Science Support and Advisory Committee

ESSAC Spring Meeting 2023

08-10 May 2023

Centro de Ciências do Mar do Algarve (CCMAR)

Universidade do Algarve

Hotel Baia, Cascais, Portugal

Meeting Minutes

21/06/2023

List of Participants

Role	Member country	Delegate	Alternate	Delegate	Alternate
		In person		Remote*	
ESSAC	Austria	Michi Strasser			
ESSAC	Canada				Dominique Weis or Ben Tutolo
ESSAC	Denmark			Marit-Solveig Seidenkrantz	
ESSAC	Finland	Joonas Virtasolo			
ESSAC	France	Georges Ceuleneer			
ESSAC	Germany			André Bornemann	
ESSAC	Ireland			David Hardy	
ESSAC	Italy	Angelo Camerlenghi			
ESSAC	Netherlands	Martin Ziegler			
ESSAC	Norway	Jan-Sverre Laberg			
ESSAC	Portugal	Antje Voelker			
ESSAC	Portugal				Cristina Veiga-Pires
ESSAC	Spain			Carlota Escutia	
ESSAC	Sweden	Matt Oregan			
ESSAC	Switzerland			Gretchen Früh-Green	
ESSAC	United Kingdom	Antony Morris			
ESSAC SCI. COORD	Italy	Hanno Kinkel			

EMA	France	Gilbert Camoin, Nadine Hallmann	
ECORD EFB	UK		Sasha Turckyn
ESO	UK		David McInroy
SEP	Portugal	Antje Voelker	Tim Reston
MAGELLAN+	France/Netherlands	Nadine Hallemann	
EOTF	France		Malgo Bednarz
OBSERVER	Portugal	Fatima Abrantes	Davide Gamboa, João Duarte
FILED TRIP GUIDE	Portugal	Pedro Terrinha	

Agenda

ESSAC Meeting 8-10 May 2023 –Agenda

8 May 2023

09:00	1 – Introduction, logistics (Antje, Angelo) and adoption of the agenda
09:15	2 – Updates on the ESSAC composition
09:30	3 – Minutes of ESSAC Fall 2022 Meeting and actions
09:45	4 – Update on Future Scientific Ocean Drilling (including ECORD-JAPAN Workshop)
10:30 – 11:00	*Coffee break*
11:00	4 – *(continued)*
13:00 – 14:30	*Lunch break*
14:30	5 – Reporting from boards and committees (~15 minutes each + discussion)
	PMOs (Angelo Camerlenghi) on site
	Facility Board (Sasha Turchyn) remotely
	ESO (David McInroy) remotely
	SEP (Tim Reston) remotely
	Magellan Plus (Nadine Hallmann) on site
16:00 – 16:30	*Coffee break*
16:30	Science Talk by Fatima Abrantes: Expedition 397 Iberian Margin Paleoclimate
20:00	*Dinner*

9 May 2023

09:00	6 – 'Virtual Expeditions' Concept
09:45	7 - Training and Outreach
	ECORD Grants, Summer Schools and Scholarships
	Distinguished Lecturer Program
	Conferences and ECORDsphere
10:30 – 11:00	*Coffee break*
11:00	Past and future training activities (including joint activities with J-DESC)
11:30	8 - Expedition Staffing
	Review of the expedition schedule and ECORD participants
13:00 – 14:30	*Lunch break*
14:30	Current quota table
15:30	9 - ECORD participation by countries and monitoring of ECORD participation in scientific ocean drilling
16:00	10 - AOB and date and place of Next Meeting
16:30	End of meeting

10 May 2023	
09:00 – 16:00	Filed Excursion led by Pedro Terrinha. Geology in the Guincho area. Local transportation from Cascais will be provided.

1 – Introduction, logistics

Antje summarises the organization of the meeting and the field trip.

The meeting scope was defined as:

Monday:

Mainly update ESSAC delegates on:

- Ongoing process of preparation of the ECORD-Japan program
- The recent activities of ECORD

Tuesday:

Discuss Virtual Expedition concept in the ECORD-Japan program

Review of ESSAC activity since last meeting and discussion on how to improve the monitoring for post-2024 activities.

2 - Updates on the ESSAC composition

Country	**Delegate**	**Alternate**
Austria	Michael Strasser	Walter Kurz
Canada	John Jamieson	Dominique Weis
Denmark	Marit-Solveig Seidenkrantz	Paul Knutz
Finland	Joonas Virtasolo	Christoph Beier
France	Georges Ceuleneer	Anne Le Friant
Germany	Susann Henkel	André Bornemann
Ireland	David Hardy	Xavier Monteys
Italy (Chair)	Angelo Camerlenghi	Riccardo Tribuzio
Netherlands	Martin Ziegler	Jeroen van der Lubbe
Norway	Helga F. Kleiven	Jan Sverre Laberg
Portugal	Antje Voelker	Cristina Veiga-Pires
Spain	Carlota Escutia	tbd
Sweden	Matt O'Regan	tbd
Switzerland	Gretchen Früh-Green	Silvia Spezzaferri

United Kingdom	Antony Morris	Kate Littler

- Spain: Carlota reports that she will rotate off as soon as the confirmation is received from the Ministry. A new delegate will be nominated, likely before the Fall 2023 ESSAC Meeting and she will remain as Alternate for a short time.
- Sweden: Matt reports that the name of the Alternate must be communicated by the funding agency. Because Magnus Friberg has left his position, the nomination is taking more time than expected.
- Portugal: Antje reports that she and Cristina Veiga-Pires will rotate off ESSAC and the new Delegate/Alternate will be nominated.

All new delegates and alternates should be nominated in time before the ESSAC 2023 Fall Meeting.

Angelo apologizes for not copying ESSAC correspondence to ESSAC Alternates, while addressing e-mail messages only to Delegates. It is agreed that for a complete communication all ESSAC communications should be sent to ESSAC delegates with Alternates in copy.

Next ESSAC office and Chair

Angelo reminds that the current ESSAC Office will stay in Trieste until December 30, 2024. On January 1st 2024 the new vice-Chair (who will become Chair on January 1st 2025) will begin his/her functions as in-coming Chair.

A new ESSAC Chair should be identified for ECORD Council decision in Fall 2023.

The ESSAC delegates are invited to consider expressing the intention to host the ESSAC Office or to enquire with colleagues or suggest names. Angelo revises the ESSAC budget (see Agenda Point AOB).

The ESSAC Office is available to provide all necessary information to potential candidates. Antony Morris stressed the importance of encouraging women to apply.

Action #1: ESSAC office from now on all ESSAC Correspondence will be addressed to ESSAC delegates with Alternates in copy.
Action #2: ESSAC Office will issue a call for Candidates to host the ESSAC Office in June 2023 so that the ECORD Council can approve during the Fall 2023 ECORD joint ECORD Council - ESSAC meeting.

3 – Minutes of ESSAC Fall 2022 Meeting and actions

The Minutes of the ESSAC Fall Meeting 2022 were approved.

4 – Update on Future Scientific Ocean Drilling

Before asking Gilbert to review the situation of the ECORD-Japan program and the position of the international partners following the Forum Spring 2023 Meeting in Vienna, Angelo lists the important milestones since last meeting:

December 12-15 2022 AGU IODP Booth, Chicago (Hanno reports later)

January 17, 19, 26 2023 ECORD-Japan Workshop (see following slides)

	https://www.ecord.org/workshop-on-the-future-of-scientific-ocean-drilling/
February 23	New logo of ECORD for the 20th Anniversary of ECORD in 2023
	https://www.ecord.org/new-logo-of-ecord-for-the-20th-anniversary-of-ecord-in-2023/
March 06 2023	NSF's response to the Science Mission Requirements report for a potential new U.S. scientific ocean drilling vessel
	https://www.nsf.gov/news/news_summ.jsp?cntn_id=306985&org=OCE
March 06 2023	NSF: Announcement of the Non-Renewal of the JOIDES Resolution Operations and Maintenance Cooperative Agreement
	https://www.nsf.gov/news/news_summ.jsp?cntn_id=306986&org=OCE
March 07 2023	Alexandra Witze publsces an article in Nature: Ocean-drilling ship that revolutionized Earth science due to retire
	https://www.nature.com/articles/d41586-023-00690-1
March 15 2023	NSF Dear Colleague Letter NSF DCL: Advancing Research in the Geosciences Using Legacy Scientific Ocean Drilling Cores
	https://mailchi.mp/ldeo/nsf-dcl-using-legacy-sci-ocean-drilling-cores?e=c1803cec1b
March 16 2023	Letter from USAC Chair and USSSP Director
	https://mailchi.mp/ldeo/iodp-news-letter-from-usac-chair-and-usssp-director?e=[UNIQID]
March 20-23 2023	ECORD-Japan MoU Writing Retreat, San Francisco
March 28 2023	Gilbert Camoin and Nobu Eguchi publish a Correspondence to Nature: Japan and Europe's next ocean-drilling research programme
	https://www.nature.com/articles/d41586-023-00893-6
April 03 2023	ECORD Headlines#21
	https://www.ecord.org/ecord-headlines-21/
April 3-5 2023	ANZIC FUTURE D.E.E.P. REGIONAL PLANNING WORKSHOP
	https://iodp.org.au/home/future-d-e-e-p-workshop/
April 22-23 2023	IODP Forum
April 25 2023	EGU General Assembly 2023. Scientific Session: Achievements and perspectives in scientific ocean and continental drilling
	https://meetingorganizer.copernicus.org/EGU23/session/46843#
April 27 2023	EGU General Assembly 2023. 20th ANNIVERSARY at the occasion of the ECORD-ICDP Townhall meeting25

Gilbert provides a review the situation of the ECORD-Japan program (named IODP^3) and the position of the international partners following the Forum Spring 2023 Meeting in Vienna, which triggered an in-depth discussion with all ESSAC delegates.

See Slides in attachment.

Important points emerged in the discussions about IODP^3:

Critical and important role of the future Science Support Office

A call for expressions of interest to host the IODP^3 Science support office will be issued jointly by ECORD and Japan at the end of June 2023, so that negotiations can be started in spring 2024. The Science Support Office will include the tasks on Publications and will be asked to create and manage a IODP3 web-based Participant Portal (see agenda Point 9). A Committee will be established for the evaluation of the applicants. Possible ESSAC involvement in the process.

Financial contributions to IODP^3

No details yet defined about cash contributions. Japan will make the *Chikyu* available for riderless drilling. Possibly with ~ 5 months of operations per year. The area will be Western Pacific and Indian Ocean.

Scientific priorities in IODP^3.

The use of the *Chikyu* will enforce a geographic steering of some riserless drilling. MSP drilling implemented by ECORD could benefit from a science steering, functional to the new MSP Concept. Even if any water depth and penetrations is in principle possible with MSP, the costs will be lower if geotechnical drilling vessels will be employed. This will favor certain paleoclimatic investigations (high resolution paleoclimatic records in the most recent part of the Cenozoic, studies on submarine slope instability etc. ESSAC will be asked to play a role in such scientific steering in IODP^3.

Three expeditions/year are considered as a target for success in IODP^3, but flexibility could enable shorter expeditions than the usual 2 month as well.

Future science parties will be enlarged, and it will be possible to involve more co-authors of the proposals, especially data scientists, who are often unable to enter science parties.

An effort that may require input from ESSAC is the drafting and approval of the new guidelines for submission of drilling proposal, that will be imitated by the chairs of EFB and CIB. A revised version will be released in Autumn 2023 to enable co-authors of existing proposals in SEP or JRFB to submit their proposals to IODP^3 if they wish.

In the meantime, the ECORD and Japan operators will begin defining the composition of an IODP^3 EPSP-like entity.

ECORD-Japan workshop on future scientific drilling with MSP and Chikyu.

Angelo reports on the Phase-1, online only workshop (see attached presentation). The most attended breakout session was Climate and Ocean Health. A question was raised whether Ocean Health is under-represented. This will be kept into consideration when organizing the phase-2 Workshop.

The planning of the Phase-2 hybrid workshop will be crucial. The purpose of this workshop is to invite teams presenting the most promising scientific ideas to formulate concrete initiatives towards the submission of new drilling proposals.

Furthermore, it is agreed that the Workshop could be useful in the identification of scientific focus of scientific drilling of IODP3 and produce a sort of white paper. A writing retreat could be considered after the phase-2 workshop to daft such white paper.

The date and place of the Phase-2 workshop should be decided soon after the finalization of the report (before the ECORD Council meeting). It is agreed that holding the workshop in the Fall of 2023 could be too soon, with little time for a proper organization. Spring 2024 could be the best option.

Action # 3: ESSAC Office will decide date and place of Phase-2 ECORD-Japan Workshop jointly with JDESC involving the Workshop Steering Committee.
Action #4: ESSAC Office promotes further discussion on the implementation of a process that will lead to a IODP3 Science White Paper to steer the scientific objectives of the early phase of IODP^3.

5 – Reporting from boards and committees

Presentations given are available as attachments.

- ECORD Facility Board (Sasha Turchyn)
- ESO (Hanno Kinkel for Dave McInroy)
- SEP (Tim Reston)
- Magellan Plus (Nadine Hallmann)

ECORD Facility Board

The issue of how to implement the process of transfer, or re-submission of existing proposals at JRFB to the IODP^3 Facility board was discussed.

To begin the planning of FY 2025 with the necessary time it is conceivable that an extraordinary EFB meeting will be held sometime in the early months of 2024. Regarding JRFB proposals, a shared opinion is that automatic transfer should be avoided, and proponents should be informed that they have an option to re-submit to IODP^3. A joint EFB-CIB meeting will happen in September 2023, during which a decision will be made.

ESO

A question was asked if a test of the rock-drill used during Exp 389 (Hawaii Drowned Reefs) will be performed on basalts outcropping nearby.

Action #5: ESSAC Office asks Dave McInroy to provide the answer.

SEP

The SEP meeting of June 2023 (Pavia, Italy) will evaluate 8 proposals and there are possibilities that two can be forwarded to the EFB. The activity of the current SEP will end in 2024 (before September 31st (Likely with the June 2024 meeting). A maximum of 5 proposals could then be available to the EFB for post 2024 scheduling, provided that all the candidate proposals in SEP will be moved to EFB.

There may not be the time to complete the transfer of proposals from IODP2 SEP to IODP^3 SEP. Proponents are anxious to know how to eventually move their proposals in SEP (and at JRFB) to IODP^3. It is important that guidelines will be issued soon.

Magellan Plus

Statistics of ECORD participation in the Magellan+ Program have been presented by Nadine (see attachment). Since 2024 an average of 4 proposals per year have been submitted. 26 IODP proposals have originated from Magellan+ Workshops. In all, 1500 were the participants in the workshops, from all ECORD Countries. 24% were the ECS.

PMO

No PMO Meetings since September 16 2022 at Lamont

Planning for an **initial Flagship Initiative workshop on Ground Truthing Future Climate Change should be postponed** until NSF renders its decision on a 2025-28 extension of the JOIDES Resolution. However, it was agreed that a draft should be developed for a global call from PMOs for steering committee members to guide this Flagship Initiative.

In response to a recommendation from the recent Co-Chiefs review meeting at JRSO, the PMOs affirm the **value of a standardized approach, to the extent possible, for all IODP applications to sail, ideally via a centralized web page.**

There should be a collaborative PMO effort to produce a **record of the International Ocean Discovery Program's most outstanding scientific achievements,** or "Greatest Hits." Multiple distribution channels, both digital and printed, should be pursued to disseminate this information, which should be organized by IODP theme.

The PMOs endorse efforts to **support general ocean drilling-related projects at modest funding levels, such as USSSP's Novel Projects Program and ANZIC's Legacy Analytical Funding.** The possibility of providing a **centralized page** with links to these project descriptions, perhaps on the iodp.org site, should be explored.

ESSAC expresses support to the introduction of a common application systems for all IODP^3 members.

Regarding the Greatest Hits, one initiative on MSP is already in progress with a Special Issue of Marine Geology. A forward-looking document can be produced by ECORD and Japan for IODP^3, including a focus on Climate Change. The issue must be further discussed at IODP3 working Group level, also in relation to the second ECORD-Japan Workshop.

NEXT PMO Meeting: Back to back with IODP Forum, Wollongong (Sidney) 12-13 October 2023

6 – 'Virtual Expeditions' Concept

A JRFB Working Group on Virtual Expeditions has been established and held 14 meetings since August 2022

Tasks

- To define the minimum requirements for a research effort to be considered a virtual expedition.
- To develop recommendations for procedures related to the evaluation, endorsement, and scientific outcomes/scientific legacy of a virtual expedition.

Composition of JRFB Working Group on Virtual Expeditions

Larry Krissek	Chair	Ohio State University
Daniel Babin	Member	Lamont-Doherty Earth Observatory
Laurel Childress	Member	Texas A&M University
Hugh Daigle	Member	University of Texas at Austin

Susan Humphris	Member	Woods Hole Oceanographic Institution
Amelia Shevenell	Member	University of South Florida
Gary Acton	Alternate	Texas A&M University
Gail Christeson	Ex Officio	National Science Foundation
Beth Christensen	Ex Officio	Rowan University
Sarah Kachovich	Ex Officio	Australia-New Zealand IODP Consortium
Charna Meth	Ex Officio	IODP Science Support Office
Angela Slagle	Ex Officio	Lamont-Doherty Earth Observatory
Junichiro Kuroda	Ex Officio	J-DESC Executive Board
Angelo Camerlenghi	Ex Officio	ECORD Science Support & Advisory Committee
Yangyang Li	Ex Officio	IODP China
Dhananjai Pandey	Ex Officio	IODP India

Review of 'virtual expedition' concept by other IODP members:

Beth Christensen's 4th Platform / Virtual Expeditions / Legacy Expeditions in IODP

Joint US-European Double sampling Workshop proposals submitted.

NSF Dear Colleague Letter: Advancing Research in the Geosciences Using Legacy Scientific Ocean Drilling Cores

OCE welcomes proposals to the Marine Geology and Geophysics Program (MGG) promoting research that supports collaborations of diverse scientists and disciplines and provides training opportunities for the next generation of ocean scientists. Proposals in response to this DCL must advance core OCE program science goals and use DSDP/ODP/IODP cores toward addressing scientific problems.

ANZIC Legacy Core Grant program: ANZIC legacy analytical Funding (AILAF)
https://iodp.org.au/explore/legacy-funding/

ANZIC provides grants of up to $25,000 to researchers from member institutions for the study of previously collected ocean and land core samples and data and the rapid delivery of research outputs. Opportunities extend to fields beyond traditional geosciences, including data science, mathematics, molecular and genetic analysis, and much more.

J-DESC and the Kochi Core Center (KCC): Legacy Core Re-Discovery (LeCoRD):

Program under development.

WG members until now have agreed that:

The term "*virtual expeditions* (VE)" will be replaced by **Legacy Asset Projects (LeAPs)**

The definition for LeAPs should be kept broad to provide flexibility and inclusivity for future programs and structures.

- **LeAPs** should:
- address an aspect of the 2050 Science Framework. The definition for virtual expeditions should not specify which or how many elements of the 2050 Science Framework must be addressed;
- include a sustained and focused effort as appropriate for meeting the scientific objectives of the research;
- have objectives that originate from or that are based on “legacy assets”;
- be formally reviewed and endorsed by a future scientific ocean drilling program;
- build from a foundation of legacy assets, but the definition of LeAPs should not specify which or how legacy assets should be used;
- include participants from multiple countries who represent multiple disciplines;
- not include new drilling;
- be standalone activities that are not dependent on other expeditions or active research projects for success.

The proponent group for a LeAP should participate in the project, but there should also be mechanisms for opening participation to the broader community.

OUTLINE OF REASONS BEHIND ESSAC INTEREST IN THE IMPLEMENTATION OF LeAPs IN POST-2024 SCIENTIFIC OCEAN DRILLING

- Such “expeditions” will:
    - expand the shore-based participation of scientists in scientific ocean drilling;
    - increase the value of scientific ocean drilling legacy data beyond the existing mechanisms of sample requests to core repositories;
    - generate data that can provide crucial information for the development of future drilling proposals;
    - contribute to the implementation of the FAIR data in scientific ocean drilling;
    - generate particularly attractive research opportunities for ECRs: from training to leadership;
    - reinforce the bottom-up, proposal driven, international character of scientific ocean drilling;
- Such “expeditions” are viewed as:
    - multi-disciplinary, structured, scientific initiatives addressing the 2050 Science Framework and subject to scientific validation by an international panel;
    - initiatives undergoing a rapid assessment relatively to drilling expeditions;
    - initiatives rapidly implemented;
- Critical points
    - involvement and support to Core Repositories because of envisaged increased work-load;
    - funding supporting scientists during data collection in core repositories and subsequent analytical work.

WHAT NEXT:

1) Adopt as much as possible the conclusions of the WG, agreed by all current program members
2) Include these concepts in the ECORD-Japan MoU
3) Develop guidelines for such proposals in the new program
4) Identify science evaluation process and management
5) Allocate a budget:

LeAPs (if the outcomes of the JRFB Working Group will be adopted)		
Proposal for start-up funding from ECORD (2025-26-27?)		
Goal:	Implement 2 LeAPs / year	
1st Call in spring 2024		
Use the Magellan+ Tool for calls, review until a program-wide evaluation is established		
Resources per LeAPs		
Planning Workshop	15,000 €	
Travel and subsistence to core repositories	2,000 €	per scientist per core repository
Start-up analytical work	10,000 €	per scientist
Maximum number of ECORD scientists	10	

LeAP budget 1 core repository	
Planning Workshop	15,000 €
Travel and subsistence	20,000 €
Analytical start-up	100,000 €
Total	**135,000 €**

LeAP budget 2 core repositories	
Planning Workshop	15,000 €
Travel and subsistence	40,000 €
Analytical start-up	100,000 €
Total	**155,000 €**

Total budeget to be prelimiarily allocated by ECORD Council	**290,000 €**	**per year**

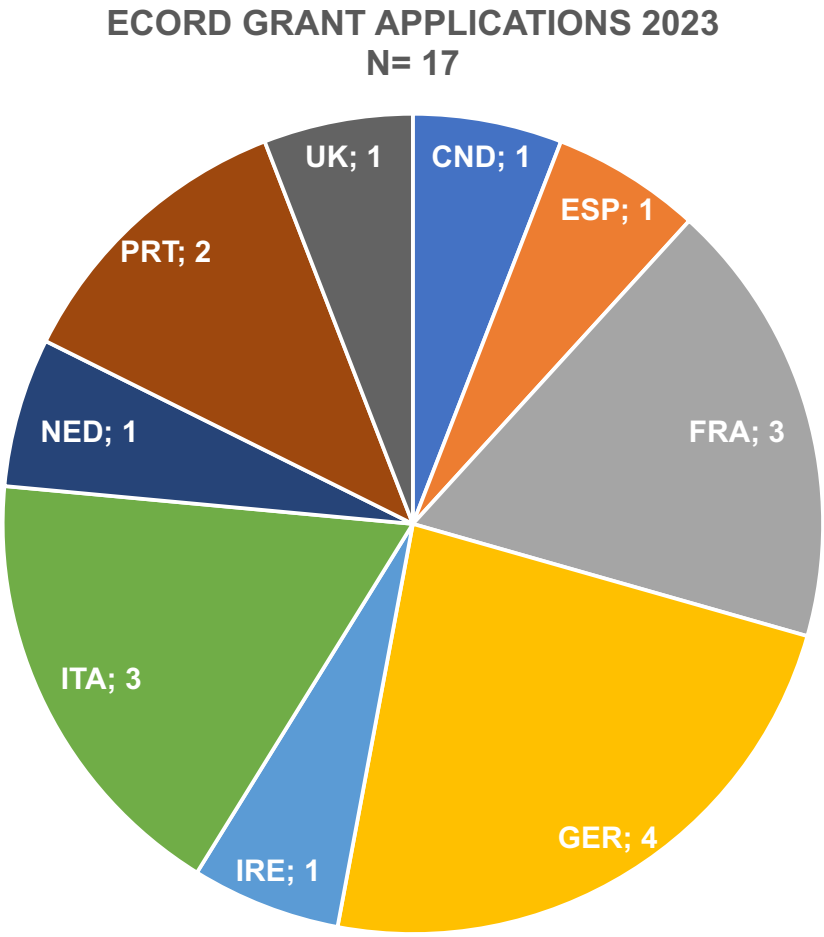
The discussion on LeAPs concentrated on the 'large scale' character that such projects must have compared to sample requests and the opportunity that they represent for small ECORD countries. There is a consensus on identifying a budget to support travel and subsistence in relation to sampling and measurements at core repositories. There is a possibility that ECORD will also fund a small contribution to analytical work. However, this contrasts with the lack of such support for analytical work for drilling expeditions and care should be taken in not generating two different paths of funding. LeAPs should provide some kind of reporting, or synthesis paper, within IODP3. A discussion addressed the need of breaking LeAPs proposals in pre- and full-proposal, with a majority of opinions in favor of a single stage proposal

The issue should be discussed also at ECORD-Japan level.

Action #6: ESSAC Office supports the implementation of LeAPs during the ECORD Council meeting in June 2023.

7 – Training and Outreach

Attendance to calls was very good in terms of gender balance, number of applicants, and diversity within ECORD. There were 17 applications to Grants requesting ~ 43 k Eur. All were of good quality and were accepted.



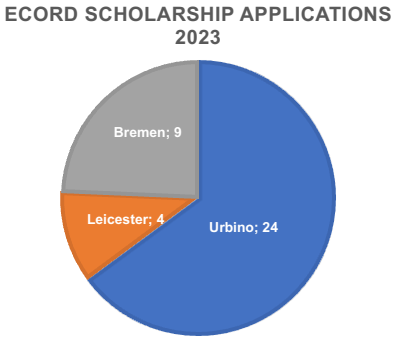
ESSAC should start Tandem Grants with Japan to foster co-operation. Preferably the 4 distinguished - lectures should address the 4 themes of the Science Framework 2050 as they have been shortened in the themes of the ECORD-Japan Workshop.

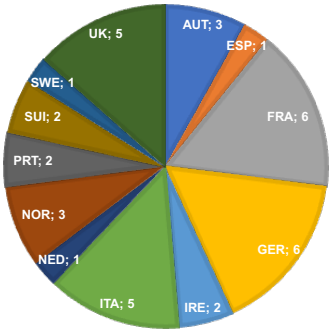
DLP will be called soon after this meeting. The call will be for 4 lectures, possibly including MSPs. IN general, 4 replicas of the conference are expected. It is agreed that a lecture exchange should be started with Japan.

Action #7: ESSAC Office launches a Call for Distinguished Lecture Program soon after the ESSAC Spring Meeting.

ESSAC supports 3 Summer schools this year (Leicester – Downhole Logging for IODP Science; Urbino – Past Climates for the Earth System; Bremen – From Greenhouse to Icehouse – The Cenozoic Arctic Ocean and global climate history) . Each summer school will receive 10k€ in direct support.

In addition, we opened a call for scholarships and have received a total of 37 applications, which will all be funded.





8 – Expedition staffing

2023-2024 Schedule of the JOIDES Resolution	
Exp. 398 Hellenic Arc Volcanic Field (*Completed*)	Dec. 11, 2022 – Feb. 10, 2023
Exp. 399 Building Blocks of Life, Atlantis Massif (*ongoing*)	April 12 – June 12, 2023
Exp. 395 Reykjanes Mantle Convection and Climate	June 12 – Aug. 12, 2023
Exp. 400 NW Greenland Glaciated Margin	Aug. 12 – Oct. 12, 2023
Exp. 401 Mediterranean-Atlantic Gateway Exchange	Dec. 10, 2023 – Feb. 9, 2024
Exp. 402 Tyrrhenian Continent-Ocean Transition	Feb. 9 – Apr. 8, 2024
Exp. 403 Eastern Fram Strait Paleo-archive	June 4 – Aug. 2, 2024
Exp. 404 Arctic-Atlantic Gateway Paleoclimate	Aug. 2 - Sept. 30, 2024
2023-2024 Schedule of MSP	
Exp. 389 Hawaiian Drowned Reefs	mid-August to end October 2023
New England Shelf Hydrogeology, if budget allows	2024
2023-2024 Schedule of the Chikyu	
Proposal 835 Japan Trench Tsunamigenesis	2024
Proposal 939-APL3 Petit-Spot Magmatism	2024

Invited ESSAC scientists:

Exp. 399 Building Blocks of Life, Atlantis Massif

1. **Co-chief Scientist** McCAIG, Andrew (UK)
2. Structural Geologist, COLTAT, Remi J.M.B. (FRA)
3. Inorganic geochemist, GODARD, Marguerite M. (FRA)
4. Structural Geologist, KUEHN, Rebecca (GER)
5. Igneous Petrologist LISSENBERG, Cornelis Johannes (UK)
6. Petrologist PARSONS, Andrew J. (UK)
7. Inorganic geochemist/ organic geochemist, SISSMANN, Oliver J. (FRA)

Exp. 395 Reykjanes Mantle Convection and Climate

1. **Co-chief Scientist**, BRIAIS, Anne (FRA)
2. Paleomagnetist, DI CHARA, Anna (ITA)
3. Micropaleontologist (nannofossils), KARATSOLIS, Boris T. (SWE)
4. Physical Properties Specialist/Stratigraphic Correlator, SINNESAEL Mathias (FRA)
5. Sedimentologist, MODESTU, Sevasti E. (UK) formerly NORWAY
6. Petrologist, MURTON Bramley, (UK) **SHORE-BASED**
7. Petrologist, PASQUET Gabriel T. (FRA)
8. Paleomagnetist, SATOLLI, Sara (ITA) **SHORE-BASED**

Special Call

1. Micropaleontologist (nannofossils), DUNKLEY JONES, Thomas (UK)
2. Downhole Tools/Physical Properties Specialist, McNAMARA, David D. (UK)
3. Micropaleontologist (planktic foraminifers), PEARSON Paul N. (UK)
4. Physical Properties Specialist, WHITE Nicholas J. (UK)

Exp. 400 NW Greenland Glaciated Margin

1. **Co-chief Scientist**, KNUTZ, Paul (DEN)
2. Micropaleontologist (planktic foraminifers), COXALL Helen Katherine (SWE)
3. Sedimentologist, LE HOUEDEC, Sandrine (SWI)
4. Paleontologist, NELISSES, Mei (NED)
5. Micropaleontologist (diatoms), ÖZEN, Volker (GER)
6. Stratigraphic Correlator/Downhole Measurements, PEREZ MIGUEL, Lara Felicidad (DEN)
7. Inorganic Geochemist, STAUDIGEL, Philip (GER)

Special Call

1. Micropaleontologist, ZIMMERMANN, Heike (DEN)

Exp. 389 Hawaiian Drowned Reefs

1. Inorganic Geochemist, FELIS, Thomas (GER)
2. Inorganic Geochemist, HATHORNE, Ed (GER)
3. Inorganic Geochemist, GREVE, Sahra (GER)
4. Microbiologist, PROHASKA, Ana (DEN)
5. Micropaleontologist (benthic forams), RENEMA, Willem (NED)
6. Physical Properties Specialist, JORRY, Stephan J. (FRA)
7. Sedimentologist, HAMON, Youri (FRA)
8. Sedimentologist, WESTPHAL, Hildegard (GER)
9. Sedimentologist, NOHL, Theresa (AUT)
10. Sedimentologist, GISHLER, Eberhardt (GER)
11. Coral Specialist ALLISON, Nicola, (UK)

Exp. 401 Mediterranean-Atlantic Gateway Exchange

1. **Co-chief Scientist**, FLECKER, Rachel (UK)
2. **Co-chief Scientist**, DOUCASSOU, Emmanuelle (FRA)
3. Sedimentologist, FABREGAS, Natacha Fabregas (NOR)
4. Sedimentologist, HERNANDEZ MOINA, Javier (UK)
5. Paleomagnetist, KRIJGSMAN, Wout (NED)
6. Physical Properties specialist/Downhole Measurements, RAAD, Fadl (FRA)
7. Micropaleontologis (Foraminifera), SIERRO Francisco Javier (ESP)

Special Call

1. Sedimentologist, RODRIGUEZ TOVAR, Francisco Javier (ESP)

The staffing has generated a satisfactory composition of the Science Parties with respect to ECORD participation, that is diverse in terms of career stage, expertise, gender and reflects well the financial contributions from the ECORD member countries.

ESSAC reiterates the importance of submitting to the Science Operator of IODP Expeditions a short list of the highly ranked applicants (in general those scoring 4 or more out of 5) often resulting in a number of candidates that is two to three times the available berths. In this way co-chief scientists are given a choice to better fill all the positions in the scient party considering expertise, career stage, gender, and nationality. It is noted that nota all current members of IODP adopt this procedure, appointing directly the scientists that should be included in the science party.

A discussion was initiated during the meeting addressing the importance of allowing young researchers (PhD students and early-career researchers) to participate in IODP expeditions in relation to the need to ensure the proper experience and expertise onboard, with particular reference to biostratigraphy and sedimentology. The consensus is that, for biostratigraphy and sedimentology in particular, the science party members ensure that an appropriate mix of young and experienced researchers co-exists.

Because ESSAC considers that the participation in science parties of IODP, and IODP^3 in the future, as a unique opportunity for young researchers to build expertise and skills, ESSAC should continue and even enlarge its support to training schools.

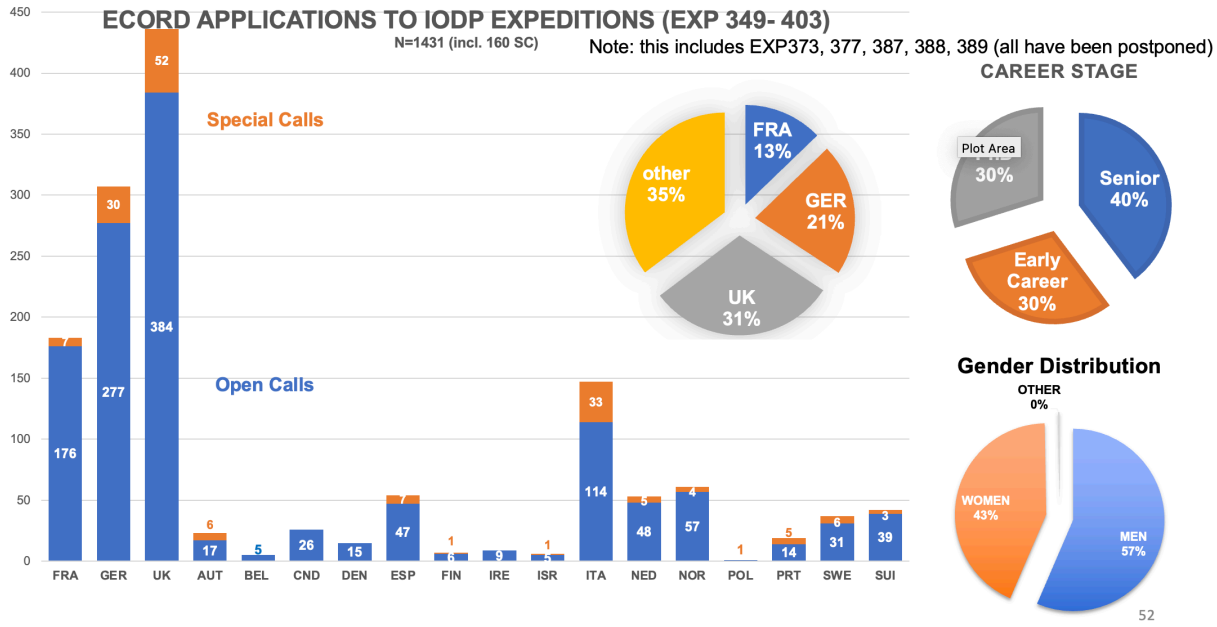
9 - ECORD participation by countries and monitoring

The summary of the scientists invited in the science parties during the current phase of IODP in relation to the financial contribution of the ECORD members (the so-called Quota Table) updated to the date of this report is included below:

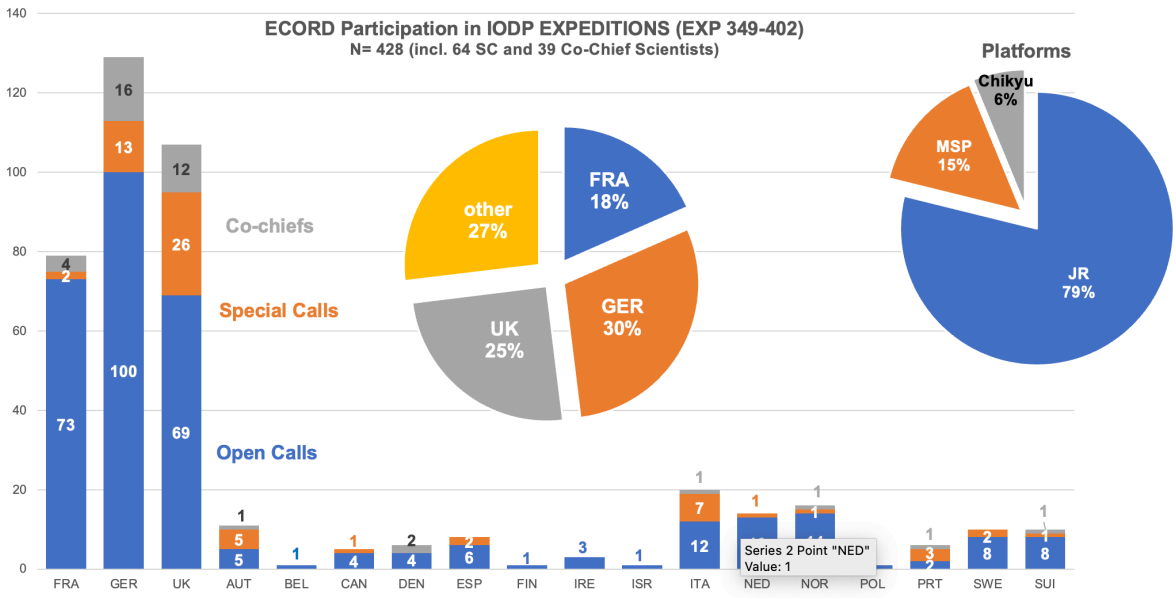
	Financial contributions								Quota calculations							
Member	Contributions ($US) upto and inc 2019	FY 2020 ($US)	FY 2021 ($US)	FY 2022 ($US)	FY 2023 ($US)	FY 2024 ($US)	Total contributions	% contribution	Total berths	Total quota berths	Total non-quota berths	Berth entitlement	Quota difference	% of quota berths	% budget	% difference
France	26,682,460	3,908,000	4,328,800	3,146,680	3,146,680		41,212,620	24.1%	84	81	3	85.5	-4.5	22.82	24.09	-1.28
Germany	33,600,000	5,600,000	5,600,000	5,600,000	5,600,000		56,000,000	32.7%	133	109	24	116.2	-7.2	30.70	32.74	-2.04
UK	22,089,870	3,364,000	3,545,300	3,386,000	1,110,000		33,495,170	19.6%	106	74	32	69.5	4.5	20.85	19.58	1.26
Sum	**82,372,330**	**12,872,000**	**13,474,100**	12,132,680	9,856,680		**130,707,790**	**76.4%**	**323**	**264**	**59**	**271.3**	**-7.3**	**74.37**	**76.42**	**-2.05**
Austria	600,000	100,000	100,000	100,000	100,000		1,000,000	0.6%	10	4	6	2.1	1.9	1.13	0.58	0.54
Canada	323,400	106,000	115,000	115,000	115,000		774,400	0.5%	6	5	1	1.6	3.4	1.41	0.45	0.96
Denmark	940,800	146,000	146,000	150,000	150,000		1,532,800	0.9%	7	5	2	3.2	1.8	1.41	0.90	0.51
Finland	480,000	80,000	80,000	80,000	80,000		800,000	0.5%	1	1	0	1.7	-0.7	0.28	0.47	-0.19
Ireland	746,810	109,000	120,000	120,000	120,000		1,215,810	0.7%	4	4	0	2.5	1.5	1.13	0.71	0.42
Italy	2,700,000	500,000	600,000	700,000	750,000		5,250,000	3.1%	22	14	8	10.9	3.1	3.94	3.07	0.87
Netherlands	3,100,000	600,000	600,000	600,000	600,000		5,500,000	3.2%	13	12	1	11.4	0.6	3.38	3.22	0.16
Norway	6,600,000	1,100,000	1,100,000	1,100,000	1,100,000		11,000,000	6.4%	18	17	1	22.8	-5.8	4.79	6.43	-1.64
Portugal	540,000	90,000	87,700	90,000	90,000		897,700	0.5%	6	3	3	1.9	1.1	0.85	0.52	0.32
Spain	329,000	0	0	660,000	165,000		1,154,000	0.7%	9	7	2	2.4	4.6	1.97	0.67	1.30
Sweden	3,040,000	400,000	400,000	400,000	400,000		4,640,000	2.7%	10	8	2	9.6	-1.6	2.25	2.71	-0.46
Switzerland	3,600,000	600,000	600,000	600,000	600,000		6,000,000	3.5%	10	8	2	12.5	-4.5	2.25	3.51	-1.25
Belgium	58,100						58,100	0.0%	1	1	0	0.1	0.9	0.28	0.03	0.25
Iceland	30,000						30,000	0.0%	0	0	0	0.1	-0.1	0.00	0.02	-0.02
Israel	90,000						90,000	0.1%	1	1	0	0.2	0.8	0.28	0.05	0.23
Poland	60,000						60,000	0.0%	1	1	0	0.1	0.9	0.28	0.04	0.25
Sum	**23,574,110**	**3,831,000**	**3,948,700**	**4,715,000**	**4,270,000**		**40,338,810**	**23.6%**	**119**	**91**	**28**	**83.7**	**7.3**	**25.63**	**23.58**	**2.05**
TOTAL ECORD	**105,946,440**	**16,703,000**	**17,422,800**	**16,847,680**	**14,126,680**		**171,046,600**	**100.0%**	**442**	**355**	**87**	**355**	**0**	**100**	**100**	**0**

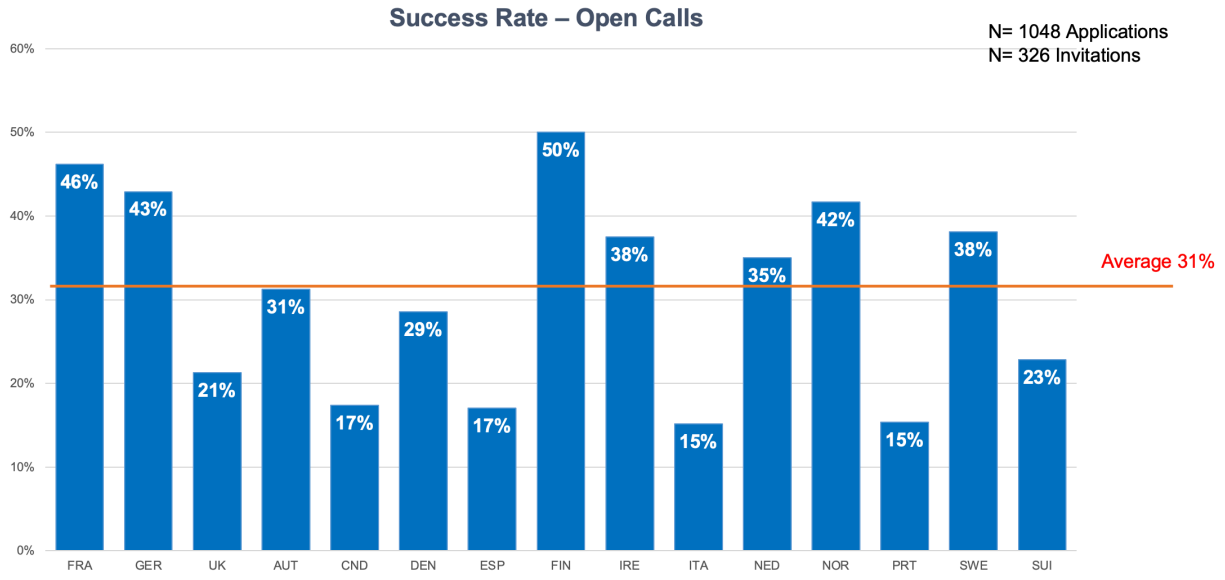
The ESSAC Office continues its monitoring of application and participation in IODP Expeditions. In general, there is ongoing large interest in participation in expeditions, and we receive a good mixture of applications from different career stages and gender diversity. The application numbers are very heterogenous, and some countries have large numbers of applications coming in, which result in a lower “success rate”.

The participation statistics indicate that overall ECORD has received 442 berth () with respect to the 355 entitled according to the MoUs, which is a result of very successful ECORD applications for filling special call berths.

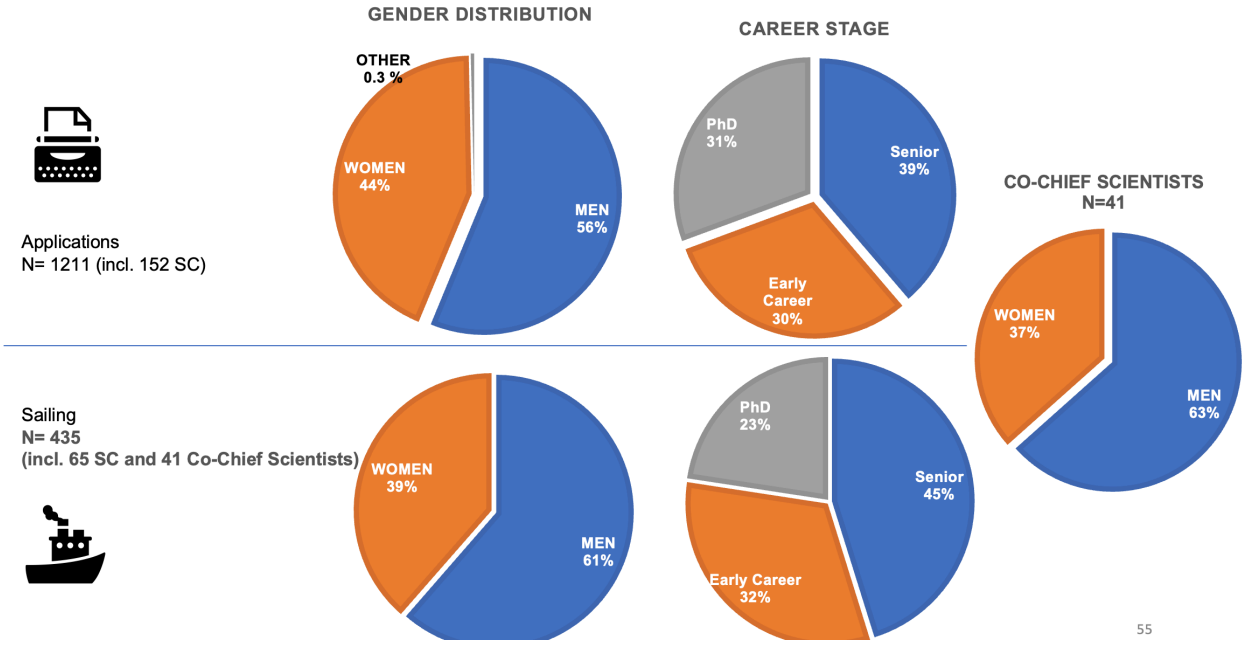

ECORD APPLICATIONS TO IODP EXPEDITIONS (EXP 349- 403)
N=1431 (incl. 160 SC)
Note: this includes EXP373, 377, 387, 388, 389 (all have been postponed)
Special Calls
Open Calls
FRA 13%
GER 21%
UK 31%
other 35%
CAREER STAGE
Plot Area 30%
Senior 40%
Early Career 30%
Gender Distribution
OTHER 0%
WOMEN 43%
MEN 57%
FRA GER UK AUT BEL CND DEN ESP FIN IRE ISR ITA NED NOR POL PRT SWE SUI

52


ECORD Participation in IODP EXPEDITIONS (EXP 349-402)
N= 428 (incl. 64 SC and 39 Co-Chief Scientists)
Co-chiefs
Special Calls
Open Calls
FRA 18%
GER 30%
UK 25%
other 27%
Platforms
Chikyu 6%
MSP 15%
JR 79%
Series 2 Point "NED" Value: 1
FRA GER UK AUT BEL CAN DEN ESP FIN IRE ISR ITA NED NOR POL PRT SWE SUI



The comparison between application statistics and sailing statistics shows that there is a slight mismatch in the gender and career stage ratio between applications and shipboard scientists.



10 - AOB AND NEXT MEETING

AOB1 - Angelo asks to report an budget on view of the ECORD Council meeting in June 2023 where the ESSAC Office budget for 2024 will be established. The current situation is that of underspending as a consequence of the some decreased travel grants, the Leichester summer school 2022 held online only, and the lack of the DLP program in 2022.

A discussion on whether to identify new budget item to be addressed with the available resources, or to focus on existing budget items. The consensus is that the resources should be focused to the support of

ECORD participants in the second ECORD-Japan Workshop that will happen in hybrid form in Japan either in Fall 2023 or in Spring 2024. The budget allocated to the support of such travel grants is 70.000 Euros.

Other options of supporting vide-communication activities on key ECORD scientists in scientific Drilling, or to support a historical role of ECORD members in scientific drilling were not prioritized.

The ESSAC Fall 2023 Meeting is already scheduled on Monday afternoon, October 2nd in Nice, in conjunction with the annual joint ECORD Council and ESSAC meeting.

ESSAC members are invited to think of venues for the ESSAC Spring 2024 meeting.

The meeting ends at 16:00 on May 9, 2023