ERA-NET

Supporting the Cooperation and Coordination of Research Activities carried out at National or Regional Level

ERA-NET scheme is a highly innovative component of the European Union's Sixth Research Framework Programme (2002 - 2008), aimed at integrating and strengthening the European Research Area. To overcome the traditional fragmentation of research efforts in the European Union, ERA-NETs are expected, through better coordination and cooperation, to lead to collaboration of major significance, including the strategic planning and design of joint research programmes, the reciprocal opening of national research programmes to researchers from other member countries, the pooling of resources and the launch of fully transnational programmes. A total of 148 million euros has been allocated to the ERA-NET scheme for the life of FP6.

The first open call for proposals received an extremely positive initial response. The ECORD-net proposal was highly ranked by the EC and, after negotiations, the European Community contract No ERAC-CT-2003-510218 entered into force on 12 December 2003.

www.cordis.lu/coordination/era-net.htm

First open call for proposals Dec 2002	
Submitted proposals	72
Selected proposals	32
Total E.C. contribution	35 Meuros

ECORD - Net

Instrument	Coordination Action
Research field	Geosciences
Duration	4 years
EC contribution	2.32 M €

COORDINATOR:
France: Centre National de la Recherche Scientifique / Institut National des Sciences de l'Univers (CNRS / INSU)

PARTNERS:
Germany: Deutsche Forschungsgemeinschaft (DFG)

Iceland: The Icelandic Centre for Research (RANNÍS)

Netherlands: Netherlands Organisation for Scientific Research (NWO)

Norway: Research Council of Norway (NFR)

Portugal: Office for International Relations in Science and Higher Education (GRICES)

Sweden: Swedish Research Council (VR)

Switzerland: Swiss National Science Foundation (SNF)

U. K.: Natural Environment Research Council (NERC)

ERA-NET funding will be used to implement the ECORD structure in order to move towards a single research and operational funding network for scientific ocean drilling in Europe and use ECORD as a test of the ERA-NET system within Europe and in particular within an international programme in which it is anticipated that Europe will play a leading role alongside the USA and Japan.

More information:

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STRATEGIC OBJECTIVES

Establish best practice in Europe and internationally in mutual exchange of information:
Create an accessible and highly visible data base to permit European scientists to efficiently exploit all aspects of scientific ocean drilling and managers to evaluate the impact of ocean drilling related science.
Workpackage 1 Leader: GRICES

Open ECORD to all European and other countries:
Develop strategies for involving scientists from NAS and other European States in joint IODP proposals and joint research programmes through ECORD. Develop an outreach strategy for ECORD in association with all partners.
Workpackage 2 Leader: VR

Provide a forum of exchange:
Link scientific management of ECORD-net involving liaisons with other European and international scientific projects which require validation by drilling.
Workpackage 3 Leader: DFG

Ensure best practice for subcontracting of pooled national funding:
Develop the tools for the ECORD Managing Agency to become an open European structure for the financial, legal and research management of IODP.
Workpackage 4 Leader: CNRS

Establish and test best practice for implementation of complex scientific programmes:
Develop best practice for sub-contracting, balancing of European and international involvement in IODP drilling operations using mission specific platforms, ensure equitable availability of core samples, incorporate third party scientific interests in IODP activities in national waters.
Workpackage 5 Leader: NERC

Achieve mutualisation of European science programmes:
Establish strategies for proposal preparation, efficient scientific staffing, and effective pre- and post-cruise funding and coordination of European science programmes in IODP.
Workpackage 6 Leader: NWO

Consortium management:
ECORD Managing Agency
Workpackage 7 Leader: CNRS

The ECORD Newsletter has been prepared and edited by EMA - ECORD Managing Agency, IPG-Paris, 4 place Jussieu, 75005 Paris, ema@ipgp.jussieu.fr - http://www.ecord.org

ECORD Newsletter #2

n°2
April, 2004

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Welcome ECORD !

Following on the formal IODP inauguration symposium a delegation of EMA director and ECORD chairs (current, vice and past) met with Lead Agency representatives in Tokyo on 7 and 8 October 2003. The main objective of the meeting was to come to an agreement about ECORD participation in the programme. For all parties it was obvious that failure could jeopardise a succesful start to the programme. Specifically, preparations for the Arctic drilling urgently required formal approval to be included as part of IODP. Main points for discussion concerned the SAS panels representation, management of MSPs, number of expedition participants and funding. As ECORD would not be able to contribute more than 4 participation units it was decided that ECORD could not join as third Lead Agency. Nevertheless ECORD still strives to raise considerable additional funding from the EU and the door has been left open to join as Lead Agency at a later stage. For the time being ECORD was granted a special status as a contributing member and primary coordinator for MSP operations, with ESO being the Implementating Organisation (IO). Furthermore ECORD will, in principle, provide 8 participants for each expedition and 4 representatives in science advisory panels of which there are 3 voting and 1 non-voting members.
On 23 October in Paris the ECORD Council very much welcomed the outcome of the negotiations. The Council also finalised the internal consortium MoU which was officially signed in Paris on 15 December. A final Memorandum between ECORD and Lead Agencies has been approved in principle and is going through legal procedures in US and Japan. Much has been achieved in the past few months and pieces have fallen into place with ECORD ready for a flying start which has already achieved attention in Nature and Science. All is set for John Ludden as the new Council Chair from 1 April.

Raymond Schorno, ECORD Chair

ECORD Signing Ceremony

ECORD (European Consortium for Ocean Research Drilling) was officially created in Paris on December 15, 2003, when the representatives from 12 European countries signed the ECORD Memorandum of Understanding-MoU. This was the achievement of several years of work, supported by the European Commission through the JEODI programme (Joint European Ocean Drilling Inititiative). ECORD will provide Mission Specific Platforms (MSPs) to the programme and will therefore become a contributing member of IODP. The European Commission has decided to continue supporting the work of the consortium through an ERA-NET (see page 4), demonstrating a strong interest in ocean drilling.
Since last December, Spain has joined the consortium which now comprises 13 countries. ECORD expects to grow in the near future. Negotiations are underway with Belgium and Ireland, Canada has expressed interest in joining the consortium and discussions with Austria and Greece have been initiated. If such an expansion occurs, this would give ECORD a basis wider than Europe.
ECORD will officially join IODP on March by signing the Memorandum with NSF and MEXT in Bremen.
ECORD makes accessible the exciting objectives of the Integrated Ocean Drilling Program to European scientists...and hopefully to the Canadians in the future.

Catherine Mével, EMA Director

ECORD Contacts

ECORD Council:
Chair: Raymond Schorno - schorno@nwo.nl
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Past-Chair: José H. Monteiro - hipolito.monteiro@igm.pt
EMA-ECORD Managing Agency:
Director: Catherine Mével - mevel@ipgp.jussieu.fr
ESSAC-ECORD Science Support Advisory Committee:
Chair: Jeroen Kenter - jeroen.kenter@falw.vu.nl
Vice-Chair: Chris MacLeod - macleod@cf.ac.uk
ESO-ECORD Science Operator:
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More information is available on the ECORD website:
http://www.ecord.org

ICDP - IODP Euroforum
Bremen, March 17-19, 04

The joint meeting of the Integrated Ocean Drilling Program (IODP) and the International Continental Drilling Program (ICDP) - Euroforum for Scientific Earth Drilling - will be held in Bremen, Germany, from March 17th to March 19th, 2004.

In addition, two workshops are scheduled for March 16, one day before the official beginning of the Euroforum meeting. One workshop provides support to scientists that are planning to **submit a drilling proposal to IODP** and a second workshop is organized on **IODP Education and Outreach** not only on an international level but specifically aimed at the ECORD and national levels. Both workshops are chaired by experienced scientists and will benefit the ECORD scientific community in the broadest possible way. The ECORD proposal pressure on IODP should increase in the new programme and Education and Outreach is our way to inform, raise awareness and teach a new generation of scientists that will eventually succeed us.

2004- Mid 2005 IODP Expeditions

Arctic Coring Expedition
Palaeoceanographic and tectonic evolution of the central Arctic Ocean

Mission Specific Platforms, August-September 2004
Proponents: J. Backman, N. Bogdanov, B. Coakley, M. Edwards, R. Forsberg, R. Jackson, M. Jakobsson, W. Jokat, Y. Kristoffersen, L. Mayer & K. Moran.

To understand a global climate evolution, it is essential to have access to the record of what happened in the Arctic. The Lomonosov ridge, in the central Arctic Ocean, has a 450 m sediment cover that provides a unique opportunity to acquire a first order knowledge about the palaeoceanographic history of the central Arctic Ocean. Drilling these sediments will provide information on the long term (50 Myears) climate history of the central Arctic Ocean, and its role in Earth's transition from one extreme (Palaeogene greenhouse) to the other (Neogene icehouse). The shorter-term (Neogene) climate history, will also allow connecting the Neogene history of the Arctic Ocean to that of the North Atlantic Ocean at sub-millennial scale.

North Atlantic 2
Continuation of North Atlantic 1
Installation of a CORK in Hole 642E to document and monitor bottom water temperature variations through time

JOIDES Resolution, 10 February - 5 April 2005
Proponent: Robert N. Harris.

Knowledge of bottom temperature variations (BTV) is important to understanding the vigor and nature of ocean circulation as well as the nature of climatic interactions between the ocean and atmosphere. This programme will investigate the feasibility of reconstructing BWT histories at the decade to centennial time scale by making high precision temperature-depth measurements in ODP Hole 642. A borehole observatory will be installed in the hole, sealed with a CORK.

North Atlantic 1
Ice sheet-ocean-atmosphere interactions on millennial time scales during the Late Neogene-Quaternary using a Palaeointensity-Assisted Chronology (PAC) for the North Atlantic

JOIDES Resolution, 13 September - 30 October 2004
Proponents: J.E.T. Channell, J.S. Stoner, G.C. Bond, D.A. Hodell & E.E. Martin.

This programme will establish, for the last few Myears, the intercalibration of geomagnetic palaeointensities, isotope stratigraphies and regional environmental stratigraphies and, in so doing, develop a millenial-scale stratigraphic template. Such a template is a requirement for the understanding of the relative phasing of atmospheric, cryospheric and oceanic changes that are central to our understanding of the mechanism of global climate change on orbital to millenial time scales. Seven North Atlantic sites, selected to be the most appropriate from previous ODP/DSDP drilling or from conventional piston coring, will be drilled.

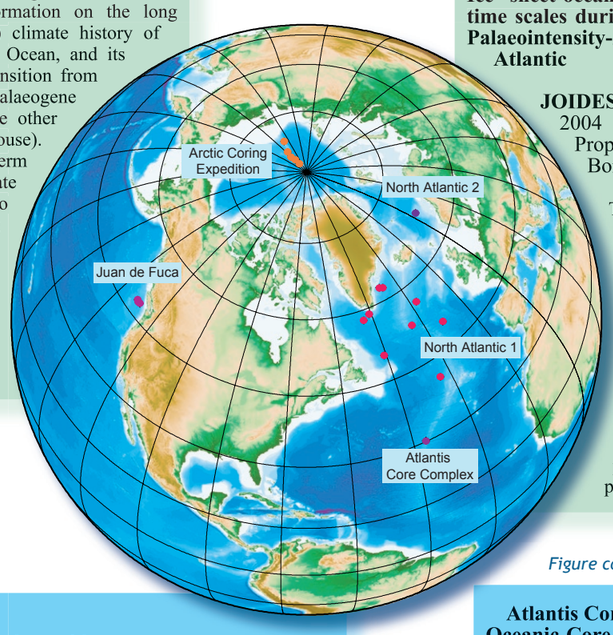

Figure courtesy of M. Coffin and N. Eguchi

Juan de Fuca
The hydrogeologic architecture of basaltic oceanic crust: compartmentalisation, anisotropy, microbiology, and crustal-scale properties on the Eastern flank of Juan de Fuca Ridge

JOIDES Resolution, 21 June - 29 August 2004
Proponents: A. T. Fisher, J. Alt, W. Bach, J. Baross, K. Becker, J. Cowen, S. D'Hondt, E.E. Davis, M. Hutnak, D. Kadko, M. McCarthy, J.S. McClain, M. Mottl, M. Sinha, G. Spinelli, V. Spiess, D. Teagle, H. Villinger, C.G. Wheat & L. Zühlsdorff.

This programme aims to evaluate the formation-scale hydrogeological properties within oceanic crust; determine how fluid pathways are distributed within an active hydrothermal system; establish linkages between fluid circulation, alteration, and geomicrobial processes; and determine relations between seismic and hydrological anisotropy. This will be accomplished by replacing two existing subseafloor observatories penetrating the upper crust, drilling two new holes and conducting the first multi-dimensional, cross-hole experiments attempted in the ocean crust, including hydrological, microbiological, seismic, and tracer components.

Atlantis Core Complex 1 & 2
Oceanic Core Complex Formation: Deformation, Alteration and Accessible Mantle Peridotite

JOIDES Resolution
CORE 1: 30 October - 18 December 2004
CORE 2: 18 December 2004 - 10 February 2005
Proponents: D. Blackman, J. Collins, J. Escartin, G. Fruh-Green, K. Johnson, C. MacLeod & M. Seyler.

Oceanic core complexes (OCC), domal massifs capped by corrugated, striated detachment faults, appear to be an episodic manifestation of plate rifting and accretion at slow spreading ridges. They commonly expose serpentinised peridotites and lower crustal rocks. Drilling two holes on the Atlantis massif at the mid-Atlantic ridge will help understanding the mechanisms of uplift and emplacement of OCC. Moreover, mantle seismic velocities have been measured at levels as shallow as a few hundred metres beneath the surface where serpentinites are exposed. Drilling in this location provides an unprecedented opportunity to document the nature of the MOHO (alteration front ?) and the recovery of fresh oceanic peridotite.

ESSAC "Up and Running"

ESSAC is the science committee of the European Consortium for Ocean Research Drilling (ECORD), a group of European member countries, which is a member of the Integrated Ocean Drilling Program (IODP) with, as partners, Japan and the USA. ESSAC is responsible for the scientific planning and coordination of Europe's contribution to and participation in IODP. The main purpose of ESSAC is to maximize ECORD's scientific and technological contribution.

With the official signing of the MoU in December 2003 in Paris, the ESSAC Office was officially established in Amsterdam (at the Faculty of Earth and Life Sciences of the Vrije Universiteit) and started the science coordination activities among the member countries, as well as formalizing the contacts with the Japanese and US partners. To facilitate the exchange of information, a website was set up that provides updates on the project schedule as well as science proposals and downloadable forms to apply for drilling projects :
http://www.geo.vu.nl/users/essac/

One of the results of the Science Planning Committee (SPC) meeting in Japan in August 2003 was the provisional schedule for riserless drilling in 2004 and 2005 (see table below). ESSAC scheduled its first meeting for November 2003 where it dealt with the staffing issues for these science projects as well as the nomination of members for the various Science and Advisory Structure (SAS) Panels and co-chief scientist positions on these projects. The nominations of the first two projects, Juan de Fuca and Arctic Coring Expedition, were submitted very recently to the Implementation Organizations (IO's). The interest by the scientific community for these projects was overwhelming: more than 30 scientists submitted applications for the Arctic Coring Expedition. The proportions of applications for the succeeding projects is steadily growing to similar. In addition to being a member of the Science Party (shipboard and shorebased for Mission Specific Platforms, "MSPs") scientists are encouraged to submit proposals to the ESSAC Office for shorebased participation as under the previous ODP.

To improve the exchange among the European scientists interested in IOPD and ICDP, ESSAC is co-organising the ICDP-IODP Euroforum in Bremen on March 17-19, 2004. One of the primary goals of this conference is the presentation of the science plans of both programmes and to learn where these can be joined to optimise the opportunities for the scientific community. Both the ECORD Council and ESSAC will use this opportunity to meet prior to the Euroforum on the 16th of March.

The complex task of managing the scientific interests and participation in IODP of thirteen nations has taken shape and is developing into an efficient structure. As such, ECORD is not only a successful partner in IODP, it is also unique for its "welding" of a large variety of science programmes, interests and active participation into one Science Support and Advisory Committee (ESSAC).

Jeroen Kenter, ESSAC Chair

Riserless Vessel & MSPs schedule

Cruise	Port (origin)	Dates	Staffing Period
Juan de Fuca	Astoria	21 June - 29 Aug. 04	Jan-March 04
Arctic Coring Expedition	Tromsö	Aug. - Sept. 04	Jan-March 04
North Atlantic 1	Acapulco	13 Sept. - 30 Oct. 04	Feb-April 04
Atlantis Core Complex 1	Ponta Delgada	30 Oct. -18 Dec. 04	March-May 04
Atlantis Core Complex 2	Ponta Delgada	18 Dec. - 10 Feb. 05	March-May 04
North Atlantic 2	Ponta Delgada	10 Feb. - 5 April 05	March -May 04

ESO is here and getting ready to drill for IODP

ECORD Science Operator (ESO), a group of Earth science institutes from across Europe, has been set up to drill in parts of the world previously inaccessible to ODP. Since coming together in 2002, ESO has been working hard with all of the other parts of ECORD and IODP to deliver a high-quality science operation. This will start this summer with the first serious attempt to drill in the high Arctic to understand its climate history.

ESO consists of the **British Geological Survey**, utilising its long experience to undertake the drilling, charter platforms and manage science and operations; the **University of Bremen**, already hosts of an ODP core repository, manage science parties and sample curation, storage and distribution and the **European Petrophysics Consortium** (Universities of Leicester, Montpellier, Aachen and Amsterdam), acquiring and integrating logging and track-based petrophysics more closely than was possible in ODP. Specialist help comes from the Swedish Polar Research Secretariat for polar operations and the GFZ-Potsdam's ICDP support group for their databasing experience.

ESO will drill using non-specialist "Mission Specific" drilling Platforms which are likely to have limited space. In a major change from the past, much of the science party's work, including core description, will be done in the labs at Bremen shortly after drilling finishes. Though operations are likely to have a different style, the aim is maintain the high standards of science people have come to expect from ocean drilling in ODP.

No longer will the scientists' imaginations be constrained by the limitations of a single drilling platform; now they can choose the best place in the oceans or continental shelves to solve their problem, and IODP can make it happen. IODP has chosen the Arctic, Pacific coral reefs and the New Jersey margin sequence stratigraphy as ESO's first targets but after that there is a huge opportunity for any scientist with a good plan to get it drilled. All you need is to do is prepare a proposal and have the enthusiasm to make it happen!

Andrew Kingdon, ESO External Coordination & Science Liaison