in the next MagellanPlus call for an IODP-broad conference that will be held in Shanghai in 2019 to prepare a potential new ocean drilling programme post 2023. The workshop themes are Science Frontiers and New Technological Developments.

2) A workshop for early-career scientists on IODP proposal writing should be advertised in the next MagellanPlus call.

The deadline for the next call will be on January 15th, 2018. The Deep Biosphere Frontiers theme will be highlighted. The next SC meeting will be held on February 1st-3rd, 2018 in Prague, Czech Republic.

Four proposals will be funded for the February 2018-2019 time frame.

The budget is 70,000 € per year. Travel grants of up to 10,000 € can be funded. A temporal increase by 30,000 € to 100,000 € for the funding of the additional is suggested.

DISCUSSION on MagellanPlus budget:
If the ECORD Council agrees with the budget increase, the additional workshops should be included in the next call for proposals (G. Camoin). The current call will be changed or a Special Call will be issued with the same deadline (L. Lourens). Two Special Calls should be issued, one for the preparation of the 2019 Shanghai conference and the other one for the early-career scientists workshop on proposal writing (G. Camoin). At the IODP Forum meeting it was not specified that this conference will be held in Shanghai (J. Austin). The money has to be kept for the next year budget in case no workshops will be organised (M. Friberg). One or two workshops are needed in 2018 to prepare a conference for 2019 (G. Camoin).

ECORD Council Consensus 17-10-18:
The ECORD Council approves the MagellanPlus FY18 budget of 100,000 € composed of a regular budget of 70,000 € and additional 30,000 € that will be dedicated to the support of:
1) one or two preparatory workshops for a 2019 international conference on the future of scientific ocean drilling;
2) one workshop focused on IODP proposal writing best practices and targeting especially early-career scientists.
The MagellanPlus budget will be administered by the ECORD Managing Agency at the CEREGE in Aix-en-Provence.

DISCUSSION on MagellanPlus proposals:
Only a few MSP proposals are coming into the system and this might be a concern over the long-term (M. Strasser). MagellanPlus could be a vehicle of advertising MSP expeditions. Workshops for MSPs were held, for example for the Corinth MSP expedition (L. Lourens). A call to attract the community would be helpful (M. Strasser). The deep biosphere will be emphasized in the next call for workshop proposals (L. Lourens). MagellanPlus is a science driven programme (G. Camoin). A message was sent to the community showing that there

are free slots for MSP expeditions (G. Camoin). The two planned preparatory workshops for the preparation of a 2019 conference on ocean drilling post 2023 will be on new frontiers in science and new technologies, i.e. this includes MSPs (G. Camoin). Twenty-four proposals were developed during the IODP Regional Planning Workshop that was held in Sydney this year and some of those are MSP proposals (L. Armand).

COLLABORATION

29 ICDP recent and future activities (U. Harms)

Not done.

30 Complementary Project Proposals for MSPs (R. Gatliff/D. McInroy)

Not done.

EDUCATIONAL ACTIVITIES

31 ECORD educational activities (H. Kinkel)

(14:35)

ECORD Summer Schools - Scholarships:

The ECORD Petrophysics Summer School was held for the second time in Leicester in July 2017 and received a direct support of 10,000 €. Five scholarships with 800 € each were funded.

The ECORD Urbino Summer School in Paleoclimatology was held in July 2017 and received a direct support of 10,000 €. Nine scholarships with 1,200 € each were funded.

The ECORD Bremen Summer School 2017 with the topic "Current-controlled Sea Floor Archives: Coral Mounds & Contourites" was held in August/September 2017 and received a direct support of 10,000 €.

The total number of participants in ECORD Summer Schools is 124. In total, 43 applications for ECORD Scholarships were received and 14 ECORD Scholarships were given.

ECORD Training Course:

The ECORD Training Course 2017 “Virtual Drillship Experience” was held at the MARUM in March 2017 with 30 participants.

ECORD Research Grants:

In 2017 seven research grants were given to young researchers from five ECORD member countries. The maximum grant funding is 3,000 €. Sixteen applications were received. The majority of those were on the 'Climate and Ocean Change' and 'Biosphere Frontiers' themes.

Distinguished Lecturer Programme (DLP):
A call to host a Distinguished Lecturer was issued in September 2016 with the deadline to apply until November 1st, 2016. After a second call, four speakers who cover the themes of the Science Plan: 'Climate and Ocean Change', 'Biosphere Frontiers', 'Earth in Motion' and 'Earth Connections' were selected. Overall, 26 lectures are scheduled and 13 were already given. A new call will be issued in spring 2018.

Teachers at Sea:
Alessia Ciccioni (Italy) sailed on Expedition 368 "South China Sea Rifted Margin". She produced a video for a geoscience video competition in Italy. In spring 2017, J. Erbacher organised during the German IODP colloquium the Science Show "Unterirdisch" with Teachers at Sea live on stage and from the *JR*. Vivien Cumming, a freelance science writer, videographer and photographer with a PhD in Earth Sciences, is currently sailing on Expedition 369 "Australian Cretaceous Climate and Tectonics". Martin Böttcher, a German teacher, participated in the Expedition 381 "Corinth Active Rift Development" port call and he will participate in the Onshore Science Party. Many applications covering a wide range of expertise were received for Education and Outreach Officers on Expedition 377 "Central Arctic Paleoceanography".

DISCUSSION on Teachers at Sea:
G. Camoin asked who has taken the decision for the Education Officer on Expedition 381. There was an open call and only one application was received (H. Kinkel). ESSAC forwarded the application to ESO to see if the applicant is suitable for outreach activities (H. Kinkel). The applicant will not be onboard but he will be at the port call to get in contact with the Co-chiefs and the Outreach Officers (H. Kinkel). Outreach and Education Officers have to list deliverables, products they plan to develop, in their applications (H. Kinkel). U. Röhl asked if an application can be rejected if only one application is received like for the Corinth Expedition. This was part of the discussion (H. Kinkel).

ECORD Council Consensus 17-10-19:
The ECORD Council decides that educational activities towards teachers will be managed only at the national level.

OUTREACH

32 ECORD OETF Report and FY18 budget (P. Maruéjol)

(14:50)
P. Maruéjol summarized ECORD Outreach and Education Task Force (OETF) activities on behalf of the ECORD OETF. The mandate and members of the OETF were presented. The OETF has two meetings per year.

Outreach activities since the end of 2016 include international conferences (EGU, AGU) and support to IODP events in ECORD member countries (exhibition booths, public events). The first joint IODP-ICDP booth under the "Scientific Drilling" banner was organised at the AGU 2016. A joint ECORD/IODP-ICDP booth was organised at the EGU 2017 including lunch talks for teachers. A Townhall meeting and a joint IODP-ICDP session were organised at the EGU 2017. ECORD also provided support to IODP France to organise an exhibition booth at the International Meeting of Sedimentology (IMS 2017) in Toulouse. In addition, ECORD supported IODP Italia with the organisation of exhibition booths at conferences of the Geological Society of Italy (SGI) and on Past Antarctic Ice Sheet Dynamics (PAIS) that were held in Italy. ECORD also provided support for the organisation of a workshop for young scientists at the Goldschmidt 2017 on how to communicate science.
ECORD also provided resources to organise public events in ECORD countries, such as science festivals in France, Germany and the UK, and school activities in Portugal, France and the UK. For example, in July a "Teenager Summer School" was held at the University of Algarve, Portugal.

Outreach resources for 2017: the ECORD Annual Report 2016, ECORD Newsletters (#27, #28), ECORD Headlines, different flyers, the ECORD Calendar, core replicas, videos on the ECORD-ESO channel, ECORD website, Wikipedia and the social networks Facebook and Twitter. Six core replicas together with educational material were presented at 11 events in four ECORD countries. The ECORD website has an average of 2800 users per month with peaks of 3500 and 4400 users per month when the calls for expeditions 381 and 377 were released, respectively.

OETF future plans: Following the recommendations of the ECORD Evaluation Committee and the decisions by the ECORD Council, the OETF will broaden its outreach activities to the general public with tailored resources. This will be done together with professional outreach specialists, videographers, illustrators, etc., volunteers to organise public events in ECORD countries and the IODP partners. The future focus will be on outreach and educational activities will be an ESSAC task including collaboration with the EGU educational programme and support of the ECORD School of Rock (SOR). The next ECORD SOR will be held in December 2017 in Brussels and is organised by a French teacher together with IODP France.

OETF plans for 2018: ECORD will be present at following conferences: AGU 2017 and EGU 2018. The potential participation at the International Sedimentological Congress (ISC 2018) in Québec and at the AGU 2018 in Washington, D. C. still needs to be discussed. The ECORD Newsletters #29 and #30 will be published in November 2017 and April 2018, respectively. The OETF will work on educational kits to travel with the core replicas and/or focusing on MSP expeditions. It is planned to update the ECORD Information Database and to produce an ECORD image video addressing stakeholders and the general public. For both an additional budget is needed.

P. Maruéjol presented the OETF FY18 budget. (Table 13). The total request of the OETF to ECORD is $66,400 USD.

Table 13: OETF FY18 budget

	€	USD
Exhibit Booths (3)	20,000	23,6 00
Publications	11,300	13,300
Other costs	7,000	8,300
Shipping costs	4,000	4,700
Overheads	3,000	3,500
Travel costs	11,000	13,000
Total	53,600	66,400

ECORD Council Consensus 17-10-20:
The ECORD Council approves the Outreach FY18 budget of $66,400 USD to be administered by the ECORD Managing Agency at the CRPG, Nancy, France.

ECORD Council Consensus 17-10-21:
The ECORD Council receives the request for an update of the ECORD Information Database and mandates the OETF to send the relevant budget for approval.

(15:05)
coffee break
(15:20)

33 Outreach activities related to recent MSP expeditions and forward look (C. Cotterill)

(15:20)
C. Cotterill summarized ESO outreach activities for IODP Expedition 364 "Chicxulub Impact Crater" and IODP Expedition 381 "Corinth Active Rift Development" and presented a forward look for outreach activities.

IODP Expedition 364 "Chicxulub Impact Crater": A filming and media day was organised and a number of videos were produced. The video "Unravelling the Life of a Core" made by Lara Jacobi at the MARUM as part of her Masters project can be found on YouTube:

https://www.youtube.com/watch?v=96U3QMHzheY. A series of offshore GoPro videos was produced and Barcroft was filming at the Onshore Science Party. In July the BBC documentary "The Day the Dinosaurs died" was aired and NOVA will air "The End of the Dinosaurs" in December 2017. The German version will be aired in spring 2018 and the date for the French version is not known yet. Japan already aired a documentary in May 2017. Expedition 364 will also be part of the series "Drain the Ocean", a National Geographic special. Twenty-six live OSP video events were organised with 33 groups reaching 1,401 school children and their teachers (mostly US). Two Ask Me Anything (AMA) Reddit sessions were conducted: offshore (3,170 participants with 399 comments) and onshore (3,028 participants with 364 comments).
Ongoing outreach: ECORD is producing core replicas. Many universities and museums are interested in the core replicas. The "Blast from the Past" poster which can be used with the core replicas will be re-designed. A virtual fieldtrip showing onshore and offshore sites and OSP footage is planned. Museum exhibition contributions and educational workshops are in development.

IODP Expedition 377 "Central Arctic Paleoceanography": A logo was designed and a pre-cruise flyer was drafted. Applications for science communicators were assessed.

IODP Expedition 381 "Corinth Active Rift Development": A logo was designed and a pre-cruise flyer was completed. The Communications Plan was completed and distributed. Banners and outreach materials are ready and displayed. A press conference was held and a press release was distributed to 170 outlets. An expedition blog was set up and many visitors are channeled by Facebook. Twenty-seven countries have viewed the blog. There was national press representation and two film crews visited the vessel. The Greek TV also visited the vessel. A production company in Australia is considering doing something on the expedition. An EGU session proposal was accepted to present "ECORD IODP Outreach: Past, Present and Future". An AGU abstract "Take One Boat" was submitted.

Future outreach: The goal is to increase the effectiveness of expedition outreach and to ensure a consistent approach to social media usage. Blogs for each expedition will be set up. ESO now includes guidelines for social media usage, and expedition hashtags to use, as part of the Communications Plan circulated to the Science Party. Further tasks are to ensure the effective engagement of science communicators, to overcome language barriers across Europe and to develop curriculum/school activities. During the offshore phase of an expedition, the use of social media and blogs, live video updates, photo and multimedia archives are important. Photo documentaries and artistic short films may be developed.
National Geographic Standard Grants have four deadlines per year and they are looking for proposals on Changing Polar Systems. A film may be submitted to the Ocean Film Festival and a touring audio visual exhibition may be organised.
Google Expeditions runs virtual reality (VR) fieldtrips where an area can be explored

through 360 degree imagery and 3D images. Google provides the equipment and ECORD could film and create a VR expedition.

34 ECORD Outreach - Forward look (N. Hallmann)

(15:35)

N. Hallmann presented a forward look to ECORD's 2019-23 outreach activities.

E&O timeline: Over the past four years education and outreach activities were reviewed at the IODP Forum and PMO meetings. Education and outreach activities across IODP were discussed and the need for a better coordination and collaboration across IODP was highlighted. In 2017, a discussion on separation of outreach and education was initiated. The IODP Forum #4 encourages a renewed emphasis on outreach efforts and highlighted the decoupling of education and outreach as a long-term objective (Forum Consensus Item 17-07). Outreach includes the provision of information to various target audiences, to broadly target the general public and finally to raise the awareness of ECORD/IODP. Education means to impart or acquire knowledge and skills and to develop CVs. Education will be an ESSAC task.

Educational activities: The EEC recommended that the OETF strengthens its contacts to other organisations active in teacher's education programmes. The ECORD Council recommends the OETF to reconsider its actions towards teachers and educators and to involve them only in the onshore phase of MSP expeditions (ECORD Council Consensus 17-06-11).

Outreach activities: The EEC recommended to include decision makers, funding organisations and targeted industry as outreach target audiences. They also recommended the use of popular science journals, such as National Geographic, to increase public awareness. The ECORD Council agreed with the importance of targeting the wider public and emphasized that ECORD will have to be more efficient in its communication in the future (ECORD Council Consensus 17-06-11).

N. Hallmann presented the OETF mandate and the members of this task force. The OETF communicates with all audiences, develops resources for the targeted audiences, assists the other ECORD entities and ECORD member countries regarding outreach and interacts with other science programmes regarding outreach activities. The ECORD Outreach Task Force (EOTF) is ECORD's communication entity and is responsible for the coordination of ECORD's outreach related to IODP in ECORD countries. In summer 2019, the current ECORD Outreach Coordinator, Patricia Maruéjol, will retire and therefore a call for an EMA Outreach Officer starting in January 2019 will be issued in 2018.

N. Hallmann continued to summarize communication channels and resources for the different target audiences: early-career scientists/students, scientists, educators,

medias, stakeholders and the general public.

Review of resources and communication tools: The ECORD Annual Report, the ECORD Headlines, core replicas and the website/social networks were recently revised/improved. The ECORD Newsletter may be revised as the need for one or two issues per year and the need for an e-Newsletter have to be evaluated. An educators' kit will be developed and the goodies will be revised. The ECORD calendar (hard copy) will probably be discarded and replaced by an electronic version. New resources for different target audiences have to be developed, such as brochures and a video for stakeholders and the general public. The EOTF needs to identify appropriate expeditions for the production of TV documentaries (following an open call as endorsed by the IODP Forum). Furthermore, e-books and exhibition material for museums/aquariums have to be developed.

C. Cotterill presented further outreach ideas: a potential Distinguished Outreach Lecture Series, the National Geographic Standard Grants, to engage with the outreach applications for ArcOP in another way, a ScienceMediaNL workshop at the AGU, an IODP book series.

35 IODP Forum - Outreach activities (J. Austin)

(15:53)

Dispersed activities and underfunding are problematic. Looking for partners and raising funds is crucial to conduct outreach activities.

Stephanie Spray is a filmmaker and she produced the movie "The Immortals" on Expedition 363 "Western Pacific Warm Pool".

DISCUSSION on external funding:

A minimum of resources/material is needed to start raising external funds (G. Camoin). ECORD should market to raise additional funds (J. Austin). There are not enough resources for activities beyond science (J. Austin). For example, BBC and NOVA could be ECORD partners (J. Austin). BBC and NOVA want to be paid for broadcasting (C. Brenner). Not all expeditions are appropriate for TV documentaries, i.e. the ECORD OTF has to select scheduled MSP expedition(s) and to sell them (G. Camoin). For example, Chicxulub and Corinth expeditions are appropriate expeditions for TV documentaries (G. Camoin). A call for applications has to be issued and the task of the 1-3 selected people onboard is to advertise ECORD/IODP (G. Camoin).

ECORD should also try the philanthropic approach (J. Austin). First a few resources have to be created to approach these people (G. Camoin). The ECORD Council will decide on how to spend external funds in case ECORD is able to raise additional money (G. Camoin).

DISCUSSION on educational activities:

There is almost no workload for ESSAC regarding the teachers (G. Camoin). The workload concerns the funding of the ECORD School of Rock (SOR) (P. Maruéjol). At the moment the SOR budget is with the EOTF and not with ESSAC. ESSAC is also present at the EOTF meetings where exchanges on education may take place (P. Maruéjol). The IODP National Offices should also contribute to discussions and organisations of educational activities (P. Maruéjol). Committed teachers from the Teachers at Sea programme or Education and Outreach Officers are needed to continue the ECORD SOR (P. Maruéjol). The SOR is a good way to convince teachers to bring IODP to the classrooms (P. Maruéjol). The SOR is driven by teachers (A. Voelker). A proposal has to come bottom-up from the community (M. Webb).

The International Geolympics for high school children from all over the world is an excellent way to advertise ocean drilling (H. Kleiven). ECORD was sponsoring this International Earth Science Olympiad, which was held in France in 2017 (P. Maruéjol).

Education happens nationally (J. Behrmann). ECORD has to produce material, which has to be transferred to the different countries as ECORD cannot produce material for all member countries in all different languages. The countries are responsible for the implementation (H. Kinkel). Outreach is prioritized over education and the educational activities would have to be at the national level (M. Webb). Organisation is needed to reply to the countries' questions regarding educational activities, especially if they need resources, such as core replicas (G. Camoin). Teachers have to create a network in their country and they have to express their needs for resources (G. Camoin). ESSAC's role is not to distribute created resources (A. Morris). The question is if ECORD should continue to create resources for education (M. Webb). ECORD's external evaluation has revealed a prioritisation of outreach (M. Webb). Education is very specific and time-consuming (K. Verbruggen). Reflecting ECORD's external review the focus should be more on outreach, especially targeting stakeholders (K. Verbruggen).

COMMENT on e-Newsletter:

The PAGES programme also releases a magazine and a newsletter and the reader can choose between the printed or the electronic version. There has to be a link in the email to download the e-Newsletter (A. Voelker).

ECORD Council Consensus 17-10-22:
The ECORD Council approves the proposed reorganisation of the ECORD outreach activities, as defined during the ECORD Council-ESSAC meeting #5. The ECORD Council encourages the future ECORD Outreach Task Force to start developing this new strategy and considering the production of relevant resources in 2018.

(16:20)
coffee break
(16:34)

CONCLUSIONS

36 Review of Consensus and Actions (N. Hallmann/All)

(16:34)

M. Webb summarized consensus and action items.

37 Next ECORD Council-ESSAC meetings (M. Webb/A. Morris)

See Agenda Item 16: Closed Session.

ACKNOWLEDGEMENTS

ECORD Council Consensus 17-10-23:
The ECORD Council and ESSAC thank the National Oceanographic Center in Southampton, especially Ian Folger, for providing excellent facilities and arrangement and, nice working atmosphere at the occasion of their 5th joint meeting.

ECORD Council Consensus 17-10-24:
The ECORD Council warmly thanks Mike Webb for his outstanding services as Chair of the ECORD Council for the period January 1st to December 31st, 2017 during which he led two very successful meetings in the crucial period of ECORD's renewal. At this occasion, Mike Webb learned that tea breaks are also coffeee breaks.

M. Webb closed the meeting at 16:43.

LIST OF ACRONYMS

ADP: Amphibious Drilling Proposal
AGI: American Geosciences Institute
AGU: American Geophysical Union
AMA: Ask Me Anything
ANZIC: Australian and New Zealand IODP Consortium
APL: Ancillary Project Letter
ArcOP: Central Arctic Paleoceanography, IODP Expedition 377
AWI: Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany
BCR: Bremen Core Repository
BGR: Bundesanstalt für Geowissenschaften und Rohstoffe - Federal Institute for Geosciences and Natural Resources, Germany
CDEX: Center for Deep Earth Exploration
CEREGE: Centre Européen de Recherche et d'Enseignement des Géosciences de l'Environnement - Centre for Research and Education in Environmental Geosciences, Aix-en-Provence, France
CIB: *Chikyu* IODP Board
CNRS: Centre National de la Recherche Scientifique - National Center for Scientific Research, France
CO: Climate & Ocean (IODP Science Plan)
CPP: Complementary Project Proposal
CRPG: Centre de Recherches Pétrographiques et Géochimiques - Research Centre of Petrography and Geochemistry, Nancy, France
DIS: Drilling Information System
DLP: Distinguished Lecturer Programme
DSDP: Deep Sea Drilling Project
EC: Earth Connections (IODP Science Plan)
ECORD: European Consortium for Ocean Research Drilling
EEC: ECORD Evaluation Committee
EFB: ECORD Facility Board
EGU: European Geosciences Union
EM: Earth in Motion (IODP Science Plan)
EMA: ECORD Managing Agency
E&O: Education and Outreach
EOTF: ECORD Outreach Task Force
EPC: European Petrophysics Consortium
EPM: Expedition Project Manager
EPSP: Environmental Protection and Safety Panel
ESFRI: European Strategy Forum on Research Infrastructures
ESO: ECORD Science Operator
ESSAC: ECORD Science Support and Advisory Committee
ETH: Eidgenössische Technische Hochschule Zürich - Swiss Federal Institute of Technology, Zurich
FY: Fiscal Year
GEOMAR: Helmholtz Centre for Ocean Research Kiel
HPCS: Hydraulic Piston Coring System
ICDP: International Continental Scientific Drilling Program
ICP: International Conference on Paleoceanography
IGSN: International Geo Sample Number
IKC: In-kind contribution
INSU: Institut National des Sciences de l'Univers - National Insitute of Sciences of the Universe, France
IODP: Integrated Ocean Drilling Program (2003-2013) & International Ocean Discovery Program (2013-2023)
JAMSTEC: Japan Agency for Marine Earth Science and Technology
J-DESC : Japan Drilling Earth Science Consortium
JOIDES: Joint Oceanographic Institutions for Deep Earth Sampling
JPFY: Japanese Fiscal Year
JR: *JOIDES Resolution*
JRFB: *JOIDES Resolution* Facility Board
JRSO: *JOIDES Resolution* Science Operator
LDEO: Lamont-Doherty Earth Observatory
LFO: Large Facilities Office
LHR: Lord Howe Rise
LTBMS: Long-Term Borehole Monitoring System
LWD: Logging While Drilling
MAD: Moisture & Density
MARUM: Zentrum für Marine Umweltwissenschaften der Universität Bremen - Center for Marine Environmental Sciences, University of Bremen
mbsf: metres below seafloor
MDP: Multi-phase Drilling Project
MeBo: Meeresboden-Bohrgerät
MEXT: Ministry of Education, Culture, Sports, Science & Technology, Japan

MoU: Memorandum of Understanding
MSCL: Multi-Sensor Core Logger
MSP: Mission-specific platform
NanTroSEIZE: Nankai Trough SEIsmogenic Zone Experiment
NERC: Natural Environment Research Council
NIOZ: Nederlands Instituut voor Onderzoek der Zee - Royal Netherlands Institute for Sea Research
NSF: National Science Foundation
NWO: Nederlandse Organisatie voor Wetenschappelijk Onderzoek - Netherlands Organisation for Scientific Research
ODP: Ocean Drilling Program
OETF: Outreach and Education Task Force
ORC: Operational Review Committee
OSP: Onshore Science Party
PAIS: Past Antarctic Ice Sheet Dynamics
PCT: Project Coordination Team
PI: Principal Investigator
PMO: Program Member Office
PU: Participation Unit
QA/QC: Quality Assurance/Quality Control
RD2: Rockdrill 2
SC: Steering Committee
SCORE: Shallow Core Program
SEDIS: Scientific Earth Drilling Information Service
SEP: Science Evaluation Panel
SGI: Società Geologica Italiana - Geological Society of Italy
SOR: School of Rock
SSDB: Site Survey Data Bank
SSDP: Swedish Scientific Drilling Programme
SSO: Science Support Office
TIME: Tyrrhenian Magmatism & Mantle Exhumation
USAC: U.S. Advisory Committee for Scientific Ocean Drilling
USSSP: U. S. Science Support Program
XRF: X-ray fluorescence