



ECORD Council Spring Meeting #2

June 1st, 2016

DFG headquarters, Berlin, Germany

EXECUTIVE SUMMARY

1. Self introduction and logistical information (M. Friberg / G. Lüniger)

M. Friberg opened the meeting and the meeting participants started with the self-introduction. G. Lüniger presented the logistical information.

2. Approval of the agenda (M. Friberg)

There was a change for Agenda Item 7 - ECORD collaboration with industry. A. Moscariello was absent and could not present his ECORD-ILP report. The ECORD Council decided to go through his presentation and to ask questions to A. Moscariello if needed.

- **ACTION (N. Hallmann):** to circulate the consensus items to the Council members who did not attend the ECORD Council Spring Meeting #2 for approval

ECORD Council Consensus 16-06-01: The ECORD Council approves the agenda of the ECORD Council-ESSAC Meeting #3.

3. ECORD News (G. Camoin)

G. Camoin presented ECORD and IODP News. He started with the presentation of following changes in the ECORD structure:

- 1) M. Friberg (Sweden) is ECORD Council Chair until December 2016 and M. Diamant (France) is the ECORD Council Vice-Chair until June 30th, 2016.
- 2) M. Friberg, M. Diamant, M. Webb (UK), G. Lüniger (Germany) and A. Kjaær (Denmark) are members of the ECORD Executive Bureau.
- 3) G. Lericolais (France) is the new Chair of the ECORD Facility Board since January 1st, 2016 and D. Weis (Canada) is Vice-Chair. S. Gallagher (Australia) and F. Inagaki

(Japan) are the new ECORD Facility Board members.

4) J. Behrmann (Germany) is the new ESSAC Chair since January 1st, 2016. G. Früh-Green (Switzerland) is the outgoing Vice-Chair until December 31st, 2016.

5) L. Lourens (Netherlands) is MagellanPlus Chair since 2015 and replaced J. Erbacher (Germany).

G. Camoin continued to present the rotation scheme for the ECORD Council. He suggested that M. Webb should be the new Vice-Chair starting on July 1st, 2016 and become the new ECORD Council Chair on January 1st, 2017. M. Webb agrees in principle with this suggestion.

Six ECORD Council members were not present at the ECORD Council Spring Meeting #2. G. Camoin mentioned the necessity of having an alternate. M. Diamant will be replaced as an ECORD Council member by Eric Humler on July 1st, 2016. The new alternate of Luis Menezes Pinheiro (Portugal) is Rita Silva Carvalho.

ECORD budget: The FY16 member contributions are of \$17.5 M USD. There is a currency exchange loss of \$1-1.2 M USD every year. Potential additional contributions (cash, IKCs) are not considered. Spain, Poland and Germany did not yet sign the ECORD Annex K2 for FY2016. FY16 will end with a positive balance of about \$11 M USD. The predicted balance for the end of FY17 and FY18 is of \$17.6 M USD and \$100,000 USD, respectively.

DISCUSSION on the payment of member contributions:

Germany will soon sign the agreement until FY2018 (G. Lüniger). G. Camoin emphasized the new timeline for signing the Annex K2 and for paying the annual contribution to ECORD. The payment shall be made until June 30th of each year. M. Webb suggested sending the ECORD Annex K2 before the start of the new financial year, e.g. in September so that the payment could be transferred at the start of financial year in January. There is also the possibility to sign the Annex K2 for several years (M. Friberg). A few countries like Finland, Netherlands and Sweden signed for several years (G. Camoin).

- **ACTION (EMA):** to send the ECORD Annex K2 for FY2017 already in September 2016 to the ECORD Council members for signature

G. Camoin continued to present the ECORD 5-yrs MSP operational plan for 2014 to 2018.

19 MSP proposals are in the system with 12 proposals being at SEP. There is a great diversity in the science themes, oceans and drilling systems.

COMMENT by K. Verbruggen:

It would be helpful to include in the MSP proposals table how long the proposals are already in the system. Since the new IODP architecture was built, the average residence time of proposals is three years (G. Camoin).

G. Camoin reported on the Amphibious Drilling Proposals (ADPs). The guidelines for a joint IODP-ICDP evaluation of these proposals were accepted by all IODP Facility Boards and ICDP. The implementation plan has been submitted to all Facility Boards. The CIB accepted the document in March 2016 and the JRFB had a few comments in May 2016. The implementation plan will be presented at the next EFB meeting in Brussels. Finally, ICDP will receive it for final approval.

- **ACTION (G. Lericolais):** to send the ADP implementation document to the ECORD Council members after the ECORD Facility Board Meeting #4

G. Camoin continued to report on the last CIB and JRFB meetings that were held last March and May, respectively.

He showed the funding situation of the *Chikyu*. One decision at the CIB was not to implement the three following, very expensive expeditions until at least 2019: 1) Proposal #537 CRISP (\$160 M USD), 2) Proposal #698 IBM (\$260 M USD) and 3) Proposal #781 Hikurangi (\$200 M USD). Furthermore, no new riser proposals will be accepted, except CPPs. Expedition #365 NanTroSEIZE Shallow Megasplay LTBMS was implemented in March-April 2016 with four ECORD scientists and one ECORD co-chief on board. At the end of the current year Expedition #370 Nankai Microbial Temperature Limit will be implemented with one ECORD co-chief and eight instead of four ECORD scientists on board. The ECORD Council has to decide at its next meeting in fall 2016 whether or not ECORD will pay \$1 M USD in FY17 to the annual funding of the *Chikyu*.

G. Camoin presented the FY17-19 expedition schedule for the *JOIDES Resolution*. The JRFB decided to schedule a fifth expedition in FY17. In FY18 and FY19 five expeditions will be implemented each year. In FY19 the *JR* will go to the Caribbean and then to the Southern Atlantic to drill offshore South America. In FY20 there will be another Antarctic expedition before going north along the African shore. The *JR* will be in the Northern Atlantic and Mediterranean in FY20-21 where it will stay for a couple of years depending on the proposal pressure. G. Camoin continued to present the *JR* Facilities renewal process and the projected *JR* budget until FY21. The annual contribution from the international partners will raise from \$14.5 M USD to \$20.5 M USD in FY19-20 and then to \$21.5 M USD in FY21 if there are no CPPs in FY20-21. Consequently, ECORD could be asked to increase its annual contribution by \$2-3 M USD.

JR Shallow Coring: At the last JRFB meeting the National Academic Committee recommended in the Sea Change report to use the *JR* to collect APC cores up to 100 m below seafloor outside IODP, i.e. only for the US community through NSF proposals, during *JR* tied-up periods. The length of the coring expeditions could be four weeks per year including transit.

DISCUSSION on JR Shallow Coring:

There is a competition between the JR Shallow Coring and the MSP expeditions (G. Camoin). This process reflects a bypass because the US community can submit an NSF proposal outside IODP to use the shallow coring. It would cause problems for ESO because ECORD could implement these expeditions when the proposal would be submitted to IODP (G. Camoin). It is an efficient process if it is used only for four weeks per year and within transits (K. Verbruggen). If ECORD people want to be on board, they have to be in the NSF proposal led by an US scientist (G. Camoin). The operations should be open to the community (A. de Vernal). It is an efficient way of using the JR (M. Webb). A platform can be used for IODP work but also for non-IODP, e.g. national work (R. Gatliff). However, it should not intervene with the IODP work (M. Friberg). Unless there is no threat to IODP it can be considered as NSF business (J. Behrmann). ECORD is not doing exactly the same because there is no giant piston coring going down to 100 m (G. Camoin). There would not be a problem if they are doing single coring. However, if they are doing transects there would be an overlap with the agreement on how to handle long piston coring proposals in IODP that ECORD has with the NSF (G. Camoin). There is no threat as long as they do not change the use of the JR, the exchange of berths, etc. (M. Friberg).

4. MSP proposals to be discussed at the ECORD FB meeting #4 (G. Lericolais)

G. Lericolais started with the presentation of the EFB membership. He continued to report on the proposals at EFB and at SEP. Furthermore, he presented the 5-years schedule of MSP expeditions until FY18.

DISCUSSION on the implementation of MSP expeditions:

M. Webb asked whether there was any merit of taking both rock drills on future MSPs given the experience with the Atlantis Massif expedition. Following a brief discussion, it was agreed that the benefits of taking one or two rock drills on future MSPs will be discussed at the Review Meeting in October 2016, following which G. Lericolais will report back to Council on this (G. Lericolais).

Concerning the Antarctic MSP expedition, M. Webb noted that the projected costs for 2017/18 season had gone from those of a low cost MSP to a medium/high cost MSP due to the ca.\$5m charge for chartering the RV Palmer now being included in the MSPs costs. He also noted that the RV Palmer had not been due to be in the right region of Antarctica for ECORD in 17/18 and so questioned whether ECORD Council should consider delaying the delivery of the Antarctic MSP until a time when the RV Palmer is tasked by the US National Science Foundation to that region – thereby allowing ECORD the opportunity to avoid the high costs associated with re-positioning the ship in 2017/18 and significantly reduce the ca.\$5m charge for chartering. Following discussion, it was agreed that Council might consider adjusting the programming schedule for this MSP and that ESO would do an analysis of the costs of delivering this MSP in future years and report back to ECORD Council so that an informed decision can be made on the timing of the MSP. It should be considered that the Koreans are operating in the Ross and Amundsen Seas (L. de Santis).

Furthermore, it should be considered that the IPCC is preparing a report on Antarctica and they ask the scientific community for Antarctic Research to contribute to the work on Antarctica until 2020 (L. de Santis).

The idea of the AWI is to keep the old Polarstern as an icebreaker and ECORD could have access to the Polarstern, which could also be a potential IKC (G. Lericolais).

At the next EFB meeting in June 2016 there will be a report on the Atlantis Massif and Chicxulub Impact Crater expeditions (G. Camoin).

- **ACTION (G. Camoin):** to ask Joanna Morgan to present Expedition 364 'Chicxulub Impact Crater' at the ECORD Council-ESSAC Meeting #4 in Bremen in October 2016

ECORD Council Consensus 16-06-02: The ECORD Council agrees to explore the possibility of adopting the scheduling of the Antarctic MSP expedition (Proposal #813) to the scheduling of the *R/V Palmer* with the aim to reduce costs.

- **ACTION (ESO):** to do a cost analysis together with the ECORD Facility Board for different scheduling options of the Antarctic MSP expedition (Proposal #813) in FY17 and FY18 and to report to the ECORD Council within the next two months

5. Update on next MSP expeditions (D. McInroy)

D. McInroy presented an update about the two recent expeditions Atlantis Massif and Chicxulub Impact Crater.

- **ACTION (G. Camoin):** to ask G. Früh-Green to present Expedition 357 'Atlantis Massif' at the ECORD Council-ESSAC Meeting #4 in Bremen in October 2016

D. McInroy continued reporting on the next MSP expeditions 'Antarctic Cenozoic Paleoenvironment' (Proposal 813) and 'Central Arctic Paleoceanography' (Proposal 708). So far, the offshore operation for P813 'Antarctic Cenozoic Paleoenvironment' is planned for December 2017 to February 2018. The maximum costs for this expedition will be of \$5.5 M USD if the ship is not provided as an IKC. However, there is the possibility to schedule other projects around this MSP expedition and therefore to lower the costs. D. McInroy presented the recent proposal history of P708 'Central Arctic Paleoceanography (ACEX2)'. In April 2016 the proponents submitted a new addendum. D. McInroy summarized possible drilling options and their cost estimates. The offshore operation is planned for late summer 2018.

DISCUSSION on P708 'ACEX2':

Rapidly changing ice conditions during the operation could be a risk (M. Friberg). In case of any difficulties there is the possibility to require rescue (D. McInroy). Furthermore, there is never more pipe deployed than the time needed to get the pipe out based on an ice forecast. The ice management will take care of these issues (D. McInroy). It would be great to have a heavier icebreaker as support (D. McInroy). ECORD could take the opportunity to engage with a potential Russian membership in ECORD (K. Verbruggen).

There is an agreement between the Arctic states coming out through the Arctic Council on having no transit and support fees for research in the Arctic (M. Friberg). This binding agreement is not yet signed.

A call for the use of the icebreaker Oden in 2018 was recently opened and the deadline for application was one month ago (M. Friberg). However, the Swedish drilling community did not apply for using the Oden in 2018. That means that the Oden cannot be promised. The Oden will be in the Arctic in 2018 but for a project together with the US (M. Friberg).

M. Webb suggested that a risk-benefit-analysis is needed (i.e. a concise recommendation on how to manage the financial risk of the ACEX2 expedition) as ECORD Council needs to decide on the financial aspects.

- **ACTION (EFB):** to write after the ECORD Facility Board Meeting #4 a concise recommendation for the preferred option of the drilling plan for the MSP expedition 'Central Arctic Paleoceanography (ACEX2)' (Proposal #708) taking all possible (financial and scientific) risks into account
- **ACTION (EMA):** to send soon after the ECORD Facility Board Meeting #4 the report of the ECORD Facility Board on one single option of the drilling plan for the MSP expedition 'Central Arctic Paleoceanography (ACEX2)' (Proposal #708) to the ECORD Council members for approval

6. ECORD post 2018 renewal

6.1 - Proposed renewal procedures (G. Camoin)

G. Camoin presented the ECORD post FY18 renewal procedures. Most of the ECORD member countries are committed until FY18. An executive working group worked on the timing and procedures of ECORD's renewal. An ECORD Evaluation Committee (EEC) should be appointed by January 2017. Until September 2016 ESSAC should nominate the EEC members and the ECORD Council will decide on the final composition of the EEC in October 2016. G. Camoin continued to present the mandate and the composition of the EEC. A 2-3 days general meeting will be held in May 2017 and a final report will be sent to EMA in June 2017. In 2018 the current ECORD MoU has to be updated and an agreement from the funding agencies is needed. Furthermore, ECORD has to work on the MoUs with its partners in 2018. The renewal process should be finished in late summer 2018 to start the new phase of the programme on January 1st, 2019.

6.2 - Discussion and decisions (Council Members)

The last ECORD review was very long. This time the process has to be a very focused activity (M. Webb). It would have been better to have ECORD's evaluation after the Arctic and Antarctic expeditions (M. Friberg), however, delaying the renewal process is not possible because the time would be too short (G. Camoin). The evaluation of the Chicxulub expedition will be in April/May 2017 and should be in place for the general meeting of the EEC members and ECORD in May 2017 (G. Camoin). The renewal process is started very early (M. Friberg). Starting the process later would allow to have more time for measuring the success of the programme (K. Verbruggen). The final draft of the new ECORD MoU was done in October 2012. This was more than a year before the new programme was started (G. Camoin). 2018 is a perfect timing for an update of the MoU and to get the agreement of the funding agencies (G. Camoin).

It would be easier for the EEC members to get assistance with the logistics, the writing and formatting of the final report (K. Verbruggen). EMA could take this in charge (G. Camoin). In the UK there were similar review meetings recently and they also received support from a secretary (M. Webb).

The review in 2017 will focus not only on the MSP expeditions, but also on the JR programme where European scientists are involved (J. Behrmann). The JR will implement expeditions in 2017, 2018 and 2019 and in addition MSP expeditions will be implemented. This can be seen as a strong package and therefore, issues regarding ECORD's renewal can be addressed anytime in the programme (J. Behrmann). Achievements of ECORD within IODP and the impact of MSP expeditions will be reviewed (G. Camoin). Summaries of each IODP expeditions written by the co-Chief scientists and some external experts could be an annex of the report to the funding agencies (G. Camoin; see IODP Forum Consensus 15-03).

What is the purpose of the internal review (M. Friberg)? Is it thought to be for the funding agencies or for ECORD's own use (M. Friberg)? It should be for both, the funding agencies and ECORD (H. Pikkarainen). Each national agency makes its own review, but they will also consider ECORD's internal review (M. Diament). Last time the UK did not use the review, but this time it will be an important document for the UK review (M. Webb). One possible use of this review is to be able to find some funds elsewhere, e.g. from the European Commission (M. Diament).

It is important to have external views, i.e. the EEC members should not currently be involved in IODP activities (G. Camoin). The final nomination of the EEC members will be made in October 2016 and an invitation will be immediately send to these people (G. Camoin). Their general meeting is in May 2017, i.e. they will be asked seven months before. In January 2017 the EEC members will receive reports from the different ECORD entities and further summaries/material (G. Camoin). A list of people, a kind of priority list, has to be made in case that some of the nominated people do not want to become an EEC member (H. Pikkarainen).

- **ACTION (ESSAC):** to nominate ECORD Evaluation Committee members prior to the ECORD Council-ESSAC Meeting #4 in October in Bremen
- **ACTION (ECORD Council):** to decide on the final nomination of ECORD Evaluation Committee members at the ECORD Council-ESSAC Meeting #4 in October in Bremen
- **ACTION (G. Camoin):** to allocate funds for the EEC members at the ECORD Council-ESSAC Meeting #4 in October in Bremen

7. ECORD collaboration with industry

7.1 - ECORD-ILP report (A. Moscariello)

R. Gatliff presented the ECORD-ILP presentation by A. Moscariello.

7.2 - MSP CPPs linked to industry (All)

IODP platforms have links with industry. The JR and the Chikyu have worked for industry but outside IODP (G. Camoin). All CPPs that were implemented so far are linked to national entities and are not industrial (G. Camoin). So far, no CPP was implemented by any IODP platform within IODP. The MSP CPP 'Glacistore' will be soon forwarded to the EFB and this expedition would be the first with a link to industry (G. Camoin). The 'Glacistore' proposal should not have been in the CPP category, but it should have been seen as a science proposal and proved on a science basis (R. Gatliff). A general statement on how to deal with MSP CPPs that are linked to industry cannot be made because it will be different from case to case (M. Friberg).

7.4 - Discussion and decisions (Council Members)

R. Gatliff suggests a more ad-hoc approach regarding the collaboration of ECORD with industry. If ECORD receives a project where industry could be prepared or if a specific technological problem occurs, a meeting can be organized related to this issue (R. Gatliff). A specific proposal is needed to take any action. Sources of new funding like from industry have to be found for the implementation of projects (R. Gatliff). The focus should be on science driven proposals and if the proposal is good ECORD could collaborate with industry (R. Gatliff). The collaboration with industry should be project-specific (K. Verbruggen). ECORD should be present at conferences, like the APG and the 3P Arctic, where industry representatives are present (R. Gatliff). However, it is recommended to rule out oil industry contribution for the Arctic expedition (R. Gatliff).

Several companies were attending the MagellanPlus workshop concerning the South Atlantic, but due to the business situation of the oil industry there was no outcome (G. Camoin). It is important not to focus only on oil and gas industry (K. Verbruggen). There are other types of industry that ECORD has not yet investigated, like the development of a new technology (M. Diamant). There should also be the vision of what ECORD has

(indirectly) brought to the society and economy (M. Diament). For example, the new Arctic drilling ships are designed based on the ACEX1 experience (M. Friberg). The ECORD Council recommended A. Moscariello to try to broaden the industrial representation at the ILP, e.g. to include people working on water resources (G. Camoin). The PIs should explore possibilities of collaboration with industry when they submit a proposal (L. de Santis). This is the idea behind inviting industry representatives at the MagellanPlus workshops where they can exchange data and experience (G. Camoin). Collaboration with industry should be an exchange of data and experience rather than direct funding (G. Camoin).

ECORD Council Consensus 16-06-03: The ECORD Council agrees to have an ad-hoc ILP Board and to decide on a case-by-case basis on ECORD's collaboration with industry. The ECORD Council recommends that, if needed, ECORD is present at industry conferences.

- **ACTION (A. Moscariello):** to present an ILP report at the ECORD Council-ESSAC Meeting #4 in October in Bremen
- **ACTION (ECORD Council):** to discuss the ILP budget at the ECORD Council-ESSAC Meeting #4 in October in Bremen

8. EMA and ESO renewals

8.1 - EMA report: state of the art and perspectives (G. Camoin)

G. Camoin presented the EMA report where he summarized the state-of-the-art, achievements and future perspectives of EMA.

Comment on ERIC:

The ERIC working group will be reactivated until October 2016 (G. Camoin). Not all countries are ready to get an ERIC (G. Lericolais).

Comment by L. de Santis:

L. de Santis expressed her sincere thanks to EMA and the MagellanPlus programme for their support for the Antarctic Drilling workshop that was very successful and where the European component was crucially represented as PIs, co-PIs of IODP proposals (some of those proposals in May were at the Facility Board and are now scheduled for 2018, 2019 and 2020), students and early-career scientists.

8.2 - ESO report: state of the art and perspectives (D. McInroy)

D. McInroy presented the ESO report where he summarized the state-of-the-art and achievements of ESO.

DISCUSSION on ESO report:

It would be good to have the possibility of getting access to geotechnical drilling vessels during their transit (G. Lericolais). This could be used if proponents are interested in a project during the transit (G. Lericolais). This system already exists in IODP and is called APL (G. Camoin). It is difficult because if a vessel is contracted for an MSP expedition, the duration of the expedition has to be estimated and the day rate will be charged (D. McInroy). This issue can be discussed with the vessel provider (D. McInroy).

How is the access of ECORD partners to ESO equipment when it is not used for ECORD (M. Friberg)? The equipment belongs to the institutes but there is an agreement that equipment bought with ESO money can be made available to other ECORD partners and under non-IODP projects (D. McInroy). The timing of the use will be negotiated with ESO (D. McInroy). The issue is that people do not know that they can use the ESO equipment (M. Friberg).

Who owns the IPR (Intellectual Property Rights) and is it published online (M. Friberg)? The IPR is held at the BGS and the Marum and at the moment it is not publically available (D. McInroy). The IPR remains with the BGS as the developer (D. McInroy). Some of the developments of the rock drills, like the logging tools, were developed with a commercial company in Germany who probably evolved property rights on the tools (D. McInroy).

8.3 - ECORD Working Group recommendations (M. Webb)

M. Webb reminded Council that an Executive Working Group, composed of M. Diament, G. Lüniger and M. Webb, had been convened to consider the issues associated with the renewal of ESO and EMA. The Executive Working Group recommends:

- 1) Extension of the EMA and ESO's terms to ensure effective completion of Phase 1 (2014-2018) of the MSP operational plan and re-negotiation of Phase 2
- 2) EMA and ESO reviews to be included in the proposed independent evaluation of ECORD in 2017
- 3) ECORD Council's decision on the potential re-tendering procedure for EMA and ESO to be informed by the outcomes of the independent evaluation of ECORD in 2017

8.4 - Discussion and decisions (Council Members)

ECORD Council Consensus 16-06-04: The ECORD Council acknowledges the strong support that both EMA and ESO are currently providing to ECORD and its science community.

ECORD Council Consensus 16-06-05: Based on the recommendations of the Working Group, the ECORD Council has decided that:

- EMA and ESO's terms will both be extended until the end of 2018 and mid/late 2019*, respectively.
- EMA and ESO will be evaluated as part of the ECORD independent review in 2017.
- The decision by the ECORD Council in 2017 on whether to re-tender EMA and/or ESO will be informed by the review outcomes.
- If the ECORD Council decides to re-tender ESO, a phased approach will be required in order that EMA can support the ECORD Council in the ESO re-tendering process

* Exact time dependent on the timing of the ACEX2 on-shore party.

Conflict of interest:

G. Camoin, R. Gatliff, N. Hallmann and D. McInroy have a conflict of interest with agenda items 8.3 and 8.4 and left the meeting room.

ECORD Council Consensus 16-06-06: The Executive Summary of the ECORD Council Spring Meeting #2 was approved by email on 20th June 2016.

ROSTER

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