

6th ESSAC Meeting

5th – 6th May 2006

National Museum of Wales, Cardiff

List of Participants

ESSAC Office

Chris MacLeod
Julian Pearce
Federica Lenci

ESSAC chair
ESSAC acting chair
ESSAC Science Coordinator

ESSAC Representatives

Fatima Abrantes
Eve Arnold
Henk Brinkhuis
Gilbert Camoin
Menchu Comas
Michael Enachescu
David Hardy
Benoit Ildefonse
Rachel H. James
Hermann Kudrass
Judith McKenzie
Rolf Birger Pedersen
Werner Piller
Marco Sacchi
Kari Strand

ESSAC delegate Portugal
ESSAC delegate Sweden
ESSAC delegate Netherlands
ESSAC delegate France/ESSAC vice-chair
ESSAC delegate Spain
ESSAC acting alternate Canada
ESSAC alternate Ireland
ESSAC alternate France
ESSAC alternate United Kingdom
ESSAC alternate Germany
ESSAC delegate Switzerland
ESSAC delegate Norway
ESSAC delegate Austria
ESSAC delegate Italy
ESSAC delegate Finland

Observers

Helen Bell
Teresa Bingham-Müller
Dan Evans
Chris Franklin
Patricia Maruéjol
Catherine Mével
Federica Tamburini

NERC
ECORD-Net, Swiss National Science Foundation
ESO Science Manager
NERC
EMA scientific officer
EMA Director
ECORD-Net, Swiss IODP Science Coordinator

Apologies

Bryndis Brandsdottir
Paul Martin Holm
Rudy Swennen

ESSAC delegate Iceland
ESSAC delegate Denmark
ESSAC delegate Belgium

DRAFT MINUTES

1. Introduction

1.1 Welcome and logistics

Pearce and MacLeod welcomed delegates to the meeting and noted domestic arrangements

1.2 Agenda

Pearce outlined the agenda for meeting, highlighting staffing, long-range planning, workshops, outreach and the ECORD review.

Brinkhuis raised the issue that IODP media policy needs to be discussed. Pearce noted that it will be included under item 5.

1.3 Approval of the 5th ESSAC Meeting minutes

The minutes of the 5th ESSAC Meeting were approved.

Lenci reported that Brandsdóttir asked to amend the title of her proposed workshop theme from 'ACEXII' to 'Arctic studies'.

1.4 5th ESSAC Meeting minutes (Edinburgh): Matters Arising

Pearce presented the list of matters arising from the 5th meeting:

- Update on SAS representatives: ECORD Council approved changes.
- Changes in SPPOC now irrelevant as SPPOC to be replaced by SASEC.
- New Jersey Shallow Shelf likely to sail early summer 2007. Evans to elaborate under later item.
- Co-chief scientists. Four ECORD members have been invited: Stephen Hesselbo, Heiko Pälike for Equatorial Pacific, and Achim Kopf (Germany) and Siegfried Lallement (France) for NanTroSEIZE.
- Mission Concept has been approved by IODP-MI Board of Governors.
- Aurora Borealis proposal – to be followed up under later item.
- Magellan Workshops. Deep Biosphere Workshop held successfully in Switzerland. McKenzie to update under later item. Hazards workshops to be arranged by ESF.
- Database and website. More information under later item.

1.5 ESSAC Chair

Pearce explains that he will step down on 1 September 2006, and MacLeod will resume role as Chair. This is by agreement within the office and UK-IODP. MacLeod will handle ESSAC input into the ECORD review. MacLeod requests that ESSAC delegates contact

essac@cardiff.ac.uk, rather than the individuals involved, to optimise communication during the transfer period.

Federica Lenci will leave in July for Australia. The science coordinator's job will be advertised, information to be circulated at EuroForum. Only 15 months are left on the contract, while the Office remains in Cardiff. Ideally, an overseas person would be appointed, although the priority is getting somebody in post quickly.

ESSAC accepts the plan for MacLeod to resume duties, and extends thanks to Federica.

1.6 Goals of the Meeting.

Pearce outlines the goals of the meeting as listed in the Agenda Book.

2. Staffing

2.1 New Jersey Shallow Shelf staffing summary

MacLeod explained that there was some confusion over ship- and shore-based applications, a problem peculiar to MSPs. Definitions have now been clarified.

MacLeod informed delegates that there were 24 applications for (nominally) 8 berths. He described the evaluation process whereby, following ESSAC input, candidates were each given a 'star' rating based on experience and national balance before forwarding to ESO. Eight individuals were given the highest star rating: 2 UK, 2 France, 2 German and 2 other nationalities.

Brinkhuis commented that shore-based work is ideal training for graduate students. Ideally a student programme would be put in place to allow experience to be gained through shore-based work. Ildefonse noted that a clear demarcation would be needed to distinguish between such students on a programme and the actual invited Leg scientists. Evans (for ESO) agreed that, if no samples are involved, then a student programme could be a good idea. It would, however, be something to organise with Bremen, rather than ESO.

Evans described the proposed staffing for New Jersey Margin MSP. He noted the need – as ever – to balance expertise. ESO needs 6 (2 Japan - 2 US - 2 ECORD) sedimentologists, but a very large number have applied. Evans informed ESSAC of the possible staffing for each of the needed areas (petrophysics, stratigraphic correlation etc.). He noted the shortage of Japanese applicants and that this may release further berths. The US might actually fund 9, possibly 10, berths if places are free. The issue of bartering of places was discussed: Franklin stressed a need to coordinate with the US and Japan Program Management Offices (PMOs) and Mével stressed the need for a long-term balance of quotas.

Evans predicted that the staffing ratios based on present application would be: 6 Japan (includes 1 Chinese and 1 Korean), 9 US and 9 ECORD. However, how many of these eventually sail is unknown at this time. There might be need to re-advertise for more applicants if particular area of expertise is lacking. ESSAC delegates may be contacted if there is this need. The tendering process is ongoing: the contract can be signed as soon as suitable platform found, as funds are available.

Regarding balance within ECORD, Evans explained that every effort is made to satisfy scientific needs, but national balance needs to be maintained in the long term. However, MacLeod showed the Table revealing that imbalances are getting significant with some countries well over quota and contributing a high proportion of the new applicants. Because of the expertise issue (in particular) for Expedition 313 it is unlikely that ideal country quotas can always be maintained. The ESSAC Office will continue to monitor national balance and attempt to maintain quotas as closely as possible during forthcoming staffing exercises.

Pearce suggested that Mével should contact small countries with over-representation to get them to increase their membership contribution.

Action: ESSAC Office to send Mével the staffing figures.

Action: Mével to contact countries that are over-represented and, thus, are candidates to increase subscription.

MacLeod added that the US operator has asked ESSAC to commence staffing for two non-riser expeditions (Equatorial Pacific and NanTroSEIZE). This call will go out to ESSAC delegates soon, with TAMU wishing to start staffing by 1 August 2006.

Action: ESSAC Office to publicise staffing calls for these expeditions in ECORD countries once approval has been granted by IODP-MI.

Lenci presented to the Committee the confidential pages of the ESSAC website which can be accessed through the 'more' drop-down menu. These pages collate staffing information, applications, statistics etc. and can be reached via a username and password which were given to delegates in confidence.

2.2 Replacement of SPPOC (SASEC)

MacLeod explained that IODP-MI BoG has decided to replace SPPOC with SASEC (Science Advisory Structure Executive Committee). SASEC will include two representatives from Japan, the US and ECORD. These representatives are to be nominated by national programmes. IODP-MI BoG is expecting big names not necessarily involved in IODP.

McKenzie commented that, as a former member of SPPOC, she did not think that the disbanding of SPPOC was handled well. Mével explained that SPPOC was disbanded because of a lack of suitable Japanese representatives. The aims of SASEC are long range review and to give blessing to SAS decisions.

Pearce pointed out that ECORD Council requires advice. The first-order question is whether (1) to choose from existing SPPOC members, or (2) to choose new people for SASEC. The SPPOC members are presently:

Mike Bickle, UK

Judith McKenzie, Switzerland

Hermann Kudrass, Germany (due to be replaced by Hans Brumsack)

Serge Berné, France

In his absence, Pearce read out an e-mail from Brumsack: he requests that a German should be involved, as UK has the ESSAC Office and France has EMA. Delegates from the countries involved confirmed that Bickle, Brumsack and Berné would be willing to be considered. McKenzie felt that, since she officially had only one more meeting, she had already served her term on SPPOC.

Mével put the alternative view, based upon informal discussions with IODP-MI members, that SASEC should perhaps comprise scientists with international recognition and a broad view, not necessarily directly involved in IODP. Of these, Gerold Wefer was put forward by Kudrass and McKenzie, and Bo Barker Joergensen (Bremen) by McKenzie. Enrique Banda was proposed by Comas. Camoin also suggested Edouard Bard as a further, or alternative, French candidate.

MacLeod asked Kudrass to give the ESSAC Office 1-2 names of German candidates, and invited other ESSAC delegates to do the same. The ESSAC office would need a CV and the individual's permission. A prioritised list could then be drawn up for ECORD Council to submit to IODP-MI. However, the stated IODP-MI deadline is 15 May 2006.

Pearce suggested that national delegates properly consider the proposed SASEC delegates from ECORD and that we are being unnecessarily rushed by IODP-MI to meet an arbitrary 15 May deadline. We need more input from IODP-MI about SASEC, and then need time for ESSAC to put names to ECORD Council. So a delay beyond 15 May deadline is essential if the choice is to be thought-through properly.

Action: ESSAC delegates to consider suitable candidates, get their permission and inform them that the first meeting is 12-13 July, and get names and CVs to ESSAC Office by 1 June.

Action: ESSAC Office to collate all proposed names and circulate (with CVs) to ESSAC delegates. ESSAC delegates then prioritise the list, marking four preferred candidates with a spread of scientific expertise. It is sensible for each country to propose only one representative.

Action: ESSAC to ask ECORD Council to approve the four names on 8-9 June and pass its decision to IODP-MI immediately thereafter.

2.3 SAS Representatives

MacLeod and Lenci summarized the present staffing status of the SAS panels.

For SPC

- Brumsack to be replaced by Behrmann in October 2006.
- Ildefonse to be replaced by Gilbert Camoin after August 2006.
- MacLeod to rotate after August 2007 meeting when ESSAC Chair is handed over (new ESSAC Chair should be an SPC member).

SSEP

- Erzinger to be replaced by Kopf in May 07.
- Teagle and Thurow to be replaced after May and Nov 06 respectively. The decision needs to be made soon, in order to go to ECORD Council.

IIS-PPG

- Doust to be replaced after first meeting by Ralf Stevens of WHOI.
- This PPG doesn't have to be run on strict quotas. David Roberts and Richard Davies (UK), John Hogg (Canada) and Didier Hubert Drapeau (France) are proposed.
- Any new names by 1 June.

EPSP

- Already short of 1 small country member: a name needed by ESSAC Office. This is a very important panel as it gives the go-ahead for drilling. Michael Enachescu, Memorial University of Newfoundland volunteered to do it if no alternative could be found.
- Philippe Lapointe (Total, Fr) to replace Mascle Dec 06.
- Kudrass suggests that Strack will continue on the panel in the meantime until a replacement is found.

Action: Small country delegates to find a suitable person to sit on EPSP and contact ESSAC Office.

SSP

- Gilles Lericolais of Ifremer to replace Gutscher (Fr) immediately.
- Need replacement for Carlota Escutia (Sp) after July 06. How about Holger Lykke-Andersen of Denmark?
- Neben (Ger) to be replaced by Gaedicke in Apr 07.

Action: Small country delegates to find a suitable person to sit on SSP and contact ESSAC Office.

EDP

- Already one small country representative short.
- Wolgemuth to replace Sperber (Ger) after June 06.
- John Thorogood (UK) expressed an interest. Could potentially fill 4th slot and then replace Peter Schultheiss in June 07.
- EDP needs more experts in borehole stability.

Action: Small country delegates to find a suitable person to sit on EDP and contact the ESSAC Office.

A summary table of SAS representatives, balance of representation compared to membership contribution was shown. ESSAC delegates noted over- and under-representation.

2.4 Co-chief Assignments

MacLeod reported that nominations requested by IODP-MI for proposals were forwarded to the OTF in March 2006. ECORD SPC members feel strongly that proponents should always be included in list of possible co-chiefs. ESSAC should, as a general policy, add names in addition to those already put forward to OTF by SPC. The operator makes the ultimate decision on the Co-chief assignments.

3. Long-range Planning

3.1 SPC Executive Summary

MacLeod reported that the last meeting (in Florida, March 2006) was attended by himself, Ildefonse and Pedersen amongst current ESSAC attendees (also Brumsack). As MacLeod and Pedersen were conflicted for the some of the planned discussion at SPC, Pearce attended as a third, non-conflicted voting member for that part of the meeting.

NSF have chosen to refit JOIDES Resolution as new IODP non-riser vessel. It will be a \$115M re-build, including addition of larger and improved laboratory and improved section. A new name will be given to the ship, with operations scheduled to resume in August 2007. The JR is currently under contract (NSF and Indian Government) to drill gas hydrates off India. Following that, the vessel will go into dry dock and re-build will take place.

Chikyu is undergoing sea trials, with a scheduled start of scientific operations in September 2007 with NanTroSEIZE Riserless Drilling. In 2008, Chikyu will undergo testing and maintenance, followed by more NanTroSEIZE Riserless Drilling.

IODP-MI Workshops

MacLeod listed the planned IODP-MI sponsored workshops. ESSAC delegates commented that these were arranged without any liaison with Europe, which ESSAC finds to be very disappointing given that they use co-mingled funds. Unilateral decisions were made by IODP-MI and, even if equivalent workshops are already planned in Europe, no attempt at linkage has been made. The ESSAC Office has attempted to put organisers of similarly themed workshops in contact with one another. Additionally, the ESSAC Office has now forged links with Kelly Kryc, who is in charge of IODP-MI workshops, and she now keeps ESSAC in the loop with workshop plans.

Action: ESSAC Office will maintain oversight of these workshops, with the intention of ensuring coordination - though this will depend on developing good links with Chairs and Steering Committees of workshops.

Comas argued that having parallel workshops organised by US and ECORD makes no sense: they should be fully integrated. EMA/ECORD need to ensure that Europeans are involved in these. McKenzie, however, noted that it is also important for ECORD to hold its own, small, specialist workshops, and feed the outcomes into the IODP-MI organised events. MacLeod agreed and emphasised that such ECORD workshops should ideally be held before IODP-MI workshops. He commented that it was regrettable that, because of the ESF/Magellan issues and consequent delays to some planned European workshops (agenda item 4.2), this was unlikely to be possible in most instances.

MacLeod explained that a 7:7:3 ratio is imposed on workshop attendance as workshops use co-mingled funds. ECORD members on SPC protested strongly at this, as it means a significant restriction on our scientific input. It was agreed with IODP-MI that more ECORD scientists can attend if they are funded from elsewhere (e.g. national programmes). Ildefonse asked whether there is anything in the MoU related to workshops: if not, why 7:7:3 ratio? Mével explained that everything, all representation, is based on financial contributions and enforced by the Lead Agencies. Franklin requested that ESSAC send a strong message to Council on this issue of workshop representation.

Action: ESSAC Office to ensure that ECORD Council is advised on the wish to have greater ECORD representation at IODP Workshops than the quota might dictate.

Mission Concept

MacLeod explained that SPC spent a great deal of time at last meeting discussing, and eventually accepting, this concept. IODP-MI's idea is that we need to develop and support more strategic 'super-proposals' so as to ensure that the goals set out in the Initial Science Plan are fulfilled.

Proposal ranking

18 proposals were forwarded from SSEPs for presentation and review by SPC. Of these, 17 were ranked (Chicxulub, MSP proposal 548, was not considered as it is awaiting site survey data).

Of the ranked proposals, the top 6 were forwarded to OTF permanently (they will sit in a 'holding pen' until they can be scheduled). Proposals ranked 7 to 13 were forwarded to OFT on a one-time basis for potential scheduling at March 2006 OFT meeting.

Lowly ranked proposals that hang around in system often get forwarded to OTF simply to pass them on, to get rid of them. There is no mechanism for dumping poor full proposals at present. Proposal 547-Full4, Oceanic Subsurface Biosphere is a good example of this. Camoin reported that SSEP proposed that most lowly ranked proposals should be kicked back from SPC to SSEP and proponents asked to re-work their submissions, otherwise the proposal should be dismissed. This was put to SPC, but there have been no further developments.

McKenzie commented on the paucity of biosphere proposals. Pearce pointed out that, although he supports more microbiology expeditions, in fact the top ranked is 677-Full, Mid-Atlantic Ridge Microbiology, a good proposal that is well written and organised and went through system in 1.5 years. MacLeod added that microbiology is part of most proposals in SPC.

MacLeod then described the tentative schedule for non-riser expeditions scheduled for FY07-FY09 (OTF March 2006). They are currently being scoped and costed by USIO, and final approval is needed from IODP-MI. Pearce added that it was decided at the Kyoto meeting that, in 2009, the non-riser vessel will continue into Southern and Indian Oceans; understanding Asian Monsoon will then become an increasingly important focus of IODP. The current plan for FY07-FY09 is to start with the Pacific Equatorial Age Transect-1. Ildefonse (OTF member) noted that the provisional schedule approved by SPC (ESSAC Agenda Book p.12 and Appendix 4 item 15, p.45) has already been modified: the Costa Rica Seismogenesis Phase 1 is now not being considered as the subsequent expedition.

McKenzie requested as much advance notice needed of dates as possible, to ensure full and appropriate staffing levels. MacLeod reminded the Committee that TAMU has asked for applications for Pacific Equatorial and NanTroSEIZE by 1 August 2006.

3.2 Management Forum Executive Summary

Pearce reported that, following the Frascati meeting, a second Management Forum Executive meeting was held in Salt Lake City at the end of March. Five topics were discussed:

Culture

How can our Japanese delegates integrate more fully into the various IODP meetings? Should there be 'Committee Training'? IODP-MI should stress the different operational procedures needed by the three different platforms. This is particularly important for CDEX and ESO.

Ildefonse noted that SSEPs already attended to these cultural differences by breaking into smaller groups where the Japanese felt more comfortable. Also ECORD is used to cultural differences, as it comprises 17 nations: maybe ECORD can help 'educate' the US representatives.

Educational outreach

The Management Forum concluded that a better integration of outreach is needed. For example, Chikyu has been branded in the press as solely Japanese, rather than part of the international programme. In addition, E&O activities need to be targeted to raise awareness amongst professional communities. IODP-MI may fund someone to collate all IODP-related information and publish on web: this would make information easily accessible to teachers. Better relationships with media need to be built, for example by having a list of media-savvy scientists that can be contacted by media.

Mével said that the key was identifying our priority audience, given our limited funds.

Funding and Industry relations

The Management Forum has decided to explore the possibility that someone from industry could communicate with oil and gas companies with the aim of getting them involved. IODP-MI seems to be willing to pay for someone from industry to forge this liaison. This person would essentially be a fund raiser.

David Roberts (ex-BP) is one name already under consideration. McKenzie recommended Peter Homewood (ex-Elf) as a good option and likely interested.

Action: ESSAC delegates should pass any names on to the ESSAC Office, which will in turn pass them to IODP-MI.

MacLeod noted that UK IODP has its own Industry Liaison Panel, Chaired by Richard Davies of Durham. UK-IODP is holding a Workshop on 27 June 2006 in London.

Mission Implementation Plan

The 'final' version of this plan was approved in principle and passed on to IMI BoG for ratification.

Workshops

The Management Forum agreed that workshops and missions can broaden the scientific constituency of IODP. Workshops could be a strategic tool to develop the program, the converse of ESF's bottom-up approach.

3.3 Missions: Implications for ESSAC

Pearce explained that Missions have finally been accepted for implementation by IODP-MI Board of Governors, after the concept being first discussed at the Frascati Management Forum. The concept now has a formal definition.

Key points to come out of the Missions concept are:

- For the first year, SSEP will make recommendations to SPC for Missions. SPC will review the SSEP recommendations, designate Missions and request SPPOC/SASEC approval.
- For subsequent years, there will be an Open Call for Mission proposals.
- Once a Mission is approved, IODP-MI will create and provide support for a Mission team (currently envisaged as 8-12 individuals) with the remit to advance the planning.

Further details are on page 50 of the Agenda book.

An important question is whether ESSAC needs to do anything to influence choice of Missions or makeup of Mission Teams? Delegates asked how many Missions will there be? Mével explained that there are likely to be 2-3 in the system at any one time.

MacLeod noted that, in e-mail correspondence with the Chair of SPC following the March 06 SPC meeting, he had been informed that IODP-MI envisaged that Mission Teams should be populated in the 7:7:3:1 quota ratio (or 2:2:1:1, both including China). This was apparently because Mission Teams were to be treated the same as other IODP planning groups (DPGs and PPGs), which SPPOC had previously decreed were to have membership quotas (in that case 2:2:1:1). Apparently this was based upon text in section V of the NSF-MEXT Memorandum.

MacLeod had protested strongly on behalf of ECORD that application of quotas was a de facto attempt to limit the *intellectual* involvement of ECORD in IODP science, and stated that ECORD would oppose these proposed measures at the highest possible level. ESSAC supported this view.

MacLeod and Ildefonse further noted that Mission Teams will also have to include IOs and various technical advisors based on expertise, making nationality quotas difficult or impossible to implement. Technical advisors could potentially comprise a large proportion of the 8-12 individuals, leaving no more than a few places for scientists. This might very well mean that no more than, at most, one ECORD scientist would be allowed to be involved in any particular Mission. ESSAC finds this nonsensical and unacceptable.

Consensus: ESSAC Office to raise the issue at ECORD Council and IODP Council. ESSAC believes that application of a quota system for Mission Team membership would be detrimental to IODP science, and resists any attempt to limit by fixed quota the intellectual contribution of ECORD scientists to IODP.

Pearce explained that ESSAC could influence choice of Missions initially through SSEP (which will look at proposals in the system, that could be grouped together into a Mission) and then through the various workshops planned. Fortunately the proposed workshops fall within ECORD's scientific goals. Brinkhuis added that the subject of Extreme Climates should be included, and Ildefonse proposed Collision Tectonics in the Mediterranean. McKenzie suggested a 'Mission Arctic' proposal might be appropriate.

Delegates agreed that it was essential that the program fulfils the Initial Science Plan and that Missions should allow a strategic and top down approach that involved the community.

Consensus: ESSAC supports the Mission concept, but believes that the scientific excellence of Missions and the implementation of the science would be impaired if IODP-MI strictly adheres to a 7:7:3:1 or 2:2:1:1 or quota.

3.4 European infrastructures: Aurora Borealis

Arnold explained the history of the Aurora Borealis (AB) proposal. Presently, it is on the ESFRI list of opportunities, one of only 23 items on the list published in March 2005. ECORD/ESSAC must consider the possibility that EU financing of the Aurora Borealis may preclude or reduce any chance of EU financial or organisational support of other IODP MSPs in the future. At this point, ECORD is passively implying IODP endorsement of the AB project when the proposal could possibly work against ECORD efforts to continue as the third partner of IODP.

Could the AB allow us to become a full third partner? It could, but it might not necessarily serve our scientific purposes. There is no scientific advantage of having AB versus a series of MSPs. Except for the fact that the AB would allow site survey capacity and ready access to the Arctic, which is lacking at present and would also give ECORD a dedicated platform.

Evans noted that IODP does not have a requirement that there will be 3-4 months of Arctic drilling time annually for the next ten years, as claimed in the ESFRI proposal. If there were more Arctic drilling proposed, ESO would be required to go out to tender, and AB might not necessarily fit the bill financially or scientifically.

Brinkhuis sees virtues of both MSPs and AB. The European Marine Board is very much in favour of the AB, and it may actually already be a done deal, based in South Africa and servicing the Atlantic and Southern Oceans.

Mével pointed out that, if we have AB, we can use it as MSP when needed, though this might be not affordable. MacLeod commented that we need to separate the needs of ECORD/IODP from the needs of the European Marine community as a whole. If money was no option, then AB would be fully supported by all, but there are other issues to be considered. It is completely wrong that IODP would likely use AB 3-4 months per year. At present there are very few polar proposals in the IODP system. Instead it is more likely a threat to ECORD if AB goes ahead, as a large amount of money would be diverted by the EU away from ECORD/IODP.

Kudrass reminded delegates that AB is a child of ECORD. It was first discussed as a way for ECORD to have its own vessel. It was taken on by the Polar Board and Marine Board of ESF, which succeeded in bringing AB onto ESFRI list. It would be good to have a European flagship, which AB could be. It would, however, have to be fully supported by all ECORD nations. Comas also noted that it would be a good thing for Europe to have its own infrastructure.

Franklin explained that science is funded by national agencies. It is useful to have a permanent platform to put against Chikyu and JR as a bargaining tool. In terms of funding, ECORD is unlikely to be able to run AB all year, given the limited funding available.

Brinkhuis informed the delegates that the Marine Board had a meeting a month ago, where it was decided that this is not just for ocean drilling but specifically for Arctic drilling. So actually it is a MSP vehicle, which ECORD could rent.

MacLeod observed that there are two separate sets of interests. ESSAC's remit is to see if ECORD IODP interests are best served by such a vessel. AB could be a big threat to the existence (i.e. funding) of ECORD. AB cannot accomplish all MSP tasks, although would be very useful to have ready access to a ship able to drill in Arctic and carry out site surveys. Evans added that Europe cannot state a commitment to Arctic science, as this is defined by SAS. It may be that no Arctic proposal will come through for quite some time, unless a Mission is set up. Thus the statement, point 5 on page 66, is incorrect, in terms of 3-4 months of Arctic drilling per year for ten years.

Kudrass retorted that it is important to state that it is important to drill further in the Arctic. The fact that there are no proposals in the system does not mean that they will not be submitted if the capability is clearly there. Abrantes emphasised that ESSAC must focus on the importance of the ship in terms of science. It is ECORD Council's job to consider the financial limitations.

As there were pros and cons to this Pearce suggested presenting ECORD with a SWOT (Strengths, Opportunities, Weaknesses, Threats) analysis. After discussion, delegates decided that the subcommittee assigned to consider AB plus others interested would draw up a motion summarising the positive aspects of AB but also noting the negatives.

“ESSAC recognises that ECORD has performed frontier breaking MSP operations that have contributed significantly to achieving the goals of the IODP Initial Science Plan. ESSAC is determined that ECORD continue these MSP operations world-wide and thus maintain our obligations to IODP.

ESSAC notes that the tectonic history, palaeoceanography and climatic evolution of the Arctic region are major scientific themes of global importance, and are of special significance to many European nations. As a consequence, ESSAC supports the plan to construct a dedicated icebreaker with drilling capacity for year-round research and site-survey deployment in the Arctic and Southern oceans. The Aurora Borealis project has the potential to enhance significantly the scope of IODP scientific capabilities and could strengthen the European position within IODP, provided that it does not jeopardise ECORD's abilities to undertake global MSP operations.”

This statement was approved by consensus.

4. Workshops

4.1 IODP Workshops

These were dealt with in the SPC report.

4.2 Magellan workshops

Pearce summarized the problems that the ESSAC office had encountered with the workshop funding. Three workshops were approved by ESSAC#5 and then supported for funding by ECORD Council: EuroForum, Hazards 1 (Spain) and Hazards 2 (Italy). However some ECORD countries had already given workshop funding to ESF.

Both ESSAC and ECORD Council were meant to be integral to the workshop planning, but neither Council nor ESSAC Office were told about the meeting or invited to it. So, we had organised a workshop series only to find that the series could not be implemented.

There was a resulting delay to EuroForum funding, and a delay to Hazards workshops, but the Naples workshop will go ahead funded by Italian agencies and non-ESF funds.

McKenzie felt that asking ESF to organise these produced misunderstandings that could have been avoided if Council had passed them directly to ESSAC to organise. Mével explained that ESF was chosen because funding through this route can allow extra pockets of funding to be found. Lenci commented that Bernard Avril of ESF had actually agreed to Council terms for workshops.

Pearce asked how the change was made for Magellan series to be ESSAC-led to ESF-led? Franklin explained that this originated from an older proposal which included both EuroMARC and the Magellan Series that Council had asked ESF to help with this. This proposal was subsequently split into two. The Council's understanding was that ESSAC would have a strategic input into workshop series. There was communication breakdown because Council believed that Bernard Avril would take the ECORD motion back to ESF. In addition, Council took the Arctic Climate conference to be the first of the series, a decision not accepted by ESF. It should have been formally put to ESF the guidelines, but it did not. The Chair of ESSAC should have been the Chair of the workshop series. The ECORD Council Chair should also have been involved.

Pearce explained that, although this was 'water under the bridge' now, there were continuing concerns within the ESSAC Office about the Magellan Workshops. There is no strategic element to the workshops, unlike other IODP workshops, yet the strategic value of workshops was stressed at the Management Forum in Salt Lake City: driving the program, synthesising successful expeditions etc. There is no coordination with other IODP workshops. There is no communication link between ESF and ESSAC Office, which has the greatest knowledge of international workshop activities. In addition, only some nations contribute to Magellan; thus, if workshops are important for strategy, then we have a problem that not all ECORD countries contribute to the Magellan series. This potentially divides the community.

Franklin responded that ECORD Council did not realise that ESF would apply its 'A la Carte' mechanism. Council should have talked to ESF about setting up the new mechanism. The hope was that more countries outside would become involved, but in fact the opposite had occurred.

Pearce asked delegates whether they thought ESSAC should have the opportunity to use workshops as a strategic tool or whether it should be purely a bottom up mechanism for funding workshops. Without a strategic component, it may be difficult to further progress IODP goals. He suggested that ESSAC delegates sitting on the ESF Committee could maybe represent the needs of ECORD.

Franklin responded that the problem is that the ESSAC Office is not involved. Instead, ESSAC delegates that also sit on the ESF Magellan Committee could form a sub-group/strategy group, reporting back and acting on behalf of ESSAC. Delegates need to promote ESSAC's strategic ideas to the community, and ensure that suitable proposals are submitted to the Open Call.

Delegates on the ESF Committee explained that funding for workshops and short visits were decided in February 2006 for this calendar year. The 'short visits' allowed money for EuroForum. There is an open call for workshop ideas with a deadline of 19 May 2006, and the

next Committee meeting will be February 2007. The ESF Magellan programme will run for five years with enough money for 2-3 workshops per year. The maximum amount of money ESF will allow per workshop is 20,000 Euros.

James proposed that, at each ESSAC meeting, there should be a discussion to decide on pertinent workshop themes, to feed back to the ESF A la Carte programme. Franklin pointed out ESSAC has already decided on strategic workshop themes, and these must be entered into ESF call. Lenci suggested that ESSAC should stimulate the community through website on preferred themes, and have scientists submit proposals to their open call.

Of the two hazards workshops originally organised by the ESSAC Office, Comas explained that she would not be a proponent of Collision hazard workshop. However, Spain will submit the Slides hazard workshop proposal into Open Call.

For EuroMARC, James (who was a member of the committee) explained that a call had gone out for full proposals to be submitted by 26 June with moderating panel to meet in November. ESSAC members may be asked to review submissions.

4.3 ESSAC Deep Biosphere Workshop outcomes

McKenzie informed delegates that the workshop on ‘Exploring the Deep Biosphere with Scientific Ocean Drilling’ was held successfully in Warth, Switzerland, 26-29 January 2006. It included the ECORD-net geomicrobiology report from Swiss WP leaders. 28 delegates from across ECORD attended, including Eric Allen, from USA, an expert on genomics, and Fumio Inagaki from JAMSTEC.

The principal recommendation was that, to make a significant impact, there should be one dedicated Expedition per year, rather than just tagging microbiology onto Expeditions. Specific recommendations were:

1. More microbiologists involved in SAS
2. A Standing Committee on microbiology (in Europe?)
3. More flexible logistics for expeditions conducive to microbiologists
4. Shipboard sampling on dedicated deep biosphere legs
5. *In situ* experiments in borehole labs
6. Portable microbiology lab

Examples of dedicated deep biosphere expeditions could be:

1. East Mediterranean sapropels
2. Great Australian Bight
3. Moroccan margins
4. Guymas Basin
5. Greenland Sea, slow spreading ridge
6. How deep is deep biosphere, S Pacific gyre
7. How old: Somali Basin
8. How hot: East Pacific Rise
9. Black Sea
10. MSP, Walvis Bay, Tahiti, *in situ* experiments.

Two of the above (Great Australian Bight and Moroccan margins) have already been submitted to IODP as proposals. It was a great success with a very 'European' group. A formal written report is forthcoming.

ESSAC delegates agreed that these European workshops are useful way of developing ECORD ideas and ideally then feeding into IODP-MI led workshops.

4.4 ESF Magellan Call

McKenzie alerted delegates to the Call on the ESF web site at www.esf.com (19 May 2006 deadline).

5. Outreach

5.1 Expansion of educational activities

Arnold explained that there is an IODP-MI E&O task force. This committee is composed of operators, public relations and scientists. IODP-MI is mainly concerned with outreach, and ECORD cannot expect financing or significant support for specific educational activities. Much of this needs to be implemented at a national level, because of differences in language, school curriculum etc. The possible initiatives listed in the Agenda Book were then discussed in turn.

Teachers at sea. The problem lies with funding, as travel and subsistence (and berth?) costs are significant. There is no ECORD financing for this, and apparently no ESF mechanism, so support would need to be borne by national agencies.

Teacher workshops. Some ECORD funds of about 10,000 Euros are available for teacher and instructor expenses for one workshop. An EGU GIFT workshop, held at the Spring EGU and organised by Carlo Laj, invites 70 teachers from across Europe to attend 2.5 day meeting of speakers including scientists, other teachers, programme managers, education professionals. EGU pays for T&S for teachers and invited speakers, and travel stipend for teachers. Past workshops have been:

- 2007 – Large urban areas;
- 2006 – The polar regions;
- 2005 – The history of the earth;
- 2004 – The Oceans.

It might be possible to run an IODP session after/before the GIFT workshop, and Arnold would like permission to pursue this.

ESSAC encourages Arnold to investigate the possibility of holding a teachers workshop at EGU.

Educational website. If scientists and teachers were willing to generate materials (photos, movies, short scientific summaries, lesson and activity plans etc) at no cost, then this could be assembled for a website. IODP and TAMU already do this and IODP-MI is willing to provide web support for 3 months, as a pilot study, to set up an improved site. This idea is much

broader and would integrate some materials. ESSAC needs to ensure that materials of interest to Europe are sent for inclusion.

Summer schools for university students. This is fairly costly, as student travel and lodging expenses, instructor costs, teaching materials etc need to be covered. Arnold and Pedersen noted that NorForsk (Nordic consortium) provides funds for Nordic and Baltic States. Here, university students are invited for a summer school (lasting days to a month) where some aspect of marine geoscience is addressed. Delegates asked whether Brussels has a funding mechanism, but that was not clear. Pearce noted that InterRidge has an educational programme for post-graduates, which is hugely successful. perhaps ECORD/EMA should consider this?

ESSAC delegates agreed that Pearce would raise issue of possible funding with ECORD Council, the delegates would all look to their national agencies, and EMA would look to the EU.

Distinguished Lecturer series. This comprises a selected group of IODP scientists willing to travel around Europe and present the most recent results in ocean research drilling. Expenses involve travel and lodging costs and someone to coordinate the advertisement/application process. An estimate is £600 for each talk, and each university expected to host speaker. ESSAC should request funding from ECORD Council for this purpose. Mével and Pearce explained that this came up at Management Forum, and IODP-MI were willing to put some support to this. But the 7:7:3 quota would apply. Sacchi noted that Italy organized an IODP-themed tour last year that was a great success. McKenzie proposed that, to confer prestige, there should be one lecturer at any time with that lecturer be given a title: for example the ‘Nick Shackleton Distinguished Lecturer/Lecture Series’ might be an appropriate choice.

Actions: Delegates to provide ESSAC Office with names of people willing to participate in such a lecturer series. ESSAC Office to put the list to IODP-MI. ESSAC Office to follow up on possible logistics.

Educational material. The old ODP CDs such as ‘Mountains to Monsoon’ are very popular in the classroom. ECORD Council and IODP-MI could be approached for funds to support this. In producing the Ocean Drilling DVD in 2006, Brinkhuis has collected together a large quantity of material. He informed the delegates that NWO has put 20,000 Euro into production of this DVD over past 3 years, and another 10,000 Euro has been sought as well.

Delegates considered whether these activities be developed, and whether they could be proposed as a package to ECORD Council for funding.

Action: Pearce to ask ECORD Council whether these and related initiatives should always be funded by individual nations, or whether they wish to co-mingle funds for the purpose.

5.2 ESSAC Database: mailing-list rules, ECORD publications

Lenci will discuss this in more detail with EMA. The database is only partially populated at present and this needs to be extended.

Action: The ESSAC Office to circulate the ESSAC mailing list to ESSAC delegates for checking.

5.3 ESSAC web-site

Lenci invited ESSAC to comment on the website. Delegates were asked to send any suggestions to the ESSAC Office as soon as possible. Delegates suggested putting administrative information on mailing list subscribers under the password protected part of site. Ildefonse explained that there was some confusion over which information should to be circulated by delegates within their countries and should be circulated by ESSAC Office. ESSAC agreed that all general information should be sent to everyone at all times. Lenci explained that, for the ESSAC Office to send e-mails to large groups of people, a professional mailer will be required.

Action: The ESSAC Office to ensure it makes clear in e-mail communications whether message has gone to ESSAC delegates only or to entire master mailing list (i.e. ECORD science community).

5.4 ECORD Newsletter #6

Maruéjol informed delegates that Newsletter #6 has been distributed widely, including sending copies to CDEX and IODP-MI. The next Newsletter will be released in mid-October 2006. The ESSAC Office is responsible for the ESSAC pages, with a deadline of 15 September for content. The Newsletters are posted and are then downloadable from ECORD and ESSAC websites.

5.5 ECORD-net Geomicrobiology database updates

Bingham-Müller explained that there was a program to build up geomicrobiology database under ECORD-net's Swiss-led Workpackage 1. Geomicrobiology Discovery Database. She and Tamburini attended the Deep Biosphere workshop and took from it ideas for inventory, content and concept design for a metadata base.

In the short term, the goal is to compile a 'discovery database' from existing databases giving appropriate links for European scientists. In the long term, the goal is a digital database including numerical data. It will also include other data from drilling programmes such as IDDP, ICDP. A metadata base plan has been devised in terms of content concept, technical aspects, data users and data owners.

Current databases that deal with microbiology are varied but some are limited to shipboard data and survey data (Janus). Navigation is difficult: one cannot search by ocean, and microbial data are often not linked to geological data. Protecting data ownership through restricted access is an issue.

Tamburini described the style and content of the searchable database in its present form. The next step is to inform IODP-MI of existence of the database as it is important to ensure its compatibility with other IODP systems.

ESSAC congratulated Bingham-Müller and Tamburini on their excellent product and looks forward to further developments.

6. ECORD Review

MacLeod noted that ECORD Council requested a review of ECORD's contribution to IODP, will report back to Council in November 2006.

Mével explained that the Initial meeting of ECORD representatives with the Evaluation Committee to be held in Paris, 22 June 2006. The review panel will talk to all ECORD bodies (EMA, ESSAC, ESO), and ask what information will be required for review. The panel is composed of experienced geoscientists from European surveys and universities.

7. Meetings

7.1 Upcoming meetings

MacLeod presented the list of meetings presently scheduled for 2006.

Lenci reported that the EuroForum currently had 143 registrants. However, only 8 people have registered to use ESF funding route for T&S costs. The deadline will be kept open until end of EuroForum. MacLeod commented upon the very differing levels of attendance from different member nations at the EuroForum. He particularly thanked the German and Swiss ESSAC delegates for their efforts in encouraging so many of their countrymen to attend, and noted with regret that this hadn't extended to all ECORD nations.

Kudrass questioned whether the EuroForum is the best way to bring community together. Pearce replied that this would be assessed after the conference.

7.2 Date and Place of the Next ESSAC Meeting

MacLeod noted that the next two ESSAC meeting will be approximately November 2006 and May 2007.

Action: Delegates asked to contact ESSAC Office if they are willing to host the next ESSAC meetings.

8. Any Other Business

Federica Lenci's position will be advertised at the EuroForum and subsequently.

9. Meeting with SAS Representatives

A large subset of ESSAC delegates met SAS representatives over lunch during the first day of the EuroForum for a short meeting chaired by Pearce. The group addressed the issue of the present lack of communication between ESSAC and the SAS representatives: there are no reports from SAS representatives to ESSAC and no advice from ESSAC to SAS representatives on strategy.

After some informal (unminuted) discussion, there was consensus that SAS representatives would be invited to attend selected ESSAC meetings to present reports. Whether present or

not, SAS representatives would provide brief written reports (one report per panel) for the ESSAC web site and for discussion at the ESSAC meeting. ESSAC will in turn advise ESSAC delegates when the Agenda Book and Minutes are posted on the web and highlight items of relevance.

The meeting also discussed, at Kudrass's request, the EuroForum and its future. This will be addressed at the next ESSAC meeting, but the ESSAC Office emphasised that any further meeting should learn from the Cardiff meeting which was limited in size by financial issues out of the control of the organisers. Most important is to establish funds well ahead of the meeting to ensure more participants from nations other than the host nation.