Final Minutes of the 9th ESSAC Meeting
Granada, Spain,
October 19th and 20th, 2007

List of Participants

ESSAC Office

Gilbert Camoin (Chair)	ESSAC Delegate France
Bonnie Wolff-Boenisch	ESSAC Science Coordinator

ESSAC Representatives

Fatima Abrantes	ESSAC Delegate Portugal
Eve Arnold	ESSAC Delegate Sweden
Bryndís Brandsdóttir	ESSAC Delegate Iceland
Henk Brinkhuis	ESSAC Delegate Netherlands
Menchu Comas (Meeting Host)	ESSAC Delegate Spain
Kathy Gillis	ESSAC Delegate Canada
Nalan Koc	ESSAC Alternate Norway
Chris MacLeod (Vice-Chair)	ESSAC Delegate UK
Brian McConnell	ESSAC Delegate Ireland
Judith McKenzie	ESSAC Delegate Switzerland
Werner Piller	ESSAC Delegate Austria
Marco Sacchi	ESSAC Delegate Italy
Rudiger Stein	ESSAC Delegate Germany
Kari Strand	ESSAC Delegate Finland

Observers/Guests

Jochen Erbacher	ESF Magellan Committee
Carlota Escutia	IODP proposal 482
Javier Hernandez-Molina	IODP proposal 644
Patricia Maruéjol	EMA
Catherine Mével	EMA
Alan Stevenson	ESO (BGS)
Dorrik Stow	IODP proposal 644
Federica Tamburini	ECORD-net Geomicrobiology database
Barbara Teichert	Expedition IODP 311
Roger Urgeles	Geologic Hazards Workshop
Stefan Winkler-Nees	ECORD Council

Apologies

Dan Evans	ESO (BGS)
Paul Knutz	ESSAC Alternate Denmark
Rudy Swennen	ESSAC Delegate Belgium
Rolf Petersen	ESSAC Delegate Norway

Motions and Actions v.3

1.4 Discussion and approval of the Agenda

ESSAC Consensus 0710-01: ESSAC approves the agenda of its 9th meeting held on 19-20 October 2007 in Granada, Spain, on 19-20 October 2007.

1.5 Approval of the 8th ESSAC Meeting minutes

> ESSAC Action Item 0710-01: ESSAC requests that Chris MacLeod makes the minor changes in the minutes of the 8th ESSAC meeting, held on 11-12 May 2007 in Svartsengi, Iceland that Catherine Mével requested during the 9th ESSAC meeting.

1.7 ESSAC Office news

> ESSAC Action Item 0710-02: The ESSAC Office will provide information about the status of the ECORD brochure.

2.3 Science Planning Committee SPC & Operation Task Force OTF

> ESSAC Action Item 0710-03: The ESSAC Office will officially send a message to IODP-MI to get information regarding the future of the active Mission proposals and the possibility of a new call for proposals.

2.5 Science Steering Evaluation Panel – SSEP

> ESSAC Action Item 0710-04: The ESSAC Office will request comprehensive statistics from IODP-MI regarding the ECORD proponents on active proposals.

3.1 EMA ECORD Council

> ESSAC Action Item 0710-05: ESSAC will suggest speakers and identify scientists and institutions to contact for the workshop 2008 in Edinburgh in the framework of ECORD-Net work package 2 to attract new members to ECORD.

> ESSAC Action Item 0710-06: ESSAC will provide input for a new, specific ESSAC glossy brochure, planned for EuroForum 2008.

4.1.2 Bering Sea expedition staffing

ESSAC Motion 0710-01: ESSAC decides not to send all applications to the Implementing Organizations after the nomination process.
14 in favor, 1 opposed (MacLeod), none-abstained

ESSAC Motion 0710-02: ESSAC decides to forward only the applications rated from 1 to 3 stars to the Implementing Organizations.
14 in favor, 1 opposed (MacLeod), none-abstained

4.1.3 Canterbury Basin Sea Level and Wilkes Land Paleoceanography Expeditions

> ESSAC Action Item 0710-07: The ESSAC Office will contact the co-chiefs of the relevant expeditions to get advice on the expertise needed and include that information in the respective flyers to be distributed to the ECORD science community.

4.2 Nominations and Staffing Subcommittee report

ESSAC Consensus 0710-02: ESSAC decides to work on SAS panel member rotation issues two meetings ahead.

ESSAC Consensus 0710-03: ESSAC agrees on the following procedures regarding the nominations of ECORD representatives in SAS panels: A call for applications will be widely distributed and posted on the ESSAC website; the applications will then be reviewed by the Nominations and Staffing ESSAC subcommittee who will recommend nominations.

ESSAC Consensus 0710-04: ESSAC decides, that the ESSAC delegates will now constitute a pool of permanent alternates for SAS panels if problems arise in finding an alternate among the current list of formal alternates.

> ESSAC Action Item 0710-08: The ESSAC Office will continue to contact SAS panel chairs for guidance regarding the expertise needed for future ECORD representatives.

> ESSAC Action Item 0710-09: ESSAC will consider in due time the following rotation of ECORD representatives in SAS panels:
- SPC - R. Pedersen in March 08.
- SSEP - J. Backman in November 07; F. Eynaud and J. Konnerup-Madsen in March 08.
- EDP - R. Person in June 08.

5.4 ECORD-net Geomicrobiology database

> ESSAC Action Item 0710-10: The ESSAC Office will provide help in contacting scientists from the Geomicrobiology community to feed the ECORD Geomicrobiology database.

5.5 Education and Outreach subcommittee report

ESSAC Consensus 0710-05: ESSAC approves the following scheduling for the FY09 ECORD Summer Schools applications:
Deadline for submission of ECORD Summer School proposals (FY 09):
May 1st 2008.
Electronic review of the ECORD Summer School proposals by the Education & Outreach ESSAC subcommittee before the ESSAC spring 08 meeting.
Recommendations on ECORD Summer School funding to be presented to the ECORD Council at its the ESSAC spring 08 meeting.

ESSAC Consensus 0710-06: ESSAC approves the following scheduling for the FY09 ECORD scholarship applications:
Deadline for submission of ECORD scholarship applications for FY 08:
February 29th 2008.
Electronic review of the ECORD scholarship applications and nominations by the Education and Outreach ESSAC subcommittee in March 08. The final selection will be given on March 30th, 2008.

> ESSAC Action Item 0710-11: ESSAC will discuss extensively ECORD Summer School activities (member of summer schools to be funded, format etc.) at its spring meeting and make recommendations to the ECORD Council.

> ESSAC Action Item 0710-12: The ESSAC Office will issue a call for ECORD Summer School applications for FY09 in early 08.

> ESSAC Action Item 0710-13: The ESSAC Office will issue a call for ECORD scholarship applications for FY08 in December 07.

> ESSAC Action Item 0710-14: The ESSAC Office will contact ESF to explore the potential funding of travel expenses for students attending ECORD Summer Schools**.**

> ESSAC Action Item 0710-15: The ESSAC Office will contact ESF to explore potential partial funding for the organization of ECORD Summer Schools**.**

6.2.1 EuroFORUM 08

> ESSAC Action Item 0710-16: The ESSAC Office will distribute all relevant information regarding the organization of the IODP/ICDP EuroFORUM 08 at the EGU to the ESSAC delegates and alternates, as well as to National offices from ECORD countries.

6.4 ECORD Distinguished Lecturer Program

FY 07

ESSAC Consensus 0710-07: ESSAC approves the continuation of the FY 07 Distinguished Lecture Program until summer 08.

FY 08-09

> ESSAC Action Item 0710-17: The ESSAC Office will issue a call for applications regarding the FY 09 Distinguished Lecture Program in early 08. Nominations from the ESSAC delegates will be sent to the ESSAC Office and then reviewed by the Workshop Communication and Vision ESSAC subcommittee. The nomination of the three lecturers will be decided at the spring 08 ESSAC meeting based on the recommendations from the Workshop Communication and Vision ESSAC subcommittee.

6.5 IODP-MI «Drills» Lecturer Program

> ESSAC Action Item 0710-18: In response to IODP-MI solicitation to advise on Yoshi Tatsumi's tour in Europe for the IODP-MI Drills lecturer program, ESSAC recommends the following additional locations: Zurich, Utrecht, Stockholm, Copenhagen; Barcelona or Madrid, various places in Germany and Iceland.

9. Next meetings

> ESSAC Action Item 0710-19: ESSAC approves the proposition from Eve Arnold to hold its spring 08 meeting in Stockholm, Sweden and Helsinki, Finland. The 11th ESSAC Meeting will be held in October 2008 in Southern Germany.

> ESSAC Action Item 0710-20: ESSAC approves the proposition from Ruediger Stein and Jochen Erbacher to hold its fall 08 meeting in Southern Germany.

10. Any Other Business

> ESSAC Action Item 0710-21: ESSAC thanks Eve Arnold, Kathy Gillis, Rolf Pedersen and Marco Sacchi for their insightful and dedicated work as ESSAC members.

1. Introduction

1.1 Welcome letter from the Chair

Gilbert Camoin welcomes all the delegates, alternates and guests to the 9th ESSAC meeting and thanks very much Menchu Comas for the organisation of that meeting.

1.2 Welcome and meeting logistics

After Menchu Comas' presentation of the logistic schedule in Granada, a self-introduction of each participant follows.

1.3 ESSAC procedures

Gilbert Camoin summarizes the expected work of the 3 new established subcommittees.

Members of the Staffing and Nominations subcommittee
Chris MACLEOD (Coord.)
Gilbert CAMOIN (ESSAC Chair)
Bonnie WOLFF-BOENISCH (ESSAC Science Coordinator)
Judith McKENZIE
Henk BRINKHUIS
Fatima ABRANTES
Rudy SWENNEN

Members of the Education and Outreach subcommittee
Eve ARNOLD (Coord.)
Gilbert CAMOIN (ESSAC Chair)
Bonnie WOLFF-BOENISCH (ESSAC Science Coordinator)
Brian McCONNELL
Paul Martin HOLM
Werner PILLER
Kathy GILLIS

Members of the Workshops, Communication and Vision subcommittee
Rudiger STEIN (Coord.)
Gilbert CAMOIN (ESSAC Chair)
Bonnie WOLFF-BOENISCH (ESSAC Science Coordinator)
Kari STRAND
Bryndís BRANDSDOTTIR
Marco SACCHI
Rolf PEDERSEN
Menchu COMAS

The subcommittees have been implemented to increase the efficiency of ESSAC and the involvement of all delegates and alternates. It is expected that the subcommittees meet electronically, work and discuss on specific issues at the Chair's request and on action items arising from the ESSAC meetings. For the following ESSAC meeting, each subcommittee coordinator will be in charge of writing a report for the agenda book and presenting it at the meeting.

1.4 Discussion and approval of the Agenda

After an introduction, the agenda of the ESSAC 9th meeting is accepted as designated.

ESSAC Consensus 0710-01: ESSAC approves the agenda of its 9th meeting held in Granada, Spain, on 19-20 October 2007.

1.5 Approval of the 8th ESSAC meeting minutes

Catherine Mével asks for minor changes in the 8th ESSAC meeting minutes, which have not been considered since the first circulation of the draft of the minutes of that meeting. Chris MacLeod will make those changes

> ESSAC Action Item 0710-01: ESSAC requests that Chris MacLeod makes the minor changes in the minutes of the 8th ESSAC meeting, held on 11-12 May 2007 in Svartsengi, Iceland that Catherine Mével requested during the 9th ESSAC meeting.

1.6 Items since the 8th ESSAC meeting

Chris MacLeod gives an overview of the items arising since the 8th ESSAC meeting:

Distinguished Lecture Program (DLP)

The first series of the DLP started late 2007. These first lectures were announced quite late because a very tight deadline had to be met. How the lectures should be scheduled in future is not defined yet. Currently each lecturer receives € 3000, and organizes its travel and lectures in agreement with the meeting host and the ESSAC Office. In order to reduce costs several lectures in one country are envisaged. With this strategy it might be possible that every lecturer holds more lectures than the six lectures planned initially. DLP funds, which have not yet been spent so far, will be transferred from Cardiff to the new ESSAC Office in Aix-en-Provence. A new lecture series must be planned and scheduled in spring 2008. The ECORD council already approved the total sum of € 9000 for this new series in 2008. New speakers have to be suggested and nominated.

The program in its entirety is considered as a success (see also 6.4).

ECORD Review

Peter Styles, Professor of Applied and Environmental Geophysics and Director of iEPSAM, was appointed to chair the Review Panel for ECORD. The review was carried out by a panel of seven scientists from Europe and the US and evaluated the effectiveness of ECORD within IODP. The ECORD council accepted the review report.

One major criticism of the evaluation regarding ESSAC was the lack of continuity due to the rotaion of the office. As ESSAC chair, Chris MacLeod responded officially to the ECORD council to this criticism. Catherine Mével explained that an official response to the evaluation report has been prepared by the ECORD council, which included Chris MacLeod's comments. This response has been sent to the Review Committee members as well as all the

entities which had received the report. This response has not yet been distributed to the ESSAC members. The new office will distribute it to all ESSAC delegates and alternates. As a consequence of the review, Gilbert Camoin, incoming ESSAC Chair, launched the creation of the ESSAC subcommittees.

1.7 ESSAC Office News

Gilbert Camoin presents the new ESSAC Office and the new proposed ESSAC logo. Catherine Mével suggests that the new ESSAC Office should adopt a logo with a design close to that of the ECORD logo in order to demonstrate the entity of ECORD. Ruediger Stein considers that changing the ESSAC logo every two years together with the new ESSAC Office bears problems and that it would be wise to keep a neutral one. Gilbert Camoin claims that this logo could be used as the ultimate logo for ESSAC. A final decision concerning the future ESSAC logo cannot be taken before approval by the ECORD Council.

Gilbert Camoin confirms that the relocation from Cardiff to Aix-en-Provence went very well contrarily to preliminary concerns in the forefront. Bonnie Wolff-Boenisch complements that a 3 to 4 days visit to the precursor Office is important to guarantee a smooth transition.

In her presentation Bonnie Wolff-Boenisch summarizes her first impressions of ESSAC as a "newcomer" and suggested a couple of actions that could be developed on a short-, mid- and long-term. She structures the undertakings also in internal and external structures as well as in different actions such as Education and Outreach, public relations, lobbying and fundraising. Catherine Mével thanks Bonnie Wolff-Boenisch for her commitment and for bringing in new ideas. Catherine Mével comments on the last item presented by Bonnie Wolff-Boenisch and notes that creating a strategic group with participants from e.g. ESSAC Office, EMA, ESF etc. is is beyond the realm of ESSAC and the ECORD council needs to be involved. The council has recently implemented a Vision group to discuss future strategies, and Gilbert Camoin, as the ESSAC chair, is a member. Reports from this group will be presented in future ESSAC meetings. Chris MacLeod points out that it is stated explicitly in the ESSAC Term of References that ESSAC should make suggestions regarding ECORD strategies. Concerning the suggestions to extend ESSAC contacts to national or international press, Alan Stevenson comments that ESO and IODP-MI are already responsible for that issue and ESSAC therefore do not need to put in further efforts. Bonnie Wolff-Boenisch replies that plenty of information exists but is not visible and therefore cannot be extracted rapidly from "outsiders" (i.e. non-ECORD potential partners). There should be at least some basic explanations and internal links between the websites of the different ECORD entities to guide interested persons. In this context, Judith McKenzie wonders why the Marine Geoscience community does not get any information about the actual state of the ongoing NanTroSeize expedition, which started in September 2007. She suggested that a short update on what is going on should be suitable for keeping the communities interest on expeditions awake.

It is agreed that education in general is a national issue and that the higher-level education is sufficiently addressed by ESSAC and IODP through ECORD Summer Schools. Further discussion on Education and Outreach matters is shifted to the item 5.1 of the agenda.

The brochure "European science programming for ocean research drilling"

dedicated to ECORD and being prepared by NWO as a deliverable to ECORD-Net, has not been finished, yet. EMA expressed its intention to check the current state of this brochure.

> ESSAC Action Item 0710-02: The ESSAC Office will provide information about the status of the ECORD brochure.

1.8 Principal goals of the meeting

One of the principal goals of the ESSAC 9th meeting is to analyse ESSAC's strengths and weaknesses and to discuss about the new upcoming challenges related to the current financial problems of IODP as this is a crucial period for the future of the program.

2. IODP News

2.1 Lead Agencies and Implementing Organizations (IO)

Catherine Mével reports on the latest news of the Implementing Organizations

a) Lead Agencies:

IODP membership

- The increase in Korea's contribution from 0.3 to $ 1 M in FY08 is still pending.
- China will not increase its contribution (presently $ 1 M).
- Australia is joining IODP in FY08 with a 1/4 membership, but It is not clear whether it will be as part of the Asian consortium or as an associate member
- No progress with India.
- In Russia, the situation is complex. There is an interest in the science community, but there is not money in the relevant institutes.
- Israel is interested in an IODP membership.

Sail participation

IODP-MI has set up a scheme to allow non-IODP outstanding scientists to sail on IODP expeditions. This will be favoured in particular by the fact that there will be additional berths on the refitted JOIDES Resolution.

In this context the guest scientist status are discussed by ESSAC delegates and alternates. The applications of two Polish (non-ECORD) scientists have been forwarded to USIO by the former ESSAC Office in Cardiff. The strategy is to attract non-ECORD countries towards IODP. There is only a small chance that the Polish candidates will sail as space on board will be the limiting factor. Kathy Gillis questioned the strategy of letting sail non-ECORD scientists in times where berths are very limited. A discussion arises about the best strategy on the issue and the different views and angles were discussed. An advantage of enabling non-ECORD scientists to sail would be to attract potential new members. This approach would certainly be considered positive from the EU side. The strategy of an open call in Europe would already anticipate the envisaged future ERA-Net+. In this scheme, if ECORD is able to pool about $ 20 M, the EU would contribute about 5 M additionally. In this context Ruediger Stein suggests to establish an extra pool for excellent scientists from which non-ECORD scientists could be financed. Although there

is a consensus about the fact, that scientific excellence should be rated higher in comparison to the country quotas, there are arguments from ESSAC delegates against this approach, because it is suspected that the contribution of small countries would be jeopardised. There is a general feeling that countries should pay, if they want that their scientists to sail.

An alternative approach could be to augment the science party participants. In conjunction with the discussion, Henk Brinkhuis challenges the procedure of selecting scientists by proposing to let sail brilliant undergraduates alternatively to non-ECORD scientists. Arguments against this suggestion are, that a lot has been done already for undergraduates within ESSAC (e.g. ECORD Summer Schools) and that experiences with undergraduates on ship have been very mixed. The virtual ship of Bremen could be an alternative for undergraduates. As ship participation is so expensive, Eve Arnold prefers to let sail an experienced scientists who has never sailed before, also because it is easier to conceive a program for undergraduates than for outstanding senior scientists who have no experience in IODP expeditions.

IODP Funding situation

The funding situation at the IODP level is difficult because of budget restrictions at NSF but mostly because of the increased price of all activities related to oil industry.

Joides Resolution (JR)

NSF has signed a contract with TransOcean. Because of the increased dayrate and the funding problems at NSF, the budget will not allow to operate the ship all year round. Nevertheless even if the ship is not sailing, NSF will have to pay the increased dayrate. NSF is considering going off contract and lease the ship to commercial companies. The situation is complex because part of the equipment of the ship belongs to the NSF.

USIO encourages scientists to find other funding sources.

Chikyu

Chikyu had started drilling for IODP last September. Operating the Chikyu is more expensive that initially planned. As a consequence, JAMSTEC also will have to lease the Chikyu. Presently, the preferred solution seems to contract it to other Ministries in Japan, rather than industry.

For the **phase 2** of the programme it is anticipated that the funding will allow operating:

- The JOIDES Resolution 7-8 months a year
- The Chikyu ~5 months in riser mode, ± 2 months in riserless mode.

  For both ships, it is anticipated that the remaining time will be used for commercial operations, or for projects for other government agencies. The impact on the scheduling of the ships is not yet well assessed.
- One mission specific platform expedition every two years.

b) Implementing organizations

Status of the JOIDES Resolution

There are some delays in the refitting of the JOIDES Resolution because the Singapore shipyard is overbooked. TransOcean, the owner of the ship, is

putting pressure to accelerate the process. As it stands now, the JR will not be able to operate before mid-May 2008.

Status of the Chikyu

The Chikyu sailed for the first NanTroSEIZE expedition at the end of September as planned. An inauguration ceremony was organized to celebrate this event, and ECORD was invited. However, CEDEX has experienced some problems with the riser during the test phase. 3 of the 6 tensioners that support the riser had been damaged during the shakedown cruises. The reasons for this technical problem have not been identified. As a consequence, the start of drilling in riser mode will be delayed, while these problems are being assessed.

Mission specific platform (MSP)

The new jersey Shallow Shelf expedition was delayed to 2008 because of the lack of platform.

Chris MacLeod reports on a train of thoughts derived from some scientists in the UK. There is a feeling that it would be more appropriate, in this difficult funding situation, not to operate MSPs and to allocate the corresponding POCs to the JOIDES Resolution. This suggestion is considered as dangerous and wrong. If ECORD would not act as an operator any more, Europe would loose its visibility in IODP, and this would weaken its position with regard to the EC. In any case, the ECORD POCs would be insufficient to cover the gap in funding.

The total cost of IODP per year is $ 150 M. Considering the European financial contribution to IODP, ECORD gets a lot for little money.

Consequence for FY08

FY08 will be a transitional year, with less drilling activities within IODP than initially planned. It is clear that flexibility in the schedule at IODP level will be necessary, because of the necessity for the two drill ships to achieve commercial work, and of the difficulty for ESO to contract a platform in this context of high demand for drilling equipment.

2.2 SAS Executive Committee (SASEC)

The report of the SASEC meeting, which was held in Bremerhaven in June 2007 has been presented by Catherine Mével.

Implementation Plan

SASEC had intended to rewrite the IODP ISP by the end of 2008. In June 2007, however, it instead wrote a draft implementation plan suggesting a more focused science plan for the phase 2 of IODP (2008-2013), which would serve as an Addendum to the ISP, in lieu of a complete revision. The final approval of this implementation plan will occur at the next SASEC meeting in January 2008 in Santa Cruz, CA.

The draft guiding principles of the implementation plan are the following:

- High scientific impact in next 5 years;
- Necessary precursor for future investigations;
- Reach major milestones;
- Balance between risk, cost and science impact;

- Integrated, interdisciplinary approach;
- Societal relevance;
- *Minimum* requirements for continuity: MSP – one every 2 years, Chikyu – average of 7 months per year over, 5-year period (must include riser drilling) SODV – average of 7 months per year over 5-year period.

Themes and initiatives of the ISP will continue to be the drivers of the program in the long term; however, SASEC recommended four major scientific areas of focus for the period 2008-2013:

1) The Deep Biosphere and Limits of Life,
2) Rapid and Extreme Climate Change,
3) Processes of Ocean Crust Formation and a Deep Crustal Section,
4) the Seismogenic Zone and Initiation of Borehole Observatories.

IODP-MI costs

Recommendations for reducing IODP-MI costs have been made. The US and Japan volunteered to reduce their representation on SAS panels to save money; there was no change for the ECORD representation. The ratio therefore will change from 7:7:3+1 to 5:5:3+1. The EPSP, STP and SSP panels reduced their physical meetings to 1 per year.

Education and Outreach

Two community workshops on Geologic Hazards and on Large Igneous Provinces, and the Topical Symposium on North Atlantic and Arctic Climate Variability were held in 2007. A workshop on High to Ultra-high Resolution Sedimentary Records will be organized in 2008. The IODP-MI Drills program was launched in 2007 with Bo Barker Jørgensen (Deep Biosphere, for the USA) and will be continued with Ted Moore (Environmental Change, for Asia) and Yoshiyuki Tatsumi (Solid Earth Cycles, for Europe) in 2008.

ECORD and ICDP

Both parties are interested to work closer together but it is difficult because of their different structures. An Ad hoc committee tries to develop an implementation plan with financial implications for common core storage and cross-program evaluation of proposals.

Industry partnership

SASEC recommends that IODP-MI work with the Implementing Organizations and the scientific community to develop and/or facilitate non-IODP work with industry consortia and/or governments. In this context, Manik Talwani plans an IODP workshop involving both scientists and industrial partners to debate about drilling in Arctic regions and the planning of joint expeditions implying cost sharing.

The ESSAC delegates have objections in dealing with industries without establishing clear rules. This issue is political and has also environmental consequences. Ruediger Stein mentions that he is invited to the IODP and Industry workshop in November.

According to Chris MacLeod the UK has its own IODP liaison panel with oil industry. Nalan Koc reports that she has contact with oil companies.

2.3 Science Planning Committee (SPC) and Operation Task Force (OTF)

Gilbert Camoin presents the report of the last SPC and OTF.

Financial situation

Because of the coupling of the scientific expeditions with commercial interests, future expeditions will be dictated by the geographic realms of the ship. SPC has informally adopted the OTF suggestion that it defines 'tier 1' and 'tier 2' proposals among those previously forwarded for possible scheduling, and any more that may be highly ranked by SPC in the future. As a result, SPC prioritised the proposals from each ocean basin, identifying one tier 1 proposal in each, so that OTF would have clear guidance as how best to arrange scientific operations around industry contracts wherever the ships might be in the future.

Definition of Tier 1 proposals: Tier 1 proposals are those of the highest strategic importance for IODP as a whole that will be essential in helping achieve the goals of the Initial Science Plan and assisting renewal of the program, and which should definitely be drilled by 2013. Half of the proposed tier 1 proposals are complex (expensive or long dead time items). 5 or 6 programmes could be scheduled over 3 years.

Definition of Tier 2 proposals: Tier 2 proposals are those of high scientific merit but which may not get drilled before 2013. SPC will annually rank those proposals that will be prioritised globally and regionally. Those proposals constitute a pool that provides flexibility to fill in gaps between tier 1 and non-IODP work. Scheduling of tier 2 proposals will depend on budgets, length of non-IODP work etc.

Because of the lack of IODP operations between late 2005 and mid 2007, the number of unscheduled proposals residing at OTF has grown to a large and unmanageable number (potentially up to 30). Considering the new fiscal realities of IODP and the likelihood of only 6-8 months of science operations per year, it had become clear that reprioritization is necessary. Because of acceleration in scheduling IODP expeditions short-term as well as long-term flexibility is needed.

At the Santa Cruz meeting, SPC re-reviewed unscheduled proposals and was asked for the first time to consider the costs of potential expeditions in addition to their scientific merit, especially for proposals including observatory components (CORKs) because these are considerably more expensive than regular proposals.

Complementary project proposals (CPP)

SPC also approved a "complementary project proposals" (CPP), that is a possible hybrid mode of collaboration between IODP and outside sponsors for projects deemed to be:

- Of high priority to an outside entity that offers resources to the program,
- Of interest to the respective Implementation Organisation and the IODP Agencies,
- In compliance with IODP data/sample access policies,
- Of scientific interest to IODP as determined by SAS (even if not necessarily top-ranked IODP scientific priority), and
- of minimal negative impact to other high-priority IODP projects as determined by IODP-MI and SAS.

The evaluation and review process of a CPP within SAS could be as follows: if the initial CPP presentation is strong, a single-pass SSEP/SPC review cycle could be sufficient for a SAS judgment of relevance or interest to IODP. At SPC, the CPP review would lead not to inclusion in the regular SPC annual proposal ranking on scientific grounds, but to a separate yes-or-no decision to forward to OTF for potential scheduling, much as SPC handles the APLs.

A working group of SPC members will examine the evaluation process for such proposal design.

JOIDES Resolution
FY08-09 Operations

USIO riserless vessel planning schedule for FY08 and FY09 operations (as of September 2007)

Expedition		Port (Origin)	Dates[1,2]	Total Days (Port/Sea)	Days at Sea (Transit/Ops)	Co-Chief Scientists	Alliance Contact(s)
Deployment, mobilization, sea trials, transit	N/A	Singapore	1 April - 18 May 08[1]	47 (15/32)	25/7	N/A	Jack Baldauf
Equatorial Pacific/JdF[3]	317	Honolulu	18 May – 18 July	61 (7/54)	19/35	Mitch Lyle Isabella Raffi	Cédric John
Bering Sea	318	Astoria[4]	18 July – 17 September	61 (3/58)	12/46	Kozo Takahashi Christina Ravelo	Carlos Zarikian
Equatorial Pacific	319	Tomakomai	17 September – 17 November	61 (6/55)	26/29	Heiko Pälike Naokazu Ahagon	Kusali Gamage
Canterbury	321	Tahiti	17 November – 17 January 09	61 (5/56)	11/45	TBD	Jörg Geldmacher
Wilkes Land[5]	323	Wellington	17 January – 22 March	64 (5/59)	16/43	TBD	Adam Klaus
Mariana[6]	TBN	Wellington	22 March – 22 May	61 (5/56)	18/38	TBD	Jay Miller

[1] **Dates for expeditions may be adjusted pending final vessel delivery date from shipyard**
[2] The start date reflects the initial port call day. The vessel will sail when ready.
[3] The expedition will consist of operations in both the Equatorial Pacific (30 days) and Juan de Fuca (5 days). Following Equatorial Pacific operations, scientists will disembark in San Diego on or about 7 July prior to Juan de Fuca operations.
[4] The port of call is tentative. Note that the port call is split between San Diego (2 days) and Astoria (3 days).
[5] Wilkes Land activities include completion of the Adelie Drift APL.
[6] Although the Mariana expedition is currently shown, the actual implementation of this expedition is awaiting final FY09 budget guidance.

The first JOIDES Resolution expedition has been postponed to May 08 with what was previously the second EqPac Expedition. The first of the EqPac Expedition, originally scheduled for March–May 08 has been put back to Sept–Nov 08, in place of the Shatsky Rise Expedition. Dates for expeditions may be adjusted pending final vessel delivery from shipyard.

For FY09, a combined expedition based upon proposal #505 (Mariana convergent margin but minus the CORK component and proposal 693-APL (CORK operations at Chamorro seamount, Marianas) is scheduled.

FY10 potential operations in the Atlantic

Mid-Atlantic Ridge Microbiology (proposal #677-Full; Edwards et al.) has been defined as the tier 1 proposal for the Atlantic Ocean and will therefore stay at OTF. This proposal was already ranked #1 before the need to prioritize proposals after ocean basins. The proponents were able to "tap" additional funds. All other proposals that include observatory components were returned from OTF to SPC for reassessment and re-ranking (i.e. proposal #633 - Costa Rica mud mounds, Brueckmann et al.; 537A - Costa Rica seismogenic zone,

Vannucchi et al.; proposal #537B - Costa Rica seismogenic zone, Ranero et al.; proposal #553 - Cascadia Margin Hydrates, Riedel et al.; proposal #589 - Gulf of Mexico Overpressures, Flemings et al.). The 07 March SPC rankings should guide expedition priorities for tier 2 FY10 JOIDES Resolution operations in the Atlantic Ocean.

FY10 potential operations in the Indian Ocean

Proposal #595-Full3 Himalayan climate-tectonic links (Clift et al.) has been defined as the tier 1 proposal for the Indian Ocean.

Proposals #549-Full6 (Northern Arabian Sea Monsoon; von Rad et al.) and#552-Full3 (Bengal Fan; France-Lanord et al.) have been defined as tier 2 proposals.

FY10 potential operations in the Pacific

Juan de Fuca Flank Hydrogeology (proposal #545-Full3; Fisher et al.) has been defined as the tier 1 proposal for the Pacific.

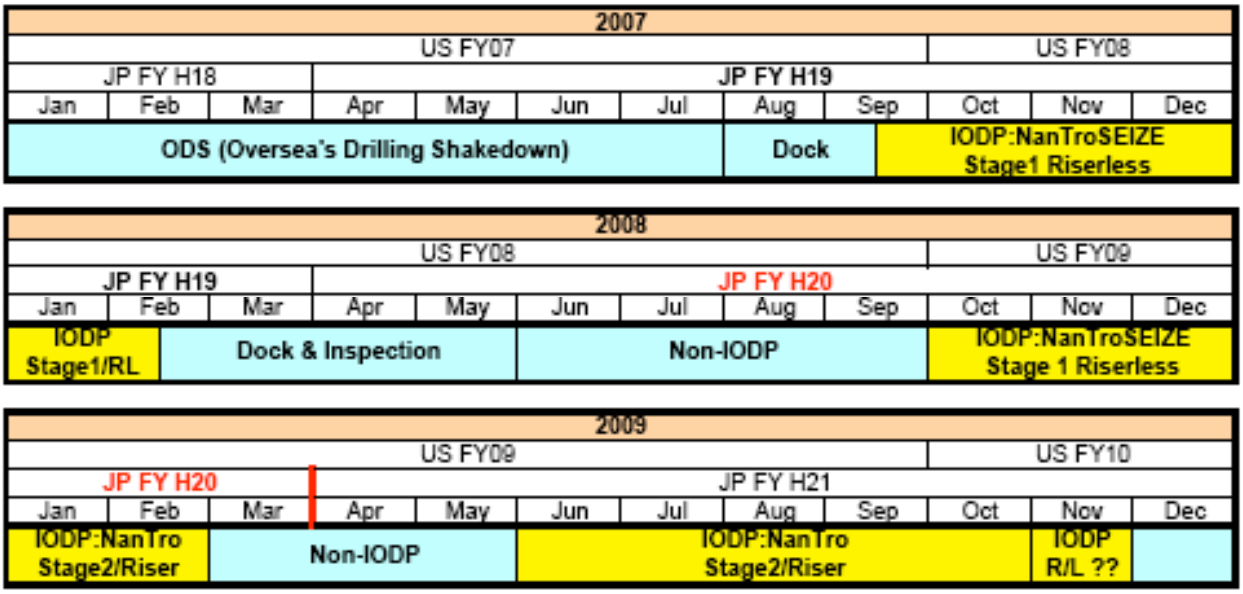
Superfast Spreading Crust (proposal #522-Full5) is the top-ranked tier 2 choice. In addition to any new proposals forwarded by the SSEP for SPC review and ranking at its March 2008 meeting, the SPC will review and rank those proposals that were previously forwarded to OTF.

The only exceptions would be those that were identified at this meeting as clear group 1/tier 1 proposals, or those that might appear in the FY09/10 schedule options to be approved by the SPC after further OTF schedule development in autumn 07.

Riser ship (Chikyu)

FY08-09 operations:

Proposed Chikyu schedule for FY08 and FY09 operations (as of july 2007)



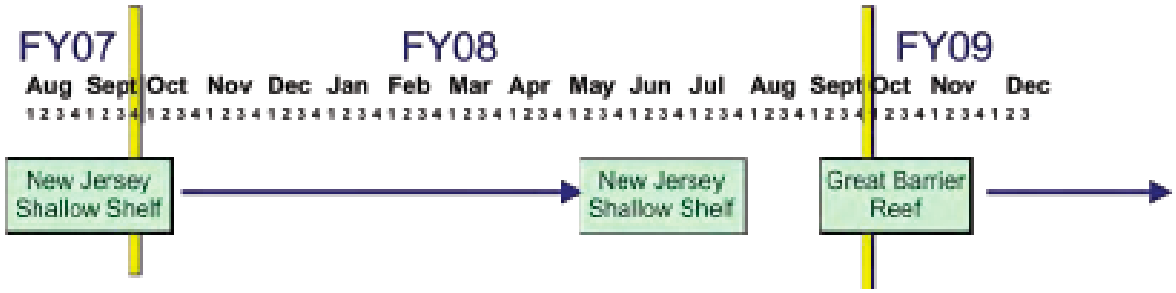
The following scheduling has been adopted by OTF:

- Phase 1 of the Nankai Trough seismogenic zone experiment (NanTroSEIZE) commenced in Sept 07 with three riserless operations on Chikyu (Exp 314, 315 and 316, Sept 07 to Feb 08).
- Feb –Sept 08: Inspection, maintenance and non-IODP work.
- Exp 317 Subduction Inputs/Kumano Basin NanTroSEIZE.
- Riser operations – NanTroSEIZE phase 2 – will be delayed, probably until Jan 09, in order to allow full investigation of the riser tensioner problems that became apparent during the riser trials in the shakedown cruises conducted earlier in 2007.
- All NanTroSEIZE expeditions are related to proposal #603-CDP3 and component proposals.

FY 10 operations:

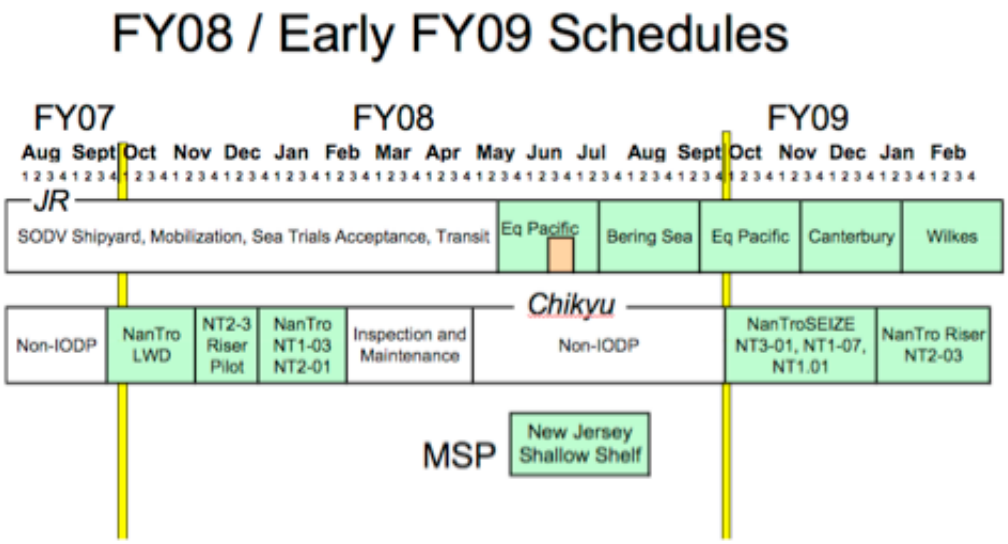
Asian monsoon (proposal #605; Tada et al.) has been designed as the SPC top priority for FY 10 non-riser Chikyu expedition.

Mission Specific Platform
FY 08-09 operations :
Proposed ESO operations for FY08 and FY09 (as of July 2007)



- The MSP operations at the New Jersey Margin (Exp 313) have been delayed because of the difficulty of chartering an appropriate platform in the right weather window.
- Planning for an MSP expedition at the Great Barrier Reef (Australia; proposal #519; Camoin et al.) is under way, and it is hoped that operations there will take place in FY08 or FY09, possibly even before New Jersey (see also 3.2).

Overview of schedules for FY08 and FY09 for USIO Riserless vessel, Chikyu and MSPs



FY10 operations:

None of the three MSP proposals at SPC was designated as a top priority for a FY 10 MSP expedition (i.e. post New Jersey and Great Barrier Reef). Proposal #548 (Chicxulub impact crater, Morgan et al.): the scientific excellence of that proposal was recognised by SPC, but the cost of such an operation is prohibitive (at least $ 20M). Unless significant external funding is found, it is unlikely that the Chicxulub proposal can ever be scheduled.

Proposal #581 (Gulf of Mexico coralgal banks, Droxler et al.): this proposal was not considered of sufficiently high priority by SPC and will be returned to SPC for re-ranking in March 2008.

Proposal #637 (New England Hydrogeology, Person et al.): this proposal lacks essential site survey information. It cannot be considered for possible operations in the foreseeable future and was therefore returned from OTF to SPC.

Mission proposals

(See also 2.5)

The Mission concept was an initiative introduced by IODP-MI a couple of years ago at the Frascati IODP-MI Management Forum as a proactive mechanism to ensure that the strategic goals of ISP were met as completely as possible by the end of IODP.

Missions were defined as intellectually integrated and coordinated drilling strategy originating from the scientific community that firstly addresses a significant aspect of an IODP ISP theme over an extended period and that merits urgent promotion in order to achieve overall IODP program goals.

Missions were envisaged as 'super-proposals' focusing on a particular scientific concept, requiring multiple expeditions to multiple places over many years, addressing scientific questions beyond the ISP and might need technical development in the future (e.g. the Mohole Mission).

IODP-MI received 3 mission proposals for the 1st April 2007 deadline. They

all contained conventional constituent drilling proposals bundled together with an umbrella overview. They were reviewed by the SSEP and by an external review panel, and then evaluated by SPC in Santa Cruz.

1) Proposal #713-MP Mission Monsoon (Clift et al.)

Component proposals:

- Proposal #549 Arabian Sea, Lückge et al.;
- Proposal #552 Bengal Fan, France-Lanord et al.
- Proposal #595 Indus Fan/Murray Ridge, Clift et al.;
- Proposal #605 Asian Monsoon, Tada et al.;
- Proposal #618 East Asian Margin, Clift et al.;
- Proposal #683 East Asian Monsoon, Zheng et al.

The major objective of this proposal is to investigate the evolution of the Asian monsoon and its linkage to the uplift of the Himalayan-Tibetan orogenic system during the Cenozoic, not only in its core regions, but also in far field regions (e.g., Sea of Japan, Timor Sea).

It was common consensus that a mission is not necessary for this proposal. A detailed planning group (DPG) will be formed to prioritise components of proposal 713-MP. The DPG will: 1) have a timeline of 1 year, 2) be chaired by a non-proponent, 3) prioritise the drilling programmes, 4) address technical issues, 5) include an outreach and education plan and 6) include a modelling component to help prioritise sites.

2) Proposal #719-MP Mission Moho (Ildefonse et al.)

Component proposals:

- Proposal #522-Full5 East Pacific, Teagle et al.
- Proposal #551-Full Hess Deep, Gillis et al.
- Atlantis Massif – to be submitted
- Proposal #535-Full5 Atlantis Bank, Dick et al.
- The Mohole (Riser) – planned

The objectives of this proposal are:

1) To determine the geological nature of the Moho seismic discontinuity,
2) To understand upper mantle dynamics and melt migration processes,
3) To test competing hypotheses of the accretion of igneous crust at mid-ocean ridges, and
4) To estimate the extent, location and intensity of hydrothermal exchanges between seawater and the oceanic lithosphere, that control crustal cooling, global chemical fluxes, and sub-seafloor biological activity.
5) The final stage of Mission Moho, the "MoHole", will require non-riser and riser drilling, and especially the construction of a +4000 m riser.

Proposal 719-MP was not designated as a Mission by the SPC. However, SPC requested that the EDP works with IODP-MI and the IOs to assess the technological needs required to achieve the deep penetrations required for the Mohole drilling.

3) Proposal #720-MP Birth of Oceans Mission (Hopper et al.)

Component proposals:

- Proposal #657-Pre Galicia Rifted Margin, Sawyer et al.
- Proposal #692-Pre Flemish Cap, Cunha et al.

- Proposal #710-Pre Gulf of Corinth, McNeill et al.
- Proposal #717-Pre W Australian continental margin, Müller et al.
- Proposal #725-Full Norwegian-Greenland Sea, Huismans et al.
- + Additional proposals to be submitted (e.g. Gulf of California, South Atlantic)

The objectives of this proposal are:

1) To understand the processes that control break-up of continental lithosphere and the initiation of seafloor spreading,
2) To document the following issues at a number of carefully selected rift systems:
   a. The subsidence and uplift history
   b. Spatial and temporal distribution of strain
   c. Ages and stratigraphy of pre-, syn-, and post-rift sediments
   d. Deformation fabrics and faults
   e. Timing, volume, and distribution of magmatism
   f. Magma chemistry and mantle compositions
   g. The depth of the melting region and the plumbing (extraction) system

Proposal 720-MP was not designated as a Mission by the SPC.

Given the parlous financial status of IODP it is unclear whether any proposals will ever receive a "Mission" designation in the future.

> ESSAC Action Item 0710-03: The ESSAC Office will officially send a message to IODP-MI to get information regarding the future of the active Mission proposals and the possibility of a new call for proposals.

Complex Drilling Proposals (CDP)

1) Proposal #707-Full2 (Sagami Bay Seismic Monitoring; Kobayashi et al.)

Component proposals:

- Proposal #722-Full2 Sagami Bay Tectonics and Palaeoseismology (Yamamoto et al.)
- Proposal # 723-Full Sagami Bay Kanto Asperity Network (Kobayashi et al.)

The objectives of this proposal are:

1) To clarify the tectonic evolution and palaeoseismological record of the Kanto region,
2) To evaluate the locked, creeping, or slipping character of the asperity system across the region,
3) To determine the geometry and mechanics of the asperity system,
4) To identify the relationship between plate motion, strain accumulation, and earthquake mode and
5) To determine the physical state of the asperity zone, and relate it to the earthquake cycle in the Kanto Region.

Proposal #707-Full2 was designated as a CDP by SPC.

2) Proposal 694-Full3 Project IBM - Izu-Bonin-Mariana Arc Evolution - (Tatsumi et al.)

Component proposals:

- Proposal #695-Full Izu-Bonin-Mariana Pre-Arc Crust (Arculus et al.)
- Proposal #696-Pre Izu-Bonin-Mariana Deep Forearc Crust (Pearce et al.)
- Proposal #697-Full Izu-Bonin-Mariana Rear-Arc Crust (Tamura et al.)
- Proposal #698-Full Izu-Bonin-Mariana Arc Middle Crust (Tatsumi et al.)

The key questions regarding that proposal are:

1) What was the nature of original crust and mantle that existed before subduction began in middle Eocene time?
2) How did subduction begin and the initial arc crust form?
3) What is the significance of across-arc variations in magma chemistry for defining the bulk composition of arc crust?
4) What is the significance of low-velocity middle crust?
5) How does the composition of arc crust change with time?

Proposal #694-Full3 was not designated as a CDP by SPC.

2.4 IODP-MI Management Forum

Gilbert Camoin presents the different objectives of the IODP-MI Management Forum, which tackles issues that concern IODP as a whole and reviews and offers advice on policies, procedures, and current and future activities.

The IODP Management Forum, while representing the views of the various separate entities that comprise IODP, is also able to express a joint perspective on the program. It is composed of key personnel from IODP-MI, the Heads of the Implementation Organisations, the Chairs of the Advisory Committees of the National Program Offices, as well as the SPC and the SASEC chairs. It meets annually in a two-day meeting in the form of a "retreat". The previous IODP-MI Management Forums were held in Frascati, Italy (May 24-26, 2005), Salt Lake City, USA (March 29–30, 2006) and Nikko, Japan (March 28–29, 2007).

The organization of an IODP Management Forum in Southeastern France has been considered by Manik Talwani. If confirmed, Gilbert Camoin would be in charge of organizing this Forum.

2.5 Science Steering Evaluation Panel (SSEP)

Ruediger Stein gives a report of the last SSEP meeting, which was held in Houston in June 2007.

IODP proposal review processes

There have been some problems with proposals, which had been submitted directly as full proposals, circumventing the pre-proposal state. Although these proposals were often immature, they have been reviewed by all panels. Accordingly SSEP decided to change this procedure in order to save time and efforts. SSEP agreed by consensus that an initial submission, whether written as a pre-proposal or full proposal, can be deactivated without sending the proposal out for external review.

In earlier times proposals, which have not been accepted were sent back with the labelling "deactivated". Currently the refused proposals are sent back

with the remark "request new submission". This denotation might be confusing for the proponent insinuating to him/her that he/she should resubmit its proposal.

SSEP so far had no universal agreement on the meaning (translation) of stars and it is was not using the full dynamic range of the star system ranging from 5 to 1 stars. However, SPC attaches greater value to words in final review and recognize the "star inflation". Therefore a translation from stars to words is needed to be more consistent in the evaluation of proposals in the different SAS panels.

The new definition of stars in the SSEP proposal review is as follows:

- 5 stars ***** - Exceptional proposal
  The science plan is innovative, cutting-edge, and extends beyond the vision of the ISP. In all probability, the expedition(s) will generate major conceptual breakthroughs and exciting new discoveries.
- 4 stars **** - Outstanding proposal
  High-priority initiatives of ISP with significant refinements of existing scientific concepts.
- 3 stars *** - Very good proposal
  Consistent with thematic priorities of ISP. Refining existing concepts, filling gap in global database, or resolving a pointed scientific debate….
- 2 stars ** - Good proposal.
  Drillable. Either excessively narrow or peripheral to thematic priorities of ISP.
- 1 stars * - Drillable
  Project is "drillable", but the scientific objectives are either not relevant to the ISP or the proposal contains deficiencies, as identified by both panel and external reviews. The nurturing process has culminated, so the proponents may need additional help in their planning and preparation.

Another important point is that some proposals include a huge number of proponents. Because only lead proponents are listed, intellectual contribution of proponents from different countries are not well taken into account. This leads to the fact that the statistics conveyed by IODP may be biased – especially more negatively for ECORD and more positively for USSSP members.

> ESSAC Action Item 0710-04: The ESSAC Office will request comprehensive statistics from IODP-MI regarding the ECORD proponents on active proposals.

Mission proposals (See also 2.3)

The SSEP responsibilities in the evaluation of those proposals are:

1) To review each Mission proposal,
2) To forward the evaluation to SPC,
3) To comment on each structural component of the proposal,
4) To provide comments on the needed composition of the proposed Stage 1 core Mission Team.

The SSEP review occurs in parallel with that of the external review panel, appointed by SASEC. There is no grouping, no ranking, no "quality points" as well as no "nurturing" or feedback to proponents.

The criteria used by the SSEP in this evaluation process are the following:

- Will the plan lead to **considerable** scientific success?
- Is the plan of **high(est) priority** for IODP?
- Does the plan require considerable technological effort and/or complex, multiple drilling strategies?
- Does the plan require **longer term planning** compared to typical of drilling expeditions?
- Does the plan merit **urgent promotion** in order to achieve overall IODP program goals?

Complex Drilling Proposals (CDP)

The criteria used by the SSEP to evaluate CDPs are the following :

- The overall scientific objectives have a strong potential to significantly advance understanding on major themes of ISP and important processes in the Earth system.
- The component proposals address parts of the overarching objective(s) and are closely interrelated.
- The completion of each component is essential to attain the overarching objective(s) but this/these cannot be achieved through a series of individual proposals.
- A multi-phase and/or multi-platform approach is essential for the project.

Two potential CDPs have been reviewed by the SSEP.

- **Proposal #707-Full2** (Sagami Bay Seismic Monitoring; Kobayashi et al.). The SSEP viewed the scientific goals of this project as very high priority and unusually high in terms of societal relevance. The scope of the project, the interrelationship of individual phases of proposed research, and the dependence of individual expeditions on the outcomes of previous ones, necessitates this designation. At this time, all of the proposals lack critical site survey data and further consideration by SSEP is delayed until such data have been acquired and analyzed.

- **Proposal #694-Full3** (Izu-Bonin-Mariana – IBM - Arc Evolution umbrella proposal). The SSEP understood the scientific importance of IBM arc drilling described in the proposal submitted as an umbrella proposal for IBM complex drilling project. However, SSEP could not agree by consensus whether or not this proposal should stand as a CDP umbrella proposal, but did agree by consensus to forward the proposal to the SPC for their judgement.

3. ECORD News

3.1 EMA - ECORD Council

Catherine Mével reports on the last ECORD Council meeting which was held in Den Haag on June 7th and 8th 2007. The current ECORD Council will last from Oct 1st 2007 to March 31st 2008. Current Chair is Bruno Goffé from France. The Vice-Chairs are Severino Falcon-Morales from Spain (incoming) and Raymond Schorno from the Netherlands.

The Council approved the base budget € 82.500 for ESSAC and an additional budget of € 25.000 for ECORD Summer School activities. The

council requested ESSAC to present a budget for additional support activities at its fall meeting (held in Madrid, the following week).

In 2007 a review of IODP-MI was organized. ECORD Council was not involved in the process.

The ECORD Council is conscious that a long-term strategy for ECORD is needed. The Council established a vision group for developing a strategy for future European ocean drilling, beyond IODP. The vision group consists of R. Schorno, B. Goffé, S. Winkler-Nees, C. Mével, C. Franklin and U. Hoeberg, D. Evans and G. Camoin.

A conference on maritime policy in Europe (EurOceans 2007) was held on June 22nd 2007 in Aberdeen. The content of this conference was driven more by policy than by science. The Aberdeen declaration can be found at: http://ec.europa.eu/maritimeaffairs/eurocean2007.html.

In the context of the Portuguese EU Presidency, the Centre of Marine and Environmental Research (CIMAR - Portugal) and the Marine Board-ESF organised a science policy event entitled "The role of marine sciences in ocean sustainability and global change" (Lisbon, October 8th 2007). This event, in line with the EurOCEAN 2007 conference (Aberdeen, June 22nd 2007), was meant at considering the importance of marine and maritime science and technology in the development of the European Maritime Policy. In this context, cross cutting aspects between marine and maritime research was a key issue. The audience targeted by this event included the Ministers of science and technology, invited scientists and EurOCEAN 2007 Organising Committee members. The meeting was attended by Stefan Winkler-Nees and Soeren Duerr.

The EC launched its maritime policy on October 10th 2007 in Brussels. The Blue Book on the future European Maritime Policy is available at http://ec.europa.eu/ maritimeaffairs/subpage_en.html.

The report of consultation can be found under http://ec.europa.eu/maritimeaffairs/pdf/Consultation/EN_Consultation_report_final_COM_574.pdf.

NOTE:

A Blue Planet Forum will be held in Brussels on November, 27th and 28th,2007
(http://ec.europa.eu/maritimeaffairs/pdf/2821_forum_BluePlanet.pdf).

The current ECORD funding situation is very encouraging, although the aim of 4 participation units has not been reached yet. From FY2008, one participation unit (P.U.) equals $ 5.6 M. The 4 P.U. are divided into 3 ($ 16.8) M for SOCS and 1 ($ 5.6 M) for POCS, i.e. a total of $ 22.4 M per year for ECORD. So far roughly $ 21 M are secured. Presently Denmark is reviewing its level of contribution, in the light of the low level of involvement of its science community.

The ECORD-Net project (FP6) is ending on August 31st 2008. It provided € 2.6 M over 57 months. This fund helped greatly to set up the ECORD structure. The ECORD council is currently investigating new opportunities of funding within FP7. An ERA-Net+ is envisaged, but the European Commission (EC) made the strategic decision not to fund ERA-Net's/ERA-Net's+ in 2007. A ERA-Net+ is an option for ECORD, because in case ECORD is able to pool funds of e.g. € 15 M, the EC is willing to top up this sum with an additional € 5 M. To establish the workplan, the programme committee for environment

makes recommendation to the EC. It is important that the national representatives on this committee lobby for ECORD.

The Deep Sea Frontier initiative submitted a proposal for a coordination action (CA) in the Framework Program Seven (FP7). This proposal was not accepted mainly because of two reasons: 1) because it was too focused on Geosciences and 2) it apparently left behind important partners in the marine geoscience community. Unfortunately no other call will be issued in FP7.

A proposal to the EC "ERICON" supporting the preparatory phase of the Aurora Borealis has been granted. It is lead by the ESF Polar Board. Paul Egerton was invited to attend the ECORD Council meeting held in Madrid on October 21st to 23rd, 2007. ECORD (through CNRS-INSU) is involved is in this proposal as a partner. ECORD will bring its experience in drilling in the Arctic and in running a scientific programme.

NOTE:
A new flyer Aurora Borealis "First steps" can be found a http://www.eri-aurora-borealis.eu/fileadmin/user_upload/Home/Whats_new/Aurora_Borealis_Flyer.pdf

A workshop for about 50 to 80 scientists from non-ECORD European member countries is scheduled in Edinburgh, next spring under the lead of ECORD-Net. Suggested target countries are especially Turkey, Greece, Israel, Poland, Russia, the Balkan States, Bulgaria, and Romania. The objectives of that workshop are 1) to explain the structure of IODP and ECORD to non-member countries, 2) to highlight the acquired benefits to the scientific communities and the scientific successes by joining ECORD, and 3) to demonstrate the scientific progresses achieved so far.

ESSAC input will be essential in the identification of scientists and universities, which could be interested as well as potential speakers within the ECORD community.

> ESSAC Action Item 0710-05: ESSAC will suggest speakers and identify scientists and institutions to contact for the workshop 2008 in Edinburgh in the framework of ECORD-Net work package 2 to attract new members to ECORD.

The creation of a glossy brochure to promote ECORD's achievement in IODP during the first phase of the programme is planned for the next EuroForum meeting in Vienna 2008. ESSAC will be involved in this project.

> ESSAC Action Item 0710-06: ESSAC will provide input for a new, specific ESSAC glossy brochure, planned for EuroForum 2008.

IODP booths will be organised by ECORD and IODP-MI at the following conferences:

- AGU - Organized by IODP-MI; Town hall meeting: Tuesday, December 11th
- EGU - Organized by ECORD; April 13-17th 2008, Vienna; Joint Town hall meeting with ICDP - TBD
- IGC - Organized by ECORD with the help of Norwegian colleagues; August 5-14th 2008, Oslo.

Help from ESSAC is needed for these two last events. Because they are in Europe, ECORD has the responsility to man the booths. .

3.2 ESO

Alan Stevenson summarises the past events since the last ECORD Council meeting. ESO experienced a number of setbacks, among which the loss of Tim Brewer, Manager of the European Petrophysics Consortium (EPC), was the saddest. Dr Sarah Davies at Leicester University will succeed Tim Brewer, with Mike Lovell contributing in the short term.

Postponement of New Jersey

In late June it was decided not to carry out this expedition in 2007. Because no platform was available before August, the expedition would not end until well into November, in statistically deteriorating weather conditions. Besides financial reasons, safety reasons, especially personnel transfers, were determining factors.

The preferred drilling contractor DOSECC made enquiries with potential platform owners to provide a platform with a defined start time of early May 2008. Unfortunately, DOSECC was unable to provide a plan and withdrew from the contract. As a consequence a re-tendering procedure started with in early October with a notice published in the Official Journal of the European Communities (OJEU).

Permit issues for Great Barrier Reef (GBR)

The Great Barrier Reef expedition was provisionally scheduled for implementation by ESO in the September-November weather window of 2008.

On February 15th, 2007 a successful meeting was held with the Great Barrier Reef Marine Park Authority (GBRMPA). In early June, ESO submitted an application to drill on the GBR together with an Environmental Impact Statement. GBRMPA rejected the application based on the fact that, according to its current Director the proposed activity is inconsistent with Section 38 of the Great Barrier Reef Marine Park Act 1975 that says: "The sample cores could be used by people or organisations in the process of prospecting for the recovery of minerals in the Great Barrier Reef Marine Park". ESO contacted several key scientists for support (Keir Becker, SPC Chair; Dave Falvey, Executive Director, Physics, Chemistry & Geoscience at the Australian Research Council; Kurt Lambek, President of the Australian Academy of Sciences). The main reason why the permission has been refused are probably the fact that currently elections take place and that Australia fears the uncontrolled data access for potential use of hydrocarbon exploration from third parties.

A discussion regarding this issue starts. Some ESSAC delegates fear that IODP and Industry are now so closely entangled that it becomes difficult to sell IODP, especially in the field of Education and Outreach as well as in the field of environment. On the other hand, it is argued that drilling permissions were always difficult to obtain. Today, one main problem is the high demand on platforms from the oil industry.

Political considerations could become an issue too for several proposals, e.g. the Murray Ridge proposal involving drilling of in the Pakistani waters.

Ruediger Stein mentions that there will be a NSF-funded workshop (lead proponent: Brian Cockley) on Arctic research in Bremerhaven. ESSAC delegates suggests to Ruediger Stein to submit also a proposal for the ESF

Magellan workshop series. The ESF deadline is November 15th 2007 and Ruediger Stein agreed to do so. Following the August SPC meeting, no other MSP proposal will stay at the Operations Task Force.

4. Nominations and staffing

4.1 Staffing

4.1.1 NanTroSEIZE expeditions

Chris MacLeod summarizes the current status of the staffing of the NanTroSeize expeditions 314, 315 ands 316.

ECORD Science Party members, Expedition 314: Tudge (UK), Bourlange (Fr), Conin (Fr), McNeil (UK). Jurado (Sp) filled a vacant slot.

ECORD Science Party members, Expedition 315: Lallemant (Fr), Calves (UK), Famin (Fr), Behrmann (Ger), Henry (Fr), Schmidt-Schierhorn (Ger), Kaksonen (Fin), Boeckel (Ger) replacing Kandilarov (Nor) who withdrew, and Kopf (Ger) replacing Géli (Fr) who withdrew.

ECORD Science Party members, Expedition 316: Nicholson (UK), Strasser (Ger, ex-Switz) replacing Stegmann, who was required to withdraw by IODP Germany, Fabbri (Fr), Louis (Fr), Girault (Switz), Claesson (Swe) replacing Hensen (Ger) who withdrew, and Riedinger (Ger).

The problems arising from the self-depended replacement of one German scientist (Stegmann) by another (Strasser) by Achim Kopf, who contacted J-DESC without having discussed the issue with the ESSAC Office is elaborated. ESSAC agrees, that the ESSAC Office must be informed in any case and that the ESSAC Office decides solely together with the Implementation Organisations whom of the ECORD scientists is going to sail.

4.1.2 Bering Sea expedition

The prioritization for the staffing of the Bering Sea expedition was done electronically before the ESSAC Meeting. ESSAC Delegates reviewed all applications individually and indicated preferences by grouping applicants (0- to 3-stars) based primarily on proposed research, experience, and expertise. The ESSAC Nominations and Staffing Subcommittee then made the final selection. The ECORD quota balance was monitored but not applied rigidly.

ESSAC received 59 applications from 12 ECORD countries and 4 non-ECORD countries (including 5 non eligible applicants and 2 applications for shore-based work). The distribution was the following: Austria: 1, Belgium: 1, Canada: 6, Finland: 1, France: 4, Germany: 10, Italy: 2, Netherlands: 3, Portugal: 3, Spain: 9, Switzerland: 1, UK: 13

It is widely accepted that the best scientists must sail independently from the quota concerns. Also, there is a clear need of flexibility to provide a wide array of expertise to the IOs. The IOs seek always the contact and opinion of the ESSAC Office in case a change has to be made.

A discussion among ESSAC delegates begins whether it is necessary to send the complete list of applicants to the IOs (USIO in that case) including those who received 0 star. The argument for sending the complete list would be to demonstrate the great interest in the European scientific community. Arguments against this handling are, that: 1) there is not enough clear

guidance from ESSAC and, accordingly, too much freedom for the IOs (USIO in that case) to make their own selection, 2) there is a significant risk to see some scientists who are not among the top priorities or not eligible selected, and 3) the fact that reviewing additional CV from scientists who are not supported by their countries, is time-consuming and unproductive. Two votes have been organized and resulted in the two following motions.

ESSAC Motion 0710-01: ESSAC decides not to send all applications to the Implementing Organizations after the nomination process. *14 in favor, 1 opposed (MacLeod), none-abstained*

ESSAC Motion 0710-02: ESSAC decides to forward only the applications rated from 1 to 3 stars to the Implementing Organizations. *14 in favor, 1 opposed (MacLeod), none-abstained*

4.1.3 Canterbury Basin Sea Level and Wilkes Land Palaeoceanography Expeditions

Calls for applications for both Canterbury Basin and Wilkes Land expeditions (currently November 2008 to January 2009 and January to March 2009, respectively) were issued. The deadline for the submission of the applications is November 30th 2007.

The prioritization for the staffing of both expeditions will be done electronically In December 2007 and January 2008. The dates for the ESSAC Office to forward nominations to the USIO are February 1st, 2008 and March 1st, 2008 for the Canterbury and Wilkes Land expeditions respectively. Nalan Koc asks if it would be possible that researchers with a common research field might be overshadowed by the dominance of researchers from other countries with the same research field. So far such a case has not been reported, but should be reported to the ECORD Council, if it had been the case.

In cases in which scientists with a special expertise should join urgently an expedition, the delegate of the applicant's country should write some lines about the importance of the applicant's input and expertise to the scientific success of the program.

Concerning the often unsecured status of young researchers, the internet application form for sailing has been changed with an additional requested information on the post cruise funding, how the scientific aims can be achieved and how the applicant is supported by its host institution.

> ESSAC Action Item 0710-07: The ESSAC Office will contact the co-chiefs of the Canterbury and Wilkes Land expeditions to get advice on the expertise needed and include that information in the respective flyers to be distributed to the ECORD science community.

4.2 Nominations

4.2.1 SAS panels and ESSAC

A review of the recent nominations and future rotations of ECORD representatives in SAS panels and ESSAC has been done.

The ECORD Council approved the following nominations:

- N. Vigier (Fr) at the Scientific Technology Panel,
- N. Mitchell (UK) at the Site Survey Panel,
- K.-U. Hinrichs (Ger) at the Science Steering and Evaluation Panel,
- R. Stein as new ESSAC Vice-Chair starting on October 1st 2007

There will be four rotations of ESSAC delegates after the 9th meeting:

- K. Gillis, Canada, to be replaced by M. Riedel
- M. Sacchi, Italy, to be replaced by E. Erba
- E. Arnold, Sweden, to be replaced by TBN
- R. Petersen, Norway, to replaced by TBN

SPC

There will be one rotation at SPC after the March 08 meeting:

- R. Pedersen.
- Regarding C. MacLeod's replacement, UK IODP decided to replace him by H. Jenkyns.

This nomination has been approved by the ECORD Council.

SSEP

There will be three rotations at the SSEP:

- J. Backman in November 2007
- F. Eynaud in May 08
- J. Konnerup-Madsen in May 08.

The nomination of Heiko Paelike as the next Co-Chair of SSEP was approved by SPC.

EDP

There will be one rotation at the EDP in June 2008:

- R. Person.

SASEC

- M. Bickle will rotate off in July 2009.
- G. Wefer will rotate off in July 2009.

SSP

- N. Mitchell replaced Roger Searle.

STP

- W. Brueckmann is not a member of this panel anymore.

It is decided, that the alternates should also receive information about the next meeting dates.

A discussion regarding the ESSAC procedures for nominations in SAS panels follows.

ESSAC Consensus 0710-02: ESSAC decides to work on SAS panel member rotation issues two meetings ahead.

ESSAC Consensus 0710-03: ESSAC agrees on the following procedures regarding the nominations of ECORD representatives in SAS panels: A call for applications will be widely distributed and posted on the ESSAC website; the applications will then be reviewed by the Nominations and Staffing ESSAC subcommittee who will recommend nominations.

ESSAC Consensus 0710-04: ESSAC decides, that the ESSAC delegates will now constitute a pool of permanent alternates for SAS panels if problems arise in finding an alternate among the current list of formal alternates.

> ESSAC Action Item 0710-08: The ESSAC Office will continue to contact SAS panel chairs for guidance regarding the expertise needed for future ECORD representatives.

> ESSAC Action Item 0710-09: ESSAC will consider in due time the following rotation of ECORD representatives in SAS panels:

SPC - R. Pedersen in March 08.
SSEP - J. Backman in November 07; F. Eynaud and J. Konnerup-Madsen in March 08.
EDP - R. Person in June 08.

5. Education and outreach

5.1 Summer Schools

Two ECORD Summer Schools have been organized in 2007. 10 scholarships of € 1000 each for the two Summer Schools were administered by ESSAC Office.

5.1.1 ECORD Urbino Summer School Past Global Change Reconstruction and Modelling Techniques (USSP), Urbino; July 2007

There have been 75 applicants to the summer school. The number of possible participants was raised from 50 to 55. 25 experts (40 % from the US) from different fields (Palaeontology, Palaeoceanography, Palaeoclimatology, and Geochemistry, including many past and future ODP/IODP participants) took part. Many instructors gave informal presentations on their latest, often unpublished, field and modelling results, providing students with an excellent opportunity to experience the cutting edge of scientific progress (including some vigorous dissenting responses by colleagues).

Sponsors

The organization of the USSP was made possible through sponsorship from 1) the Netherlands Darwin Centre for Geobiology, 2) the Institute for Marine and Atmospheric Sciences Utrecht (IMAU), 3) the Netherlands Research School for Sedimentary Geology (NSG), 4) the International Marine Past Global Change Study Group (IMAGES), 5) the European Consortium for Ocean Research Drilling (ECORD), 6) the Universities of Urbino and Utrecht, and 7) the Province of Pesaro and Urbino. Additional generous support allowed the USSP to offer 15 student fellowships (i.e., 5 ECORD, 2 IMAGES, 5 IODP UK, 3 USSP). However, a deficit of $ 6000 has accumulated.

The USSP consortium (Henk Brinkhuis & Simone Galeotti, directors USSP) is

seeking additional financial sponsorship, notably from non-European IODP sources, to reduce tuition levels, increase student enrolment, and maintain the low instructor to student ratio.

Concept

The USSP 2007 provided an integrated student-centered program comprised of: 1) integrated topical lectures by internationally recognized scientists, 2) student-centered data-rich exercises, investigations, and presentations on field data and modelling results, 3) a regional field excursion to classic Cretaceous and Cenozoic sections, and 4) intensive discussions on specific palaeoclimate topics in small student working groups facilitated by dedicated instructors.

Summary

State-of-art research; structured modules, which are exchangeable; excellent facilities; good outcrops; social components integrated into the schedule.

The USSP concept could be also exported to other countries within Europe, the US or Japan with the "postmark" USSP.

The sole critical comment on this excellent concept is the fact, that not all the themes of the Initial Science Plan (ISP) are covered.

5.1.2 ECORD Summer School on Palaeoceanography, Bremen, August 2007

The strategy of this Summer School was to keep the groups small - 24 PhD students and young post-docs from Germany (12), Europe (10) and Overseas (2) participated. However, the number of students could have been raised up to 30. The topics of this Summer School were broader than the USSP. This Summer School was very practical (e.g students worked on ice cores) and the visit of the virtual ship was an important component of the school. Additionally, a general overview about IODP and a proposal-writing module were proposed. The latter was conceived as a brainstorming session, which enabled the students to suggest drilling ideas and discuss them. All efforts of this ECORD Summer School were made to bring the students towards IODP. The school will cover successively all the Initial Science Plan (ISP) themes.

The ECORD Summer School was combined with the IODP-MI Topical Symposium "North Atlantic and Arctic Climate Variability" (see 6.3.1), which was held in Bremen at the same time. This helped to save money and to bring together the students with renowned scientists.

5.1.3 Summary

The two ECORD Summer Schools have different approaches, but are very successful in the implementation of the targeted aims, e.g. reaching students. Both ECORD Summer Schools have their own identity. They are complementary, one is theoretical, and the other one is more practical. Both ECORD Summer Schools reflect in a way the distribution of ECORD proposals and proposed themes within IODP, e.g. (10 Theme "Deep Biosphere and subseafloor ocean" (20%), 25 Theme "Environmental change, processes and effects" (49%), 16 Theme "Solid Earth cycles and geodynamics (31%)". In this context it is mentioned that hard rock material will be a component of the ECORD Summer Schools in the near future.

In general, for both ECORD Summer Schools it is important to attempt to use IODP material, which already exists and to promote ECORD/IODP. Student 2007 course evaluations assessed both ECORD Summer Schools as extremely positive.

It is suggested that both ECORD Summer Schools should exchange best practice and discuss (complementary) curriculum and the long-term impact. For the future it should be considered how to get Japanese and US students more involved.

The analysis of the strengths and weaknesses, the level of funding and the setting-up of a long-term strategy (e.g. EU funding, sustainability etc.) regarding both ECORD Summer Schools will be discussed by the ESSAC Education and Outreach Subcommittee.

ECORD Summer Schools scheduled for 2008 are:

1) Bremen Summer School 2008 "The Deep Subseafloor Biosphere".
2) Urbino Summer School in Palaeoclimatology (USSP) 2008.

5.2 ECORD Newsletter #9

Patricia Maruéjol presents the content of the ECORD newsletter #9 released early October 2007 (http://www.ecord.org/pub/newsletter9.pdf).

Regular topics are updated information from ECORD bodies (Council, ESO, EMA, ESSAC) and groups (outreach & education, ECORD-Net).

New topics are the highlights of proposals (Bengal Fan and GUCADRILL) and the scientific contributions from recent expeditions (e.g. Tahiti Sea-Level).

The future content will be discussed by the ESSAC Education and Outreach Subcommittee.

The ECORD Newsletter #10 will be released during the EGU 2008 (April, 13th - 18th). The relevant deadlines are:

1) Call for contributions: early February;
2) Authors' deadline: 3rd March 2008.

5.3 ECORD Information Database

Patricia Maruéjol gives an introduction concerning the new ECORD database (http://ecordbase.ecord.org/), which was created by the European Consortium of Ocean Research Drilling as part of the European Research Area Network (ECORD ERA-Net). The main purpose of this database is to pool and link all known existing information on drilling research by ECORD scientists. The availability and exchange of information is intended to promote ECORD participation in IODP.

By collecting information from all ECORD members, this database is documenting the participation of the ECORD scientists from the integrated drilling program according to:

- Proposals submitted by ECORD proponents (lead & co-proponents);
- Participation of ECORD scientists to IODP expeditions (co-chiefs & participants);
- Participation of ECORD scientists to workshops and summer schools.

It also archives and reflects an up-to-date picture of the ECORD participation in IODP, in order to inform scientists and managers involved in IODP or who would like to join it. Scientists are invited to fill in their personal

data and interests on their own. To do so, they received or will receive (on request) a login name and a password.

5.4 ECORD-net Geomicrobiology database

Federica Tamburini presents the current state of the Geomicrobiology database (http://geomicro.ecord.org/). The Geomicrobiology meta-database has been created under the Swiss auspices of workpackage 1 of the ECORD-Net in (T. Bingham-Mueller and F. Tamburini). The database contains information about ECORD scientists working in the innovative field of Geomicrobiology. In its present form, the database comprises a complete list of scientists (addresses, area of interests), their publications, and ODP and IODP sites investigated for Geomicrobiology. Links to existing databases, where the actual data are stored (e.g., JANUS database) are provided.

Part of the Geomicrobiology community is currently reluctant to fill in the database. Federica Tamburini asks the ESSAC Office for help to contact the community in order to persuade it about the importance of the database.

ESSAC delegates suggest to link the listed authors with the journals in which their papers have been published in order to have access to the abstracts.

> ESSAC Action Item 0710-10: The ESSAC Office will provide help in contacting scientists from the Geomicrobiology community to feed the ECORD Geomicrobiology database.

5.5 Report of the ESSAC Subcommittee Education and Outreach

Eve Arnold gives recommendations on the deadlines for the calls for the FY 09 ECORD Summer Schools and the ECORD scholarships. The suggested deadlines for both actions are:

ECORD summer schools:

- Submission of proposals: May 1st, 2008;
- Recommendations from the ESSAC Subcommittee: 15th May for ESSAC;
- Final selection: June 1st, 2008.

ECORD scholarships:

- Applications: February 15th, 2008;
- Recommendations from the ESSAC Subcommittee: March 15th, 2008;
- For the Final selection: March 30th, 2008.

Further suggestions concerning Education and Outreach activities are to try to reach more non-ECORD audiences such as the general public and teachers. This could be achieved by giving talks in teacher meetings such as the GIFT meeting. Other ways to attract teachers would be: 1) to provide free marine Geoscience lectures via Internet, to publish ECORD achievements in popular science magazines, and 3) to conceive small papers for special booklets, such as Brian McConnell and the Geological Survey of Ireland have done in order to promote the Geology of Ireland.

The overall problem with those suggestions is the lack of money and manpower. In the run-up of the 10th ESSAC Meeting in Stockholm, the sustainability of these suggestions will be checked.

NOTE:
IODP no longer commit money for Education and Outreach..

ESSAC Consensus 0710-05: ESSAC approves the following scheduling for the FY09 ECORD Summer Schools applications:
Deadline for submission of ECORD Summer School proposals (FY 09): May 1st 2008.
Electronic review of the ECORD Summer School proposals by the Education & Outreach ESSAC subcommittee before the ESSAC spring 08 meeting.
Recommendations on ECORD Summer School funding to be presented to the ECORD Council at its spring 08 meeting.

ESSAC Consensus 0710-06: ESSAC approves the following scheduling for the FY09 ECORD scholarship applications:
Deadline for submission of ECORD scholarship applications for FY 08: February 29th 2008.
Electronic review of the ECORD scholarship applications and nominations by the Education and Outreach ESSAC subcommittee in March 08. The final selection will be given on March 30th, 2008.

> ESSAC Action Item 0710-11: ESSAC will discuss extensively ECORD Summer School activities (member of summer schools to be funded, format etc.) at its spring meeting and make recommendations to the ECORD Council.

> ESSAC Action Item 0710-12: The ESSAC Office will issue a call for ECORD Summer School applications for FY09 in early 08.

> ESSAC Action Item 0710-13: The ESSAC Office will issue a call for ECORD scholarship applications for FY08 in December 07.

> ESSAC Action Item 0710-14: The ESSAC Office will contact ESF to explore the potential funding of travel expenses for students attending ECORD Summer Schools**.**

> ESSAC Action Item 0710-15: The ESSAC Office will contact ESF to explore potential partial funding for the organization of ECORD Summer Schools**.**

6. Workshops, communication and vision

6.1 Workshops

Three IODP-MI sponsored workshops were held in 2007. For those workshops approximately one-third of the applications have been from ECORD scientists and were selected by the convenors as being key attendees. IODP-MI was able to pay only for ECORD scientists up to the 7:7:3 quota, typically only ~6 people for each workshop. ESSAC Office was given € 5K to help support over-quota scientists and have been working closely with IODP-MI, ESF Magellan and National Offices to raise funds for remaining scientists.

6.1.1 Large Igneous Province Workshop

Gilbert Camoin gives an outlook of the organization and the major outcomes of that workshop. The Large Igneous Provinces (LIPs) workshop, hosted by IODP-MI and JOI, was held at the University of Ulster from July 22nd to July 25th in Coleraine, Northern Ireland, United Kingdom. Eighty scientists from 16 nations met to discuss strategies for advancing understanding of LIPs and associated environmental changes using a trio of new IODP platforms and related technologies that essentially expose the Earth beneath the sea for investigation.

LIPs are not listed as a priority of the Initial Science Plan Implementation Plan drafted by SASEC.

The four keynote presentations focused on 1) the most studied rift-related LIP—the conjugate Norway-East Greenland margins, 2) oceanic plateaus—Ontong Java Plateau and Kerguelen Plateau/Broken Ridge, 3) biotic responses and OAEs, and 4) capabilities of the three IODP platforms (riser, riserless, and mission-specific). Practical matters necessary for scientific drilling were the subjects of presentations on the IODP proposal process and drill site characterization.

The workshop concluded with participants defining multiple pathways to drill key LIPs ranging from individual projects to major mission initiatives, including full cooperation between the IODP and the International Continental Scientific Drilling Program (ICDP) for LIP investigations throughout Earth history, as well as joint academia-government-industry collaborations.

Note:

The full report will be available on the IODP website at the end of 2007 (http://www.iodp.org/lips/).

6.1.2 Addressing Geologic Hazards Through Ocean Drilling Workshop

From August 26th to 30th, 2007 the workshop "Addressing Geologic Hazards Through Ocean Drilling" was held in Portland, Oregon (USA). The workshop gathered about 80 scientists and engineers from the 5 continents and was sponsored by IODP-MI. Roger Urgeles gives a summary of the objectives and the major outcomes of that workshop. The main objectives of the workshop were: (a) to review the current state of community knowledge and activity in submarine geologic hazards in a wide variety of geologic settings, (b) to define outstanding research questions that can be addressed through scientific ocean drilling, (c) to establish scientific priorities, (d) to identify potential drilling targets, (e) to evaluate existing technologies and scientific approaches, and (f) to recommend the development of new instruments and/or new deployment strategies. It was also expected that the workshop will enhance international collaborations and stimulate teams of proponents to develop competitive IODP proposals addressing ocean geologic hazards.

The workshop allowed identifying several questions related to geohazards that can only be answered through drilling. Some general cross-disciplinary questions among the different types of geohazards tackled during the workshop were:

1. What are the sizes and frequency of hazardous events? What factors control them?
2. Can the tsunamigenic potential of past and future events be assessed?

3. Do precursory phenomena exist and be recognized?
4. Can we monitor seafloor movements, e.g., steady creep and aseismic slip?
5. What makes up weak layers that localize slip?
6. What triggers rapid seafloor deformation (preconditioning vs. triggers)

During the workshop, it was also recognized that geohazards present further opportunities for new technological developments within IODP. Among those existing but not currently implemented in the program are *in situ* geotechnical measurements including deployment of CPTU probes. New developments will be needed to address drilling of heterogeneous (chaotic) deposits and sands in overpressured zones, sampling tools that convey to geotechnical sample quality standards, and logging in shallow depths, including logging to the mud-line. Borehole observatories (and cabled arrays) are expected to include a series of tools including seismometers, strain meters, tiltmeters, extensometers, flow meters, pore fluid samplers, pressure sensors. Submarine geodesy was also considered as a tool to monitor seafloor deformation.

Impacts on present and future directions of the field and workshop follow ups were considered to be a revision of the IODP Initial Science Plan, which currently does not include geohazard issues, strengthening of international cooperation and developing materials for Outreach and Education. A workshop report is currently being produced, which might result in articles in EOS and Scientific Drilling.

NOTE:

More detail concerning this workshop can be found at: http://www.iodp.org/geohazards/.

6.1.3 Drilling to Decipher Long-term Sea-level Changes & Effects Workshop

Werner Piller attended the workshop Drilling to Decipher Long-term Sea-level Changes and Effects which was held in Salt Lake City, USA, from October 8th to October 10th, 2007 and summarized the major objectives and outcomes of that workshop.

Recent drilling advances, including the use of mission-specific platforms, together with new views on the roles of tectonics and sediment dynamics, are converging for a re-evaluation of the fundamental assumptions used in sea-level studies. To review past results in sea-level research and foster new proposals and collaborations, the Joint Oceanographic Institutions, IODP-Management International, International Continental Scientific Drilling Program, DOSECC, and the Chevron Corporation sponsored this workshop. 53 participants (18 non-US; 13 ECORD: 5 UK, 4 Ger, 2 A, 1 Dk, 1 Ca; 3 Jp, 2 Aus) attended the workshop.

There were 2 breakout groups. The first one dealt with eustatic mechanisms such as the relationship between recorded sea-level cyclicity and eustatic mechanisms through time, the hierarchy of global cyclicity (20 ky to 2.4 my and longer) using geochemical and other proxies and the timing and rates of eustatic change (Chronostratigraphy), the eustatic amplitudes (Palaeobathymetry; backstripping, forward modelling) and what they tell us about mechanisms. The second group attempted to decipher the stratigraphic record, investigating the stratigraphic response to eustasy through a

sedimentary process approach in icehouse, transitional and greenhouse worlds and tried to evaluate about what is already known and what is still needed to find out about the origins of the stratigraphic record as well as to assess the influence of sediment supply, tectonism (including active margins) via the siliciclastics and the carbonate and mixed systems.A white paper for the NSF will be published at the end of 2007.

NOTE:
More information regarding this workshop is available at: http://www.usssp-iodp.org/Science_Support/Workshops/sealevel.html

6.1.4 Magellan workshops

3 Magellan workshops were held in 2007:

- The Southern African Climates, Agulhas Warm Water Transports and Retroflection, and Interocean Exchanges (I. Hall, UK; R. Zahn, Es and R. Schneider, Ger), Kiel, September 19th to 21st 2007.
- Marine Impacts and Environmental Consequences (H. Dypvik, Nor), Svalbard, September 10th to 13th 2007.
- Exploring Escarpment Mud Mound Systems and Mud Volcanoes with new European strategies for sustainable mid-depth coring (S. Spezzaferri, It), Murten, May 10th to 13th 2007.

A report about mud mound systems was published in the ECORD Newsletter #9 (http://www.ecord.org/pub/newsletter9.pdf). Mud mounds can be found all along the European margins and in the Mediterranean Sea. What do they look like in outcropping sequences, can we recognize them in the rock record? What is the missing link? Judith McKenzie believes that this is an exciting, European-driven topic with a strong microbiological aspect.

Through the discussions among ESSAC delegates, it appears that the MeBo (german: Meeresboden = Ocean floor) would be suitable to drill into mud mounds. MeBo drills into soft sediments as well as into hard rock. It is planned to augment the operating drilling depth to 50 m. The potential of MeBo is tremendous and apparently oil companies are very interested to drill into carbonates. These holes cannot be sealed. Chris McLeod has had already experience with the BGS Rockdrill system. It is planned to present MeBo and the BGS Rockdrill system at the next ESSAC Meeting.

NOTE:
MeBo in Scientific Drilling #5
(http://www.rcom.marum.de/Binaries/Binary24831/Article_SD5_07.pdf)
Technical sheet of Rockdrill: http://www.marine.gov.uk/vibrocorer.htm

6.2 Upcoming Workshops

6.2.1 Magellan workshops:

A workshop funded with on Ocean Drilling for Seismic Hazard in European Geosystems will be held in Ulea (Sweden) on August 8th, 2008 (Convenor: M. Ask).

The deadline for the current call for the Magellan workshops is November 15th, 2007. 2 to 4 workshops could be funded in 2008 with a maximum of

20.000 € for each workshop. Favoured themes are carbon sequestration and the Atlantic Ocean.

The next Magellan meeting dealing with decisions regarding those workshops will be held on February 7th and 8th, 2008 in Hameln, Germany.

6.2.2 EuroFORUM 08

The EuroForum 2008 will be combined with the EGU. The announcement of EuroFORUM'08 is posted on the EGU site (http://www.cosis.net/members/meetings/skeleton/view.php?p_id=322).

The idea got a lot of support from different EGU divisions. The leading division will be the SSP (Stratigraphy, Sedimentology and Palaeontology) division. Other supporting divisions are the OS - Ocean Sciences, Biogeosciences, the CL - Climate: Past, Present and Future, the GMPV – Geochemistry, Mineralogy, Petrology & Volcanology and the TS – Tectonics and Structural Geology divisions.

Depending on the number of abstracts the duration of the meeting will be of 1 or 2 days. Additionally a town-hall meeting together with ICDP will take place.

The keynotes should cover the IODP Initial Science Plan themes and ICDP themes. Additionally more specific sessions related to IODP and ICDP topics can advertise their sessions with a link to EuroForum. Chris MacLeod suggests, that ESSAC might loose participants because of numerous other activities in the framework of the EGU. However, the last EuroForum, which was held in Cardiff in 2006, was not a success and another format needed to be defined. The ESSAC delegates consider that the new format of EuroForum 2008 should be tried first and then reviewed. The fact to interlink different sessions might give the programme visibility.

NOTE:
Union divisions can be found at:
http://www.copernicus.org/EGU/info/present_officers_.html

> ESSAC Action Item 0710-16: The ESSAC Office will distribute all relevant information regarding the organization of the IODP/ICDP EuroFORUM 08 at the EGU to the ESSAC delegates and alternates, as well as to National offices from ECORD countries.

6.3 Communication

6.3.1 Topical Symposium on North Atlantic and Arctic Climate Variability

Ruediger Stein reports on the Topical Symposium on North Atlantic and Arctic Climate Variability, which was held in Bremen in August 2007. This topic has been designed by SASEC during its first meeting (July 11th to 12th 2006) for the inaugural IODP Topical Symposium in 2007 and assigned Gerald Wefer as the SASEC liaison to this task.

The themes of IODP Expeditions 302, 303, and 306 were presented during the Topical Symposium. The key topics were:

1) Millennial -scale climate dynamics;

2) Milankovitch-scale climate variability;
3) Evolution of Northern Hemisphere Glaciation;
4) Extreme warm events.

At the end of the symposium, short presentations by the session chairs were given, summarizing highlights, open questions etc. In total, more than 120 persons participated in the symposium, most of them from ECORD countries, 20 from US and 5 from Japan. Furthermore, the symposium was scheduled contemporaneously to the Bremen ECORD Summer School.

NOTE:
The program of the Topical Symposium can be found at:
http://www.iodp.org/topical-symposium/

6.4 ECORD Distinguished Lecturer Programme
(See also 1.6).

6.4.1 FY 07-08
The programme for each Distinguished Lecturer was summarized as follows and would require a continuation until summer 2008:

Judith McKenzie
Judith McKenzie gave a conference at the University of Granada in Spain October 18th 2007. The host was M. Comas.
Recently discussions regarding lectures in Croatia, UK, Sweden and France are ongoing.

Benoit Ildefonse
Benoit Ildefonse started his lectures in the UK. The circular tour in the UK is:
Univ. of Bristol, UK, 08/11 (E. Hendy)
Univ. of Liverpool, UK, 09/11 (D. Prior)
Univ. of Durham, UK, 12/11 (R. Searle)
Cambridge Univ., UK, 13/11 (J. Maclennan)
There are ongoing discussions regarding lectures in Germany and Czech Republic.

Paul Wilson
Paul Wilson began his lectures in Canada and travelled afterwards to Switzerland. The lecture dates were:
McGill Univ., Montreal, Canada 26/09 (B. Wing)
Univ. of Alberta, Edmonton, Canada, 28/09 (J. Herrle)
Univ. of Geneva, Switzerland, 22/10 (D. Ariztequi)
Univ. of Fribourg, Switzerland, 23/10 (S. Spezzaferri)
ETH-Zürich, Switzerland, 24/10 (C. Vasconcelos)
There are ongoing discussions regarding lectures in Portugal and Finland.

The new ESSAC Office asks Chris MacLeod to inform the Office about the current spending related to the DLP.
Jochen Erbacher states that IODP Germany could sponsor a trip to Germany

for an invited lecturer.

ESSAC Consensus 0710-07: ESSAC approves the continuation of the FY 07 Distinguished Lecture Program until summer 08.

6.4.2 FY 09

For the FY09 lecture series a call for applications will be issued to request nominations of lecturers. Nominations from the delegates will be sent to the ESSAC Office.

> ESSAC Action Item 0710-17: The ESSAC Office will issue a call for applications regarding the FY 09 Distinguished Lecture Program in early 08. Nominations from the ESSAC delegates will be sent to the ESSAC Office and then reviewed by the Workshop Communication and Vision ESSAC subcommittee. The nomination of the three lecturers will be decided at the spring 08 ESSAC meeting based on the recommendations from the Workshop Communication and Vision ESSAC subcommittee.

6.5. IODP-MI « DRILLS » Lecturer Programme

In response to the Nancy Light's solicitation regarding Yoshi Tatsumi's tour in Europe for the IODP-MI Drills lecturer program, suggestions are given by ESSAC delegates.

> ESSAC Action Item 0710-18: In response to IODP-MI solicitation to advise on Yoshi Tatsumi's tour in Europe for the IODP-MI Drills lecturer program, ESSAC recommends the following additional locations: Zurich, Utrecht, Stockholm, Copenhagen; Barcelona or Madrid, various places in Germany and Iceland.

6.6 Report of the subcommittee Workshop, Communication and Vision

Ruediger Stein reports on the activities of the subcommittee including the following questions and recommendations:

1) What type of databases is needed and emerging from special needs of the ECORD scientists?
2) There is a clear need to establish links to already existing main databases (Geological and geophysical information database, Pangaea and the IODP database, Janus). ESSAC should consider not duplicating databases. This database should be the portal to other databases
3) Would it be possible to give specific research fields their own "forum" (Paleoceanography, Solid Earth etc.)?
4) How much efforts can be put to keep databases in function? Will it be possible to get some support in the future?
5) It would be very helpful to add further main proponents to the proponent lists (see also 2.5).
6) It is crucial to contact actively EU-countries that are not yet ECORD-members both via researchers and funding agencies at various meetings (EuroFORUM 2008 ; Edinburgh workshop in Spring 2008 (see also 3.1) and to establish partnerships with specific countries. Will it be possible

to get some support for those actions in the future?

7) Workshops are an excellent forum to formulate new drilling proposals.
8) It is important to include training on proposal-planning in Summer Schools (see also 5.1.2).
9) It is recommended to invite active IODP panel members (SPC, SSEP) to participate to the EuroFORUM 2008 or to other meetings in order to give information on proposal review process and evaluation, etc. Will it be possible to get some support for those actions in the future?

7. Expedition reports

7.1 Expedition 311 Cascadia Margin

A report about the Expedition 311 Cascadia Margin was given by Barbara Teichert who was invited by ESSAC.

8. Highlights on ECORD proposals

8.1 IODP Proposal #644 Gucadrill

The IODP Proposal #644 "Environmental significance of the Mediterranean outflow water and its global implications" was presented by the proponents Dorrik Stow and Javier Hernandez-Molina. Both were invited by ESSAC.

8.2 IODP Proposal #482

The IODP proposal #482 "Cenozoic East Antarctic Ice Sheet History from the Wilkes Land Sediments" was presented by Carlota Escutia who was invited by ESSAC.

9. Next meetings

The 10th ESSAC Meeting will be held in May 2008 in Stockholm and Helsinki.

> ESSAC Action Item 0710-19: ESSAC approves the proposition from Eve Arnold to hold its spring 08 meeting in Stockholm, Sweden and Helsinki, Finland. The 11th ESSAC Meeting will be held in October 2008 in Southern Germany.

> ESSAC Action Item 0710-20: ESSAC approves the proposition from Ruediger Stein and Jochen Erbacher to hold its fall 08 meeting in Southern Germany.

10. Any other Business

G. Camoin thanks all participants for their excellent contribution to the 9th ESSAC Meeting. Special thanks to the delegates who will rotate off after that meeting and who were always committed to IODP: Eve Arnold, Kathy Gillis, Marco Sacchi and Rolf Pedersen. Special thanks to Menchu Comas and IODP Spain for the excellent organisation of the ESSAC 9th meeting.

> ESSAC Action Item 0710-21: ESSAC thanks Eve Arnold, Kathy Gillis, Rolf Pedersen and Marco Sacchi for their insightful and dedicated work as ESSAC members.