

CERN, the LEP electron accelerator will be nearly complete and plans for the next more powerful machine would, on past form, have been canvassed. (LEP is due to be commissioned during 1988.) So, at the least, the mounting of the review is probably a guide to future negotiating positions at CERN. But British participation in planned experiments at LEP would entail some financial contribution in 1977 and thereafter.

The decision to reconsider British membership in CERN has sprung from ABRC's annual recommendation to the British Government on the division of the

science budget among the several claimants. This year's document, published three months late because of the delay in mounting the CERN inquiry, says that it has been forced to consider "withdrawing completely from a major area of scientific activity" because the problems facing the research councils are "so grave".

For an occasion of such solemnity, last week's announcement was carried off light-heartedly, even with jocularities. The explanation may be that which has people giggling at funerals, perhaps merely that the announcement was made to a bunch of journalists. **John Maddox**

## UK research budget

# Straitjackets for all

THE British Advisory Board for the Research Councils (ABRC) is likely for the third successive year to urge on the government that more money should be spent on civil research, according to its chairman Sir David Phillips. He was introducing last week an account of the board's frustrating dealings with the government over the research budget for the financial year beginning next month.

In a break with practice, ABRC last year gave the UK Government two substantial pieces of advice — a statements of its case for more money (in time for the beginning of the annual estimate of public expenditure in the spring) and recommendations on the distribution of the budget eventually agreed (in the autumn). Both documents together with correspondence with the Secretary of State for Education and Science are published as *Scientific Opportunities and the Science Budget 1983* (available from Publications Despatch Centre, Department of Education and Science, Cannons Park, Stanmore, Middlesex).

ABRC's bid for 1984-85 turns out to have been for an extra £22 million, or some 4 per cent of the total science budget. In the two succeeding years, ABRC asked for £33 million and £43 million extra, making a total for three years of £98 million after allowing for inflation (see *Nature* 15 March, p.217).

ABRC would have spent the extra as follows:

**Research grants.** The documents note that the three principal grant-making councils rejected 650 "first-rate" applications in 1980-81, for lack of funds. Making good the shortfall would have required £3.8 million in the coming financial year and £7.6 million in 1986-87.

**Manufacturing engineering.** The Science and Engineering Research Council (SERC) wanted to spend £4 million in the coming year, increasing by £1 million in each of the two succeeding years, on the application of computer techniques to manufacturing engineering.

**Food and nutrition.** An expanded programme in food research and nutrition by

the Agricultural and Food Research Council (AFRC) would have cost £18.5 million over three years, but £11.5 million of this would have been found internally.

**X-ray astronomy.** A plan by SERC to launch six years from now an X-ray satellite capable of detailed spectroscopic measurements would have cost £12.5 million over three years and £30 million in total. ABRC says that SERC has now decided not to proceed with this plan.

**Medical projects.** The Medical Research Council (MRC) had a shopping list of projects in neuroscience, nutrition and diagnostic imaging costing £12.5 million over three years.

**Biotechnology.** AFRC sought an extra £6 million over three years, chiefly for work in plant science.

**Geophysics.** The Natural Environment Research Council (NERC) sought to spend a total of £12 million over three years on projects such as sea-surface topography by satellite imaging, remote sensing and deep

seismic surveys.

In addition, ABRC sought £22.5 million over three years to meet the costs of "restructuring", chiefly at AFRC and NERC, which will now be met by a "tax" on the budgets of MRC and SERC in the last two of the next three financial years.

By the use of words such as "regret", ABRC has left the government in no doubt of its discontent that extra funds are not forthcoming. It says that growing demands in the past few years have overstretched the research councils and that even the greater flexibility likely to flow from "restructuring" (chiefly reductions of in-house commitments) will not allow the councils to exploit all the opportunities which arise. "This requires a continuing investment", which can be achieved only by a larger budget or by "withdrawing completely from expensive scientific projects". ABRC asks for two further assurances from the British Government — a lasting understanding with the government on the effects of sterling devaluation on the cost of international subscriptions and on the effects on the research councils of the decline in research commissions from government.

The tactics of ABRC's dealings with the British Government from now on are obviously delicate. Professor John Kingman, SERC chairman, said last week that the research councils hope to persuade ABRC to keep on complaining about the shortage of funds. But too much stridency may simply irritate the government.

It may be significant that ABRC has for the first time set aside £50,000 of the total science budget for "science policy studies", the first of which is to be an attempt at an international comparison of spending on basic science in Britain with that in the United States, West Germany, France and the Netherlands. □

## Hague raises doubts over ABRC

SEARCHING questions about the constitution of the Advisory Board for the Research Councils (ABRC) were raised by one of its newest members, Professor Sir Douglas Hague, chairman of the Economic and Social Research Council in the Mond Lecture at the University of Manchester on 12 March. His general complaint seems to have been that ABRC is unable, because of its constitution, to manage its affairs.

Sir Douglas acknowledged the complexity of the range of problems with which ABRC is required to deal but remarked on the overlap between its field and that covered by the Advisory Council for Applied Research and Development (ACARD), asking whether the division is tenable or useful. He also raised the question whether a body whose function it is to recommend a division of the science budget between the research councils should as a matter of principle include the heads of the research councils as members.

He said that "ABRC needs to change... and its bureaucracy needs to change". He argued that there should be some means by which ABRC, the research councils and the various parts of the government bureaucracy involved with them could be enabled to learn from their experience.

Specifically he urged that there should be a "strategy unit" within ABRC to "promote learning" and to ensure that "change actually happens". Acknowledging that think-tanks are out of fashion in Britain, he nevertheless felt that ABRC is in need of strategic advice.

Sir Douglas also dissented from Professor Ronald Mason's recommendation at the end of last year that ABRC should be "strengthened" on the grounds that such a committee would be so powerful that it would be regarded as "omniscient" but would be no better able than the present committee to take initiatives in the development of new fields of research. □