

nature

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The machinery works—does it produce the goods?

IN 1972 the British government published a White Paper 'Framework for Government Research and Development' which recommended re-structuring of financial support for R & D. The White Paper sprang largely from a report written by Lord Rothschild, and proposed, amongst other things, that support for applied R & D, whether conducted within or outside government departments should be controlled by the customer/contractor principle: departments as customers define their needs; contractors advise on the possibility of meeting these needs and undertake the work; and customer and contractor keep in close contact to ensure that objectives remain obtainable at a reasonable cost.

Of course, much departmental in-house R & D had always run along these general lines, but the controversial element of the Rothschild recommendations was that a substantial amount of work supported by Research Councils, particularly in their own establishments, should no longer be funded through the Science Vote (and thus ultimately by the Department of Education and Science) but be paid for by customer departments; research councils would continue to provide management for such activities, but the customers would control their direction. Customer departments were expected to acquire a Chief Scientist who would strengthen the department's ability to commission research widely. Chief Scientists would play an active role in research councils and also in the newly-formed Advisory Board for the Research Councils (ABRC) which took on a role of supervising the councils. The reorganisation could be seen as a corrective to a tendency for work in research council establishments to cover roughly the fields of interest of government departments without any obvious way for departments to express this interest and guide research, beyond gentle persuasion.

Has it worked? The Lord Privy Seal, quaintly entrusted with overseeing research and development policy co-ordination, has just issued, with a little help from his friends, a review of the R & D machinery as it now stands (Cmnd. 7499; £1.25). The answer, no great surprise, is that whilst there are still defects and weaknesses in the system, there is no call for further wholesale change in the arrangements.

The areas still needing attention, says the report, include the following. First, there is a danger that research councils (and, it could have been added, individual establishments such as the Institute of Geological Sciences) become so loaded with commissioned research that they lose independence to pursue their own ideas. The report sounds a particular warning over the Agricultural Research Council, which receives more than half its income from the Ministry of Agriculture, Fisheries and Food for contract work. Second, the report points out that the Department of Health has until recently had difficulties in fulfilling its role as informed customer in biomedical research, owing to the conflicting demands of health and social services research on the limited expertise available in the department. Third,

ABRC has, up to now, been too preoccupied with the Rothschild reorganisation and then with allocation of diminishing resources to devote enough time to "more general problems which arise from, or affect, the scientific activities of the government, research councils or universities". It is to be 'invited' to review its working methods to free more time for broader questions.

The machinery works tolerably well. But what of the product? It is not unreasonable to ask not only whether the right sort of bureaucratic connections are now being made, but also whether these are bearing fruit in terms of research results of real value. On this the report is silent—two paragraphs entitled 'The Dissemination and Utilisation of Results' comprise only generalities. Of course it is much more difficult to reach objective judgements on whether customers and the nation are really profiting from the new arrangements than it is just to verify that the arrangements meet general approval. Of course some of the timescales involved are too long for answers to be given yet. But without a dispassionate and rigorous assessment (and more than the department's point of view would have to be taken into account), it is impossible to be sure that all the time and effort actually bears fruit. The report claims to "try to assess whether the scientific activities financed by the government are now properly related to national need." It does not do this; someone should.

LESS publicised amongst Rothschild's recommendation was that scientists in government should be enabled to play a larger role in working out departmental needs and in policy formulation by improving their managerial skills. This was to be achieved by courses in management training, competitive transfer of scientists to the Administration Group and the stimulation of staff interchange with universities and industry. Here the report valuably notes that there has been miserable failure. Few civil service scientists are interested in jumping to administration and few are prepared to do even a short time outside the service—the interchange unit was disbanded last year.

It is difficult to know what is wrong. Scientists are often to be heard grumbling that they don't get as many chances as administrators—"always on tap, never on top". Yet there are always apparently reasons why they never take the plunge. If they stay in science, however, many lose their enthusiasm and spend an unhappy ten or twenty years up to retirement.

Individuals have to recognise that no switch in career can be made without at least temporary inconvenience and struggle. Government has to recognise that private industry offers financial inducements to people it wants to move, and that it cannot expect much success without offering the same. A review of these manpower problems of the scientific civil service, under the chairmanship of Dr Martin Holdgate of the Department of the Environment, is just about to start to cover this ground yet again. □