## Ocean drilling enters choppy waters as France and UK question strategy

**Paris.** France and the United Kingdom are considering withdrawing from the 20-year-old international Ocean Drilling Program (ODP). Critics in both countries claim that the scientific output of the programme no longer provides sufficient value for money, and that continued participation is difficult to justify, given the stiff competition for shrinking national research budgets.

The ODP studies the two-thirds of the Earth's crust that lies under water. Deepocean drilling — the ODP ship can drill cores in water up to 8.2 km deep — provides the means for carrying out research into the geological processes that create continents, for example, while the geological record also provides information on climate change.

The US National Science Foundation pays more than half of the \$45-million annual budget of ODP. The rest comes from its six other members: the United Kingdom, France, Germany and Japan, a consortium of smaller European countries organized through the European Science Foundation, and a joint membership of Canada and Russia.

France's participation is supervised by the marine research agency, IFREMER, te and costs around FF40 million (US\$8.2 million) annually. Britain's involvement is run by the National Environmental Research Council (NERC), costing around £3 million (US\$4.6 million) a year. But both are now reviewing their continued participation in ODP beyond 1998, when the current agreement expires.

The French review, which has already been completed, recommends that France withdraw from the ODP. The panel of Earth scientists that carried out the review is particularly critical of the fact that most ODP results have been published as in-house 'grey' literature, claiming that only a few have given rise to papers in international peer-reviewed journals.

"The present scientific output does not justify the costs," says Vincent Courtillot, the rapporteur of the review, who is also head of the Laboratory of Palaeomagnetism and Geodynamics at the Institut de Physique du Globe de Paris. France's tight budget for Earth sciences could be spent better, he says, adding that ODP has run out of steam, and needs to be replaced by a new international programme with clearer scientific goals and strategies.

The scientific content of the ODP is coordinated through a body known as the Joint Oceanographic Institutions Deep Earth Sampling (JOIDES). Half the subscriptions from members go towards paying for the operation of a converted oil exploration ship, the *JOIDES Resolution*. But the review claims that "ODP's [scientific] choices sometimes seem to have been aimed more at finding uses for [the ship], rather than addressing scientific problems at the lowest cost".

Scientific criteria have been sacrificed, claims the review, in doomed attempts by ODP to please two distinct groups of users with very different needs. Climatologists and

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France's participation is supervised by Uncharted course: British and French reviews may emarine research agency, IFREMER, lead to changes for the Ocean Drilling Program.

palaeoclimatologists tend to be interested in sediments and to prefer short-duration stays at many sites. But geologists tend to be interested in the deeper crust, and to prefer visits of longer duration at fewer sites. The only solution, argues the review, is for each user group to have its own ship, tools and research strategy.

The conclusions of the review have been hotly contested by ODP officials, who claim in private that French dissatisfaction with the programme stems from a resentment at both the US leadership of the programme and at having won fewer bids than the scientists concerned would have liked, combined

with domestic competition for funds from scientists not involved in ODP.

But echoes of some of the French criticisms are also being heard in the United Kingdom. NERC officials say that the questions are whether ODP has produced sufficient results for the money spent on it and whether it is continuing to produce results at the same rate as in its early years. "In these days of tight budgets we can't have a large 'ring-fenced' area in our budget that is immune from competition with other areas," says one.

The United Kingdom has traditionally been a strong supporter of ODP. Bids by its researchers have fared well within the programme, and the ODP's science planning office has been located at the University of Wales in Cardiff since 1993. But even some of the British scientists working in the programme agree that it needs to be focused more on major scientific problems.

The preliminary findings of the NERC review, chaired by Chris Hawksworth of the Open University, are expected to be known later this month. John Krebs, the chief executive of NERC, will then hold a meeting with Pierre David, the director general of

IFREMER, to reach a common position. This meeting will be followed by one that includes Germany, traditionally a strong supporter of ODP.

Three options are likely to be on the table: continuing within the existing ODP, or withdrawing from ODP and either associating with a planned Japanese ocean drilling programme or establishing an autonomous European programme. Either of the last two possibilities might also be developed into a new global programme incorporating the US ship.

Indeed, Japan has already allocated funding to a feasibility study of a drilling ▶

## New director for Cambridge biology laboratory

London. The UK Medical Research Council's Laboratory of Molecular Biology (LMB) in Cambridge is to have a new director. Richard Henderson, currently head of the laboratory's structural studies division, will take over from Sir Aaron Klug, who has recently become the new president of the Royal Society.

Henderson's appointment is being seen as a sign that the LMB is keen to maintain its pre-eminence in the study of molecular structures. The Louis-Jeantet Prize for Medicine — which Henderson won in 1993 for his work on the structure of bacteriorhodopsin — has been awarded this year to his colleague Nigel Unwin, joint head of the division (see page 200).

Henderson is due to take over as director of the LMB at the beginning of October. The timing of his appointment coincides with the arrival of George Radda, currently head of the department of biochemistry at the University of Oxford, as the new chief executive of the research council.