## UK expenditure

## Cash limits limit change

THE British government's spending plans for the next three financial years (the first, that beginning on 1 April), published last week, contain no surprises for research and higher education. The annual planning document (Cmnd 9428-1 and 2) confirms the details announced piecemeal in the past few months about the projected total of spending on research and higher education in the period immediately ahead. But even before the ink on the new document is dry, it seems to be generally agreed that the government will not be able to hold to its present course without further economies.

The document thus records the increase of public spending through the science budget agreed last December and amounting to an extra £11 million (compared with last year's estimate) in the year beginning 1 April, with increases of £8 million in each of the two succeeding years. In cash, this implies that the total science budget, that which is administered by the Advisory Board for the Research Councils, will increase from £550 million this year to £584 million next year and to £600 and £610 million in the two succeeding years when the rate of inflation is assumed to be 4 per cent and 3.25 per cent respectively.

Superficially, these figures implyh that there will in fact be reductions of the budgets available for the research councils in the two years concerned. Apart from the assumptions made about the inflation rate, there is no assurance that the future pay settlements will tally with the government's assumptions.

On higher education, the latest figures suggest that the government is planning not for reductions of student numbers but for stagnation over the next three years. Student numbers at British universities and at other higher education institutions in England are expected to decline by 3,000 in the coming financial year but then to be effectively constant.

British government support for industrial research and development through the Department of Trade and Industry is also forecast to grow less quickly than inflation in the three years ahead. The government's white paper says that spending (estimated at £383 million during the current year, and covering the costs of the department's laboratories, existing grant schemes and support for space and aerospace) will grow to £390 million in the two succeeding years. The future of the British government's support by means of grants for industrial research and development is said to hang on the outcome of a review due to be completed before the end of March.

Defence research and development, some 12.5 per cent of the total defence budget (now running at £17,250 million a year), is not analysed in detail in the new survey of forward spending plans, but will be dealt with in the formal statement on the defence

budget due next month.

In their general character, the new budget plans contain no substantial departures from the British government's declared intentions on research. Of necessity, the plans include no provision for radical changes of the spending pattern such as might result from a more radical reorganization of civil research than that now in prospect. Meanwhile, the effect of the general insistence that cash allocations are limited for the years ahead must be to reinforce the general sense that all dies are now cast.

British education

## Lords against specialism

A STRONG attack on the British government's arrangements for technical education and training was launched earlier this week by the House of Lords Select Committee on Science and Technology. Among other things, a subcommittee under Lord Gregson argues that there should be new arrangements for enabling graduates to acquire the skills needed in the application of new technologies (Education and training for new technologies, HMSO, £6.00).

The general line followed by the subcommittee is that the essence of new technology is its unfamiliarity, for which reason the most appropriate preparation is a broad education. In this spirit, its complains at the narrowness of the school curriculum in England and Wales. Both in the schools and in higher education, the devolution of responsibility to separate teaching institutions, acknowledged as a source of stability within the educational system, is also cited as one reason why valuable innovations do not spread quickly.

On the educational needs of the present, the committee argues for a more general curriculum at the early stages of people's development, saying that the needs of information technology can be met by education in mathematics, physics and English. Emphasizing the present shortage of trained people in information technology estimated by some of those giving evidence to amount to 5,000 graduates, the committee argues that there is an urgent need not merely for better provision for continuing education but for a better recognition of the need.

The central recommendation of the House of Lords committee is that there should be established within the framework of the Science and Engineering Research Council an organization to be called the Education and Training Board whose functions would include the financial support of vocationally oriented courses for graduates from British universities and other institutions. The board would also be responsible for surveys of manpower needs and for general advice on the design of courses.

More generally, the committee is critical of the *ad hoc* character of the British government's approach to technical education, pointing out that budgets for innovation are most likely to be cut first when funds are scarce. It recommends tax incent-

ives to encourage industrial and business support for education, but says nothing on the more contentious issue of whether people seeking technical education outside the limits of what the state provides should be able to offset the cost against taxation.

In passing, the House of Lords committee supports the argument that British university research is in poor shape and urges that the pursuit of excellence in research necessary for the successful exploitation of new technology.

## Seminar scrapped

Los Angeles

THE chief surgeon at the School of Medicine at the University of California, San Diego, last week cancelled a seminar demonstrating new surgical techniques on dogs after receiving a death threat from an anonymous telephone caller. According to university officials, this is the first time any such event has been called off in a California state school because of complaints of animal abuse in scientific work.

The surgeon, Dr A.R. Moossa, had planned to teach a seminar this month showing physicians how to use staples to save operating time. Thirty-six anaesthetized dogs would have been put to death after the demonstration. On 14 January, a man telephoned Dr Moossa's office and, according to Sharon Gillespie, the surgeon's assistant who took the call, threatened to put a "bullet in (Moossa's) head" if he did not "stop the thing with the dogs". The caller did not identify himself nor did he name any animal rights group, the surgeon's assistant said.

Dr Moossa promptly cancelled the seminar. Although this is the first time he has been threatened with bodily harm, Dr Moossa has received half a dozen letters protesting against the use of animals in surgery. The dogs were to be obtained from the San Diego county animal shelter and would have been destroyed anyway, according to a university spokesman.

Many California researchers are beginning to feel threatened by the growing militancy of animal rights groups, according to Sandra Bressler, executive director of the California Biomedical Research Association, an organization set up in part by the state's universities to counter the animal rights protesters. Sandra Blakeslee