
First Scientific Committee Meeting

Monday 8 October 2007, 10:00-16:30

Hôtel Maison Rouge
4, rue des Francs-Bourgeois
6700 Strasbourg
Telephone : +33 3 88 32 08 60

-Minutes -

Present: Gilbert Camoin - Gert De Lange - Trond Dokken - Eystein Jansen - Andrew Wheeler - Didier Hauglustaine - Anne-Sophie Gablin

Apologies for absence: Dick Kroon - Rolf-Birger Pedersen

1. Welcome, Introduction, presentation of the participants, and adoption of the agenda (ESF: 5 min)

Didier Hauglustaine opens the meeting, welcomes and thanks all the participants for their attendance.

Introduction and presentation of each participant:

Didier Hauglustaine is EUROCORES Programme Coordinator for EuroMARC Programme

Anne-Sophie Gablin is EUROCORES Administrator for EuroMARC Programme

Trond Martin Dokken is the Project Leader of RETRO project

Eystein Jansen is the Project Leader of AMOCINT project

Andrew Wheeler is the Project Leader of CARBONATE project

Gert De lange is the Project Leader of MOCCHA project

Gilbert Camoin is presented by Didier Hauglustaine as the Project leader of CHECREEF project; he will join the meeting shortly.

Apologies from Rolf-Birger Pedersen & Dick Kroon who could not attend the meeting are presented to the participants.

Action 1: Didier H. asks the Project Leaders to have a deputy chosen among the PIs or from the PL's institution to represent them in case they cannot attend a meeting in the future, with the possibility to send us a name in the coming weeks. This would allow all CRPs to be represented.

Presentation of the agenda, the agenda was adopted without changes.

2. Mandate of the Scientific Committee (SC) and SC Chair (ESF: 10 min)

The SC committee is composed of the PLs from funded CRPs and ESF representatives. The networking is one of the responsibilities of the Scientific Committee (SC): the SC will receive the proposals of Networking

Activities sent to the EuroMARC Office by the applicants & will be asked to give its opinion, comments on the overall programme, the SC is also responsible for reporting to the Management Committee (MC).

A chair must be elected, it is decided to wait until presentations are done & Gilbert Camoin has arrived.

Back to this item in the afternoon 15:20

Andrew Wheeler is elected as Chair of the SC until September 2008, so as to say on a rotation basis. Gilbert Camoin is elected Vice-Chair and is asked to particularly increase the relationships between the EuroMARC community and ECORD.

3. Structure & Objectives of the EUROCORES - EuroMARC Programme (ESF: 15 min)

Presentation of the European Science Foundation to the Project Leaders by Didier.

See the detailed presentation in Annex (Slides 1-10)

Two Research Networking Programmes namely MAGELLAN and MedCLIVAR and other EUROCORES programmes have common interests with EuroMARC: more info on this will be given later in the meeting.

The EUROCORES are driven by scientists, there should be an open and transparent process.

Arrival of Gilbert Camoin (10.30)

The system of funding will change in 2009, the Funding Agencies will then be asked to pay 6.6keuros per funded Principal Investigator (PI). This issue will be raised at the management committee meeting on the 12th November.

Presentation of the Management Committee (MC), Review Panel (RP) and Scientific Committee (SC) roles.

See the detailed presentation in Annex (Slide 11)

Didier H. proposed the idea of having a junior scientists body, which would be a committee to have also an exchange and networking at the level of junior researchers. There would for instance be a possibility to organise prize for best posters at the annual conference, discuss issues related to employments, suggestions for networking activities coming from the direct actors, etc ... There would not be an extra meeting for this body but they would take advantage of the different workshops/conferences to meet.

The coordination of a EUROCORES is done by both a coordinator and an administrator from the ESF Office in Strasbourg. *See the detailed presentation in Annex (Slides 12 & 13)*

As a general comment, the communication to the Principal Investigators (PIs) should go through the Project Leaders (PLs).

General presentation of the EuroMARC Programme.

See the detailed presentation in Annex (Slides 14 - 16)

The EuroMARC Programme is funded by 9 Funding Agencies (FAs) from 9 countries (Belgium, France, Germany, Ireland, the Netherlands, Norway, Portugal, Switzerland and the United Kingdom).

The projects duration is usually 36 months except for GLOW recommended to be 24 months by the RP. However NERC funding remained 36 months.

Gert De Lange mentioned that it is also the case for MOCCHA: half the project is financed for 4 years and half is for 3 years.

Eystein Jansen added that he could also use the funds for 4 years, their research council being very flexible. Andrew Wheeler informed the SC that his part of the project has started on 1st July whereas Belgian participants could not start already.

Gert De Lange is concerned about the problems they encounter to find good PhDs and find the right ship for the cruise: negotiations for this take time, it would be, according to him, best to postpone a bit the start date.

Action 2: Didier H. Raise these issues at the management committee for a possible extension of the project duration for interested partners and agencies.

4. **Overview of EuroMARC's Collaborative Research Projects (CRP) (CRP PLs: 105 min)**

- Presentation of the 7 funded CRPs: **(7x15 min)**
 - o scope, objectives, work-plan, teaming arrangements, funding status/problems, envisaged inter-CRP networking activities, etc.

➤ **Presentation from Gert De Lange: MOCCHA project**

Initial studies: a near-coastal and a deep Mediterranean anoxic basin site provide a continuous marine paleo-climate record that permits such high-resolution and well dated climate reconstructions for at least the last few kyrs.

General AIM: To extend pilot project to assess if these sites are suitable for high-resolution studies of paleoclimate > 35 kyr, i.e. for future IODP drilling.

Objectives:

1. to obtain key cores from the only two sites in the Mediterranean known thusfar to contain high-frequency paleoclimate signals in sediments of sufficiently high accumulation rates to permit high-resolution multidisciplinary studies
2. to calibrate and validate a suite of environmental proxies (SST, BT, (e.g. using proxies such as Mg/Ca and ¹³C-¹⁸O in planktic and benthic foraminifers, organic paleo-T proxies such as U^{K37}, and TEX86), to Redox conditions, Primary productivity, and salinity/aridity (²H-counpound specific organic biomarker).
3. to apply these calibrated proxies to the long-cores sediments
4. In all cases a rigorous time-frame will be constructed combining tephra chronology, ²¹⁰Pb, ¹⁴C, ¹⁸O, laminae counting, and modeling of the high-frequency signals to astronomical parameters
5. the high resolution datasets will be processed using innovative mathematical tools (collaboration C. Taricco)
6. calibration of 11-year cycles to in-situ observations from an 11-year sediment trap time series at anoxic basin site
7. firm assessment of the suitability of these sites for high-resolution paleoclimate studies over at least a full climate cycle (> 100 kyrs), so as to prepare an IODP drilling proposal

Cruises: Pelagia in October 2008; end 2009-2010 MeBo drilling depending on ship availability. Marion Dufresne if not possible. A. Wheeler inform about the possibility of an Irish RV potentially available in 2009. He will provide the information to G. De Lange.

The project will start in January.

Funding issues: Swiss funding does not cover contribution to shiptime. Problem is that MeBo is more expensive than 200 k€. The budget is still in negotiation with Bremen.

➤ **Presentation from Andrew Wheeler: CARBONATE project**

Scope: Cold-water coral reefs are high biodiversity ecosystems subject to conservation efforts. Understanding reef / mound development / initiation processes is crucial to ongoing management / Conservation. Due to high accumulation rates they offer high resolution records of environmental change at intermediate (water mass boundary) water depths
They are an unquantified sink for carbon(ate)

Objectives:

1. To recover complete mound sequences through a range of carbonate mounds in different settings
2. To elucidate the timing and factors controlling carbonate mound initiation
3. To generate a robust carbonate mound development model for different environmental settings
4. To estimate the influence of climate change in carbonate mound development
5. To assess the role of cold-water coral carbonate mounds in the global carbon cycle

To derive palaeoenvironmental signals from carbonate mound sequences

Cruises: RV Pelagia in October 2007; August 2008 RV Celtic Explorer (additional funding requested)

Funding issues: Catholic University of Leuven (Rudy Swennen), 4 years PhD or 3 year post-doc still to be decided. MeBo and Pelagia costs are fine. Ireland partner has some budget issues since 457 k were cut down to 250 k. Shortfall in analysis budget and labour costs possibly covered by additional projects. Application for RV Celtic exp. Shiptime submitted.

Possible networking: with CHECREEF on coral records; AMOCINT/RETRO on ocean circulation changes; geomicrobiology TBD.

➤ **Presentation from Trond Dokken: RETRO project**

Primary objective: To construct centennially resolved time series of the tropical Atlantic surface, thermocline, intermediate and deep waters through key transitions of the Meridional Overturning Circulation (MOC) and climate.

Specific objectives:

1. Reconstruct tropical ocean responses during millennial scale changes associated with Dansgaard/Oeschger (D/O) events between 60,000 to 30,000 years before present (BP)
2. Investigate large changes in tropical ocean parameters during the transition from the last glacial maximum (19-21kyr BP) to the present interglacial (11,500 yrs. BP)
3. Detect the amplitude of the typical tropical ocean variability for the recent interglacial period (Holocene) between 11,500 yrs BP and present.

KO meeting of AMOCINT-RETRO took place in June 2007 in Paris, due to a need of planning for cruise details.

Cruises: G.O. Stars Dec 2007; MarionD May/June 2008;

Funding issues: cuts for CNRS on consumables.

➤ **Presentation from Eystein Jansen: AMOCINT project**

Main objectives:

1. Survey and core sites for sampling of high sedimentation rate interglacial sections available to the Calypso coring system of the RV Marion Dufresne.

2. Conduct detailed site surveys for targeted IODP drilling to recover thick marine sediment sections over past interglacials at key locations for monitoring Atlantic Meridional Overturning Circulation (AMOC) variability.
3. Provide a feasibility study based on already available Calypso Cores and new cores taken within AMOCINT: Produce time series of North Atlantic circulation parameters with century scale resolution for the last interglacial and previous interglacials over the past 800.000 years and provide detailed comparisons with ice core records from Antarctica and Greenland.

Step-wise approach:

1. Survey key sites where high-quality Holocene records exist for Calypso-coring and IODP drilling targets to recover sediments from previous interglacials.
2. Core targets that are within reach of the Calypso system.
3. Provide century scale records of the past interglacial based on Calypso cored sediments.
4. Produce a proposal for IODP drilling to recover sediments that are beyond reach for the Calypso system.

Funding issues: CNRS cuts in consumables; German partner important cut. To be clarified.

➤ **Presentation from Gilbert Camoin: CHECREEF project**

Scientific objectives:

1. To reconstruct the last deglacial sea-level rise :
 - establish minimum sea-level during the LGM;
 - assess the validity, the timing and amplitude of meltwater pulses ;
 - test predictions based on different ice and rheological models.
2. To define SST and SSS variations :
 - reconstruct interannual-decadal -interdecadal climate variability and seasonality;
 - identify major changes in tropical sea surface salinity.
3. To analyze the reef responses to sea-level and climatic/environmental changes :
 - identify environmental changes (e.g. nutrient concentrations, paleoproductivity, pH, freshwater and terrigenous fluxes);
 - reconstruct the evolution of the geometry, biological composition and growth mode of reef frameworks.

Expected outcome:

1. Tahiti IODP cores + Tahiti slopes + Great Barrier Reef slopes :
 - To reconstruct the last deglacial sea-level rise over the last 20,000 yrs.
 - To define SST and SSS variations during the Last Deglaciation.
 - To analyze the reef responses to sea-level and climatic/environmental changes.
2. Great Barrier Reef survey :
 - to select suitable targets (e.g. drowned reefs) for an IODP drilling expedition corresponding to the part 2 of the IODP drilling proposal #519.

Funding issues: 2 German PIs, Thomas Felis and Christian Dullo, have had important cuts; Bremen and GEOMAR. Additional funding requested.

➤ **Presentation from Didier H. about H2DEEP (Pedersen):**

No new input provided for this meeting.

Based on the proposal: are planning 3 cruises (2007 with Geostar, main campaign in summer 2008, Hakon Mosby). Prepare an IODP proposal.

➤ **Presentation from Didier H. about GLOW (Kroon):**

No new input provided for this meeting.

Based on the proposal: IODP proposal in 2006, want to go off-shore to Tanzania spring 2008 with Pelagia.

Action 3: Planning to check about the cruise because Pelagia is taken officially according to G. De Lange.

Dick Kroon did apparently not get any official answer whether he will get shiptime, but Didier H. has received an email from R. Schorno. The Dutch contribution is 125.000 euro with the requirement for the other partners to finance another 150.000 euros (or 50.000 euro each – Germany, Ireland, UK). This issue will be discussed at the Management Committee meeting.

Action 4: Raise this discussion on GLOW shiptime at the management committee meeting.

5. Discussion and Planning of the Networking activities

(All–90 min)

- Within a CRP - Networking activities are to be covered by the National Funding Agencies (inter-CRP meetings, workshops, travel grants, fellowships, etc.)
- Programme level: Networking activities to be covered by ESF (Budget, Cross-CRP meetings, SC meetings, workshops, conferences, short-term visits, etc.)
 - o Current suggestions: EGU2008 participation, ...
 - o Conference 2008 : scope and programme
 - o Involvement of any other national/international networks (e.g. ECORD)

Presentation of general networking activities by Didier.

Presentation of Magellan. (*See the detailed presentation in Annex (Slide 17)*)

Possibility to have joint activities with Magellan. (One call is coming up).

Presentation of MedCLIVAR (*See the detailed presentation in Annex (Slide 18)*).

Other EUROCORES in LESC are quite closely related to EuroMARC. There could be common workshops with EuroCLIMATE, also with EuroDEEP (on corals), EuroDIVERSITY. EUROMARGINS is finishing but Topo-Europe will be a kind of a follow-up on some aspects. EuroMinSci is a bit too far compared to the others.

See the detailed presentation in Annex (Slides 19 -24)

Networking Activities Guidelines:

Presentation of different types of networking activities.

See the detailed presentation in Annex (Slides 25 – 27)

Summer schools: G. Camoin, ESAAC is funding summer school, can it be co-funded? YES!

Joint activities with ECORD & ESAAC are encouraged. There are several summer schools organised a year, proposal to have at least 1 a year co funded.

Specific status of Associated Partners (APs): for the time being, APs are entitled to be funded to participate to networking activities but are not entitled to be proposers.

Action 5. All. Important for the EuroMARC Office to have a list of all project members. Names of collaborators to the project, PhD students, Post-Docs working on the Individual Projects should be send to the EuroMARC Office regularly.

All proposals will be sent to the SC for review, important role to play concerning the budget as well.

Question from Trond Martin Dokken: some students, teachers, observers are taken on board on the ship. Their travel costs are very expenses. Is there any possibility that their travel costs are funded by the programme? Didier H. encourages such proposals to be made, especially when 2 CRPs are involved.

Put Junior together: can they have some students sent to another CRP to learn the methods, techniques.
YES, this is also encouraged!

The first EuroMARC annual conference will be held in La Colle sur Loup, France, 14-18 September 2008.
(See the detailed presentation in Annex (Slides 28 & 29))

The idea is that 1 PI & 1 Project member for each Individual Project will be invited and funded to attend.

Action 6: SC. Keynote speakers are also needed, the EuroMARC Office will require the help of SC at a later stage for name of potentials speakers to be invited.

EGU 2008:

A session has been agreed already under the framework of EuroFORUM 2008.

EuroFORUM 2008 - European Collaboration for Implementation of Marine Research on Cores (EuroMARC)

Convener: Gilbert Camoin (gcamoin@cerege.fr)

Co-convener: Didier Hauglustaine (dhauglustaine@esf.org)

Scientific marine drilling and coring from the sub-seafloor is crucial to progress in the Earth and environmental sciences because the oceans regulate climate, cover the sites of fundamental geodynamic, geochemical and biological processes and preserve high-resolution records of the Earth history. The EuroMARC programme supports coring activities in marine areas. EuroMARC aims at enhancing the benefit from already established funding groups and research communities like, for example, the International Marine Past Global Change Study (IMAGES) and the European Consortium for Ocean Research Drilling (ECORD), which is a contributing member of the Integrated Ocean Drilling Programme (IODP).

This session invites scientific contributions which illustrate the use of ocean coring data to investigate the ocean climate and dynamics, the ocean biogeochemistry and the carbon cycle, the deep biosphere, gas hydrates, ocean ridge processes, and ocean seismic arrays. This session offers in particular an overview of the EuroMARC scientific activities and aims to illustrate the use of marine coring to perform innovative and societal-relevant science. The session is opened to all EUROMARC participants but also to the participants of related programs and activities on ocean coring.

EuroMARC is a EUROCORES programme supported by research funding agencies from Belgium, France, Germany, Ireland, The Netherlands, Norway, Portugal, Switzerland, and the United Kingdom, and by the European Science Foundation (ESF) under contract No. ERAS-CT-2003-980409 of the European Commission, DG Research, FP6.

Action 7: All. please advertise the EGU 2008 special session.

Action 8: Prepare the programme of the session. DH and GC.

Budget for networking:

See the detailed presentation in Annex (Slide 30)

6. Dissemination & Communications

(All-30 min)

- Programme brochures and posters
- Scientific Publications, Newsletter, ...
- Website(s), creation, maintenance and content
- Others e.g., outreach and educational such as summer schools, specialized courses, etc

See the detailed presentation in Annex (Slides 31 – 36)

Website: all announcements can be done on the EuroMARC website. There is a special page dedicated to each CRP, pictures will be needed to illustrate the web!

Action 9: All. Please contribute to the website: key results and papers; nice pictures and figures; awards; related activities; job announcements; ...

7. Reporting Procedures

(All-15 min)

- To ESF: Interim & Final Reports
- To national funding agencies

See the detailed presentation in Annex (Slide 37)

8. Action List, Way ahead and Approval

(All–15 min)

The funding issues will be raised at the forthcoming management committee on 12th November in Brussels.

Action 1: Didier H. asks the Project Leaders to have a deputy chosen among the PIs or from the PLs institution to represent them in case they cannot attend a meeting in the future, with the possibility to send us a name in the coming weeks. This would allow all CRPs to be represented.

Action 2: Didier H. Raise these issues at the management committee for a possible extension of the project duration for interested partners and agencies.

Action 3: Planning to check about the cruise because Pelagia is taken officially according to G. De Lange.

Action 4: Raise this discussion on GLOW shiptime at the management committee meeting.

Action 5: All. Important for the EuroMARC Office to have a list of all project members. Names of collaborators to the project, PhD students, Post-Docs working on the Individual Projects should be send to the EuroMARC Office regularly.

Action 6: SC. Keynote speakers are also needed, The EuroMARC Office will require the help of SC at a later stage for name of potentials speakers to be invited.

Action 7: All. please advertise the EGU2008 special session on EUROMARC.

Action 8: Prepare the programme of the session. DH and GC

Action 9: All. Please contribute to the website: key results and papers; Nice pictures and figures; awards; related activities; job announcements; ...

9. Next Meeting

The next SC meeting will take place at La-Colle-sur-Loup during the annual conference in September 2008.