



Chancellor of the Duchy of Lancaster

PRIME MINISTER

REVIEW OF SUPPORT SERVICES FOR RESEARCH AND DEVELOPMENT: PROGRESS REPORT

This minute reports progress on implementing the recommendations of the 1981/82 review of support services for research and development under the guidance of Lord Rayner. The review covered such things as workshops, stores, transport, typing and messengerial services and how to control their cost. Lord Rayner estimated the possible savings from the review as £15 million a year and £7 million once for all.

... The attached short report by officials shows that departments have already made savings of £8.8 million a year and 1060 posts, based on the recommendations of the review. Although this falls short of the original estimated savings, additional savings have been made bringing the total up to £14.8 million a year and 1889 posts with £2.4 million and 138 posts in prospect. This is good progress. The annexes record departmental action in detail - I do not think you need do more than dip into these. Capital savings have proved harder to realise, but £3.3 million has been saved or is in firm prospect, and a further £3.3 million is still under consideration. *(outside the original recommendations)*

Outstanding action will be taken up in the context of the Financial Management Initiative. The report proposes that my officials carry out a management audit starting in 1986 to investigate the effect of the changes brought about by the review. I support this idea which will allow us to test the success of the review and its follow-up. I suggest that you endorse the three proposals for action in the report. If you accept them, you may wish me to write to Ministers most concerned with the review, on the lines of the attached draft.

I am copying this minute and enclosures to Sir Robert Armstrong and Sir Robin Ibbs.

geg

GOWRIE
23 October 1984

DRAFT LETTER FROM LORD GOWRIE TO SECRETARY OF STATE FOR DEFENCE

REVIEW OF RESEARCH AND DEVELOPMENT SUPPORT SERVICES:
PROGRESS REPORT

... The Prime Minister has asked me to send you the attached report by officials on progress in implementing the recommendations of this review.

The Prime Minister was pleased to see that good progress has been made in your department and in the others which participated in the review. Important savings have been realised. Many of the recommendations of Lord Rayner's central report have been put into practice. Further work is in hand in the context of the FMI.

Nevertheless it is important to keep up the momentum. The Prime Minister has asked me to draw to your attention the two points recommended for departmental action and, in particular, she would be grateful if you and other colleagues would co-operate in a management audit in 1986/87 to examine the effect of the changes brought about by the review.

I am copying this letter to the Secretaries of State for the Environment, Transport, Trade and Industry, the Minister of Agriculture and the Minister for Overseas Development, all of whose departments participated in the review, and to Sir Robert Armstrong and Sir Robin Ibbs.





10 DOWNING STREET

From the Private Secretary

29 October 1984

Review of Support Services for Research and
Development

The Prime Minister considered over the weekend the Chancellor of the Duchy's minute of 23 October in which he reported progress on implementing the 1981/82 review of support services for research and development.

The Prime Minister has noted with satisfaction the savings which have already been made and endorses the three proposals for follow-up action. She agrees that Lord Gowrie should now write to colleagues along the lines of the draft submitted with his minute.

I am sending copies of this letter to Sir Robin Ibbs and Richard Hatfield (Cabinet Office).

David Barclay

Paul Thomas, Esq.,
Chancellor of the Duchy of Lancaster's Office,

BTG

PRIME MINISTER

The three points for action which Lord Gowrie refers to are:

- (i) Departments to apply lessons to research establishments which did not take part directly in the review.
- (ii) Departments to apply Cabinet Office guidelines on productivity schemes for industrial workers and other (less significant) support services.
- (iii) Cabinet Office to conduct a management audit of selected establishments in 1986/87.

Agree letter from Lord Gowrie at Flag A?

amb

26 October, 1984

Yes not

PROGRESS REPORT ON THE REVIEW OF SUPPORT SERVICES IN RESEARCH AND DEVELOPMENT AND ALLIED SCIENTIFIC ESTABLISHMENTS

Introduction

In 1981 six departments carried out a review of support services for research and development under the guidance of Lord Rayner. They were:

Ministry of Agriculture, Fisheries and Food (MAFF)
Ministry of Defence (MOD)
Department of the Environment (DOE)
Department of Industry (DTI)
Overseas Development Administration (ODA)
Department of Transport (DTp)

The Prime Minister approved a central report by Lord Rayner in June 1982. A summary of his recommendations is at Annex A. This report describes progress since then and makes suggestions for future follow-up to the review.

Implementation of Departmental Reports

2. Savings made (£14.8m) or in firm prospect (£2.5m) in the departments which took part in the review exceed those recommended, in spite of some savings rejected or found to be unobtainable. A few recommendations are still under consideration. Some others, such as major rationalizations of land and buildings, while accepted are bound to take time to bring about. Table 1 summarizes the savings made. Further details are at Annex B.

Table 1: Implementation of Savings

	£m (annual)	Posts	£m (one-off)
Savings Recommended	14.2 ¹	1518	6.6
Savings Made at 1/4/84	8.8	1059.5	1.9
Additional Savings made at 1/4/84	6.1	829.5	-
Firm Savings in Prospect ²	2.4	138.5	1.4
Savings under Consideration	2.1	299	3.3
Savings Rejected or Unobtainable	2.1	128	-
Total Savings Made or in Firm Prospect	17.3	2030	3.3

¹All figures are at 1981/82 prices.

²Includes some additional savings in prospect.

3. Examples of savings made are:

- more than half of aircraft servicing at Royal Aircraft Establishment and Aeroplane and Armament Experimental Establishment contracted out. Saving: £1.2m p.a. and 175 posts;
- buildings and storage vacated by Transport and Road Research Laboratory. Saving: £0.3m p.a.
- income from Building Research Establishment's Advisory Service increased by £94,000 to £244,000 pa. Target for 1984/85: £272,000;
- expected saving of at least 52 support posts at Tropical Development and Research Institute by 1 April 1986;
- cleaning contracted out in DTI establishments. Saving: nearly £0.1m p.a. and over 50 posts;
- responsibility for accommodation assumed by Director of Central Veterinary Laboratory with introduction of Property Repayment Services system. Saving: more than £0.5m in current year. An example of what can be done if Directors take responsibility for their own affairs.

Implementation of Lord Rayner's Central Report

4. Table 2 summarizes progress on the main points of Lord Rayner's central report. Further details are at Annex C.

Table 2: Implementation of Central Recommendations

Recommendation	Action	Timetable
<p>2 (review of arrangements for reporting progress in R&D to Ministers)</p>	<p>All departments: reviews have been completed. Ministers and Permanent Secretaries now have the opportunity to review progress regularly.</p>	
<p>3 ("charter" for Directors of establishments)</p>	<p>MAFF: to be pursued in context of FMI MOD: implemented DOE: implemented DTI: implemented ODA: implemented DTp: draft charter in preparation</p>	<p>Target: 1/4/85 To be presented to Ministers shortly</p>
<p>5-8 (delegation of authority to Directors for efficient management, charging of costs to research projects, research establishments to be priority areas for FMI and scientific staff to be responsible for value for money)</p>	<p>Progress in all departments linked with progress on FMI generally. Research establishments made cost centres as follows:</p>	<p>Target: 1/4/85 Two stages: 1/4/85 and 1/4/86 (trial under way) 1/4/83 1/4/84 No target set 1/4/83</p>
	<p>MAFF MOD DOE DTI ODA DTp</p>	
	<p>Other developments:</p>	
	<p>MAFF: management information system to permit disaggregation of establishment budgets.</p>	<p>Target: 1/4/85</p>
	<p>MOD: delegated powers to Directors go back at least to 1972. Existing costing systems will be improved.</p>	<p>1985/86</p>
	<p>DOE: computerized project/management accounting system now in place. Mechanisms and procedures for full charging to be explored.</p>	<p>1984/85</p>

Table 2 continued

Recommendation	Action	Timetable
5-8 continued	DTI: full economic costs charged to customers. DTp: full charging for all projects now possible.	
11 (reinvestment of savings from greater efficiency)	Scheme for carrying forward capital underspend up to 5% to next financial year.	1/4/84 onwards
	Incentive schemes to encourage disposal of surplus assets, eg Research Councils have been able to keep 50% of proceeds of asset sales.	1/4/83
12 (an examination of the criteria used in the recruitment and training of specialists)	Two departmental schemes for technological generalists developed.	

Wider Implementation

5. Departments have "read across" the review's recommendations to establishments which did not take part in the review itself. The following departments and other bodies have taken similar action:

Department of Agriculture and Fisheries, Scotland
Research Councils
Health and Safety Executive
Forestry Commission
British Museum (Natural History)

This has led to further savings of at least £1m p.a., 80 posts and £0.8m once for all. Details are at Annex D.

Further work

6. The evidence in this report shows that departments have produced savings of £14.8 million and 1889 posts already, with £2.5 million and 138 posts in prospect. Research establishments must now maintain and build on the improvements made. For example:

Action: departments should search for further opportunities for "read-across" to research establishments which did not participate in the review.

7. Another example of further action: Cabinet Office (MPO) has issued a number of management guidelines which are relevant to support services in research establishments. These include stores, transport, messengers, telecommunications and typing. Further guidelines are to be issued covering reprographics, stocktaking, industrial productivity pay schemes (all due by June 1985), postal services and workshops (by June 1986).

Action: departments and research establishments should apply these guidelines.

8. In view of departments' achievements, I do not propose another progress report next year. The work now in hand on implementing the FMI in research establishments should begin to bear fruit in the next couple of years. I believe therefore that it would be appropriate to report progress in 1986/87 by which time the new arrangements will have settled down.

Action: a team from Cabinet Office (MPO) with support from departments as appropriate should visit a sample of research establishments in 1986 to determine exactly what changes have been brought about and their results. The team should include some establishments which did not participate in the original review and examples of the whole range of support services. They should consider the effects of specific recommendations of the review along with other work on the efficiency and effectiveness of support services and the impact of the FMI. They should also aim to pinpoint further areas for action in order to secure even better value for money.

Miss E M Goodison
October 1984

REVIEW OF R & D SUPPORT SERVICES : LORD RAYNER'S RECOMMENDATIONS

1. ...that Ministers seek full Action Documents...and that annexed to each should be a programme showing how other areas of support in R & D establishments for which the Minister is responsible are to be organised upon similar lines.
2. ...that the Permanent Secretary in each relevant Department should examine, in consultation with Chief Scientists as appropriate ..., the practical value of current arrangements for reporting to Ministers on technical and financial progress and the value for money obtained.
3. ...that with the appropriate Ministers' approval, Permanent Secretaries should give the Director of each establishment a "charter" which sets out the objectives and scope of his establishment for the foreseeable future.
4. ...that one of the functions of the audit procedures of the department should be to watch out for any tendencies in the establishments to widen the scope of activities beyond the Minister's objectives.
5. ...that with the Minister's approval the Permanent Secretary ... should include in each Director's "charter" formal delegation of authority for running the establishment efficiently.
6. ...[it should] be the Director's job to ensure that the scientific work of his establishment is properly approved and relevant to his Minister's needs, that the Minister's priorities are met at the required professional standard, and that productivity is improved and costs held to the essential ... he should involve scientific line management in meeting all these requirements. In particular, he should seek to adopt commercial practice in charging all the costs of the establishment which fall on the Department's Votes (including accommodation when PSA repayment starts) to individual research projects on the basis of the services they currently consume. Research project managers should have budgets agreed by him and be responsible to him for the use they make of those budgets.

7. ...departments should treat the relevant establishments in this review as priority action [for implementation of the principles of the Financial Management Initiative] - if necessary as experiments before wider decisions are taken.
8. ...that scientific staff should be responsible for their proposals and Secretariat staff should conduct, on the Director's behalf, deeper investigations of value for money on a highly selective sample of cases; and Headquarters should concentrate on controlling total budgets or major blocks within them, not on the many small items.
9. ...that each establishment should designate a senior manager who will have responsibility for clarifying and co-ordinating land and accommodation use and works and maintenance costs. He should also be charged with the continuing task of holding down accommodation costs and will provide a focus for contacts with major contractors and with the managers of the Government Estate.
10. ...PSA should seek to define with the establishments concerned those types of specialised building and maintenance work where the Director is likely to be best placed to specify and obtain what is required. For the other types of work which PSA will continue to provide as part of its management of the Government Estate, defined target levels of service should be agreed between PSA and its clients.
11. ...the Treasury should consider with Departments how arrangements can be made to encourage Departments to reinvest more from savings achieved by greater efficiency to further increase efficiency and effectiveness, reduce running costs and improve staff motivation.
12. ...MPO should examine the criteria currently used in the recruitment and training of scientists and other specialists to assess whether they adequately reflect the need for a robust mix of those with potential for management and high level administration and those who are out and out researchers.

REVIEW OF R&D SUPPORT SERVICES : IMPLEMENTATION

SECTION I IMPLEMENTATION OF DEPARTMENTAL REPORT IN THE MINISTRY OF AGRICULTURE, FISHERIES AND FOOD : CENTRAL VETERINARY LABORATORY

SECTION IA INTRODUCTION : R&D IN MAFF GENERALLY

1. The Ministry has a number of large and small establishments at which R&D is carried out, usually together with other activities, eg statutory and service/advisory functions. The total cost of these establishments in 1983/84 was about £56m (1981/82 £54m). The manpower committed at 1 April 1984 was 2753 (1 April 1981 3049½). A brief description of the Ministry's R&D establishments is at Annex A.

SECTION IB : TABLES AND NARRATIVE ON CVL REPORT

2. The tables at Annex B show the savings in research support services resulting from the CVL Report.

3. Annex 1 to Lord Rayner's report identified two main areas for savings at CVL - too many services in-house and over provision of services/too much bureaucracy. As regards the first, the in-house production of animals at CVL has been reduced in line with the Rayner review recommendations and is now ^{at} confined to those animals which cannot be purchased from outside/competitive prices or where animals of the required specification cannot be obtained externally. The main continuing in-house production is of sheep : CVL requires not only a particular breed of sheep which produces lambs throughout the year, but also lambs of specific disease and parasite free status. Early enquiries suggested that these criteria were too stringent for commercial sheep producers and that it would be uneconomic for private specialists to supply CVL, but an outside supplier has now been found, and a contract is being negotiated. Financial savings will be minimal, but 2 posts will be saved. About seventy percent of the savings shown in Table 1 of Annex B as rejected/unobtainable reflect a substantial over-estimate by the Scrutiny officer of the savings obtainable by reducing in-house animal production.

4. The scrutiny officer also noted the need to review the case for continuing in-house tuberculin production - although he then proceeded to include in his recommended savings a once for all saving of £3.3 million and an annual saving of £192,000 which assumed that the review led to in-house production being stopped. The £3.3 million once for all saving represents over 80% of the saving shown in column 1 of Annex B Table 2. The recommended review has been carried out and has indicated that if CVL obtains the contract to supply the Irish Government, new production facilities should be worthwhile. For the time being, while negotiations with the Irish Government continue, the Scrutiny officer's estimates of the savings to be made/^{are}included in Annex B as under consideration.

5. Cleaning and security at CVL have been contracted out with a saving somewhat larger than the Scrutiny officer had foreseen as possible. Similarly, the savings from sales of land are likely to exceed the Scrutiny officer's assessment. A detailed internal appraisal concluded that about 225 acres (rather than the 141 acres recommended) should be sold. The sale of 126 acres of mainly low grade land has already realised £237,000. The sale of the remaining moderate grade land (approx 100 acres), has been deferred until towards the end of 1984, pending the outcome of the investigations into any development potential it may have. With no development potential, the sale should realise in excess of £150,000; the value with development potential will depend on the type, extent, and the timing, of potential development. The amount realisable cannot therefore yet be estimated beyond regarding the non-development value as a minimum. In the meantime, the grazing has been let for 6 months at £39 per acre, producing a receipt of almost £4,000.

6. The achievement of most of the other recommended/^{savings}expected to arise from ending the over-provision of services/too much bureaucracy, depends on management and accountability changes, the full implementation of which has to be linked to progress in implementing the Government's Financial Management Initiative (FMI) in MAFF as a whole. Pending this, a few of the Scrutiny officer's recommended savings concerned with Library services, photography and stationery are categorised as still under consideration for purposes of Annex 3. The Director of CVL will, however, take responsibility in 1985/86 for resources employed at the laboratory. Development of the necessary information systems will facilitate the identification of

the costs of specific projects and the pursuit of value for money. So far only the cost of experimental animals is charged on actual use basis to individual research projects, but a computerised project costing system, which will form the basis for a management accounting system and will allow all support costs to be charged to individual projects on an actual use basis is now being tested and will be fully integrated with MAFF management accounting information system (MAIS). Meanwhile/^{with}the advent of the Property Repayment Services System, the Director has already assumed responsibility for maintenance, equipment, administrative and liaison costs and for new works under £100,000. It would not be feasible for him to assume responsibility for specialised building projects valued at over £100,000 as was implied by the figures quoted in the Scrutiny officer's recommendation since projects of this magnitude require consideration at departmental level with competing projects. Nonetheless, the saving of £ $\frac{1}{2}$ million (at 1980/81 prices) that the Scrutiny officer foresaw as possible with the transfer of these responsibilities to the Director has been more than achieved in the current year.

7. Savings have also been achieved by reducing stock holdings, simplifying procedures and cutting staff in the CVL stores by 6. The messenger service has been cut by 2 $\frac{1}{2}$ posts and, on telecommunications, a first-year saving of £2,700 (including $\frac{1}{2}$ Telephonist post) has been achieved with annual savings thereafter of £4,900, somewhat larger than the Scrutiny officer's assessment of what was possible.

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

Brief Description of R&D Establishments

1. CENTRAL VETERINARY LABORATORY

Main Features: Total Cost 1983/4 £14.2 m (1981/2 £14.6 m)
Manpower 712½ (1/4/81 804)
Main site at Weybridge 33 acres, plus
outlying farms, totalling approximately
454 acres. Outstations at Reading and
Lasswade, near Edinburgh.

The Central Veterinary Laboratory supports Government policy on animal health through research, development and testing directed towards the diagnosis and control of animal diseases. The Laboratory's resources are applied about equally to R&D and statutory and service functions.

2. LABORATORIES OF DIRECTORATE OF FISHERIES RESEARCH

Main Features: Total Cost 1983/4 £11.4 m (1981/2 £9.2m)
Manpower 437 (1/4/81 484)
Main Laboratory site at Lowestoft 4 acres.
Outstationed laboratories at Burnham,
Weymouth and Conwy (totalling 3 acres)
and Store at Grimsby (1,6000 square feet).

The Directorate carries out necessary research and other scientific services to support Government policy on fisheries management in England and Wales, and to fulfill the Minister's responsibilities for regulation of waste disposal to the marine environment. This latter activity (in all but its regulatory aspects) is carried out for radio-active material on a national basis with Scottish and Welsh Offices and Channel Island States as additional customers. About 40% of resources are devoted to R&D.

3. TORRY RESEARCH STATION

Main Features: Total Cost 1983/4 £3.4 m (1981/2 £3.1 m)
Manpower 132½ (1/4/81 157)
Site at Aberdeen 2½ acres. Outstation at
Hull closed on 30 June 1984.

Torry Research Station investigates and gives advice on the handling and processing of fish. Resources are applied in the proportion 80 : 20 to R&D and advice respectively. The main customers are the fish industry: Government, official bodies, consumers and users of fish.

4. SLOUGH LABORATORY AND ASSOCIATED WORPLESDON AND TOLWORTH LABORATORIES

Main Features: Total Cost 1983/4 £5.8 m (1981/2 £5.1 m)
Manpower 232½ (1/4/81 268)
Main site at Slough 12½ acres, plus associated laboratories at Tolworth (2½ acres) and Worplesdon (4½ acres). Outstations at Norwich, Welshpool and Woodchester Park totalling 3 acres.

The Slough Laboratory and associated laboratories support Government policies on animal health, animal and crop production, the quality of stored agricultural products and wildlife conservation. The work is largely R&D in the field of vertebrate and invertebrate pest control.

5. HARPENDEN LABORATORY

Main Features: Total cost 1983/4 £2.3 m (1981/2 £2.3 m)
Manpower 128½ (1/4/81 128½)
Site totalling 5 acres at Harpenden.

The Harpenden Laboratory is concerned with plant health and the control of pests and diseases in growing crops. This involves work on alien and domestic plant pests and diseases and on health standards for planting material; surveys of pest and disease incidents and damage; and the registration of pesticides, surveys of their use and monitoring of pesticide residues. The latter work includes development of analytical techniques for pesticides and assessments of operator risk. About 40% of the Laboratory's resources are devoted to R&D.

6. FOOD SCIENCE LABORATORY

Main Features: Total cost 1983/4 £1.2 m (1981/2 £1.1 m)
Manpower 51½ (1/4/81 56)
Three Laboratories, one at Romney Street,
London and two in Norwich (total area
22,500 square feet).

The Food Science Laboratory undertakes research and surveillance work on food matters, primarily in the field of food safety, in support of Government policy in relation to the food industry and the safety of food. The Laboratory's resources are approximately equally divided between R&D and surveillance, the latter including technical management of the Strategic Food Stockpile.

7. EXPERIMENTAL HUSBANDRY FARMS AND EXPERIMENTAL HORTICULTURE STATIONS

Main Features: Total cost 1983/4 £13.8 m gross, £9.6 m net of realisations from sales of produce (1981/2 gross £12.0 m, net £8.3 m)
Manpower 636½ (1/4/81 699)
Twelve Experimental Husbandry Farms (including 2 in Wales) totalling 12,800 acres; and seven Experimental Horticulture Stations covering 1,200 acres.

These Experimental Husbandry Farms and Experimental Horticulture Stations generate new information on methods of agricultural and horticultural production by evaluating and developing the results of research and by undertaking detailed crop and animal production experiments. The resources are devoted almost exclusively to R&D work and supporting common services.

8. VETERINARY INVESTIGATION SERVICE

Main Features: Total cost 1983/4 £7.6 m (1981/2 £6.5 m)
Manpower 395 (1/4/81 425)
The laboratories of the Veterinary Investigation Service are located at 24 sites throughout England and Wales, 4 of which have paddocks up to 1 hectare for holding animals submitted by practising veterinary surgeons or for experimental R&D work.

The Veterinary Investigation Service provides laboratory support for the national disease eradication and control schemes carried out by the State Veterinary Service. It provides a diagnostic, advisory and consultancy service to farmers through practising veterinary surgeons, collects national disease surveillance data on which R&D and control strategies are based and promotes knowledge of the results of research on the control of animal disease among veterinary surgeons and farmers. Disease investigations usually in collaboration with the Central Veterinary Laboratory and ARC Institutes form part of the Ministry's R&D effort and account for about 10% of the resources used by the Veterinary Investigation Service.

9. RESEARCH UNITS IN THE LAND AND WATER SERVICE (FARM BUILDINGS GROUP AND FIELD DRAINAGE EXPERIMENTAL UNIT)

Main Features: Total cost 1983/4 £0.44 m (1981/2 £0.55 m)
Manpower 27 (1/4/81 28)

The Farm Buildings Group has a laboratory and workshop in a building at Reading University. The Field Drainage Experimental Unit has accommodation, including a laboratory, at Anstey Hall, Trumpington, Cambridge. The total area is 8,600 square feet.

The Farm Buildings Group undertakes applied research and development on buildings used for the production of animals and crops. The Field Drainage Experimental Unit conducts investigatory work on farm drainage. Both Units have a role in support of policy and generate new information to support the advisory role of LAWS. The resource of both units are deployed in the proportion 60 : 40 to R&D and promotion/servicing respectively.

TABLE 1 : ANNUAL SAVINGS IN R&D SUPPORT SERVICES

Col. 1		Col. 2		Col. 3		Col. 4		Col. 5		Col. 6	
<u>Savings Recommended</u>		<u>Savings Made at 1/4/84</u>		<u>Additional Savings Made at 1/4/84</u>		<u>Firm Savings In Prospect</u>		<u>Savings Under Cosnideration</u>		<u>Savings Unavailable/Rejected</u>	
£	Manpower	£	Manpower	£	Manpower	£	Manpower	£	Manpower	£	Manpower
1,423,600	85	790,475	43	51,800	8½	13,000	2	344,800	16	294,125	24
		(55%)	(50%)	(3.6%)	(10%)	(1%)	(2.3%)	(24%)	(19%)	(20%)	(29%)

TABLE 2 : ONCE-FOR-ALL SAVINGS IN R&D SUPPORT SERVICES

Col. 1		Col. 2		Col. 3		Col. 4		Col. 5		Col. 6	
<u>Savings Recommended</u>		<u>Savings Made at 1/4/84</u>		<u>Additional Savings Made at 1/4/84</u>		<u>Firm Savings in Prospect</u>		<u>Savings Under Consideration</u>		<u>Savings Unavailable/Rejected</u>	
£	Manpower	£	Manpower	£	Manpower	£	Manpower	£	Manpower	£	Manpower
3,906,000	-	437,000 (11.2%)	-	-	-	154,000 (4%)	-	3,300,000 (84.4%)	-	15,000 (0.4%)	-

THE MOD RESEARCH AND DEVELOPMENT ORGANISATION

Management and Organisation

1. The MOD Research and Development Organisation is headed by the Controller of Establishments Research and Nuclear (CERN) whose principal responsibilities include the direction of the defence research programme and the management of the research and development establishments.

2. The R & D Establishments were restructured in April 1984: the three Sea Systems Research Establishments (the Admiralty Marine Technology Establishment, Admiralty Surface Weapons Establishment and Admiralty Underwater Weapons Establishment) were combined to form a unified Admiralty Research Establishment; similarly, the three Land Systems Establishments (the Royal Armaments Research and Development Establishment, Military Vehicles Engineering Establishment and part of the Procurement Executive Rocket Motors Establishment) were combined, the new establishment being titled RARDE. The remaining sections of PERME were transferred to the Royal Ordnance Factory Organisation. The overall effect of these changes was to reduce the number of establishments from 11 to 7, and it is expected that they will produce significant improvements in management and the efficient deployment of resources.

3. The 7 establishments and their headquarters are as follows:

Aeroplane and Armament Experimental Establishment: Boscombe Down
Admiralty Research Establishment: Portsmouth
Atomic Weapons Research Establishment: Aldermaston
Chemical Defence Establishment: Porton Down
Royal Aircraft Establishment: Farnborough
Royal Armament Research and Development Establishment: Fort Halstead
Royal Signals and Radar Establishment: Malvern

Research and Development Activities

4. The MOD R & D organisation has responsibilities throughout the cycle of equipment procurement: the main effort is directed to ~~basic~~ research, but scientific and technical support is also provided in the formulation of systems concepts, and at subsequent stages such as development and post design work leading to the improvement of equipment already in service. This work covers a broad spectrum of activities, often in highly advanced "state of the art" technologies.

5. Following the recommendations of the Strathcona report in June 1980, substantial progress has been made in the devolution to industry of project work (design, development, project support and post design services), permitting the R & D Establishments to place greater emphasis on innovative long term and systems research. Defence research is divided into fourteen major fields, covering specific functional areas (eg guided weapons, military vehicles, electronics systems); each is under the control of a major field leader, who is either the Director of an Establishment or a senior member of his staff. In addition to the research work that they undertake themselves, the establishments manage extramural research programmes undertaken in industry and the universities.

Manpower Resources

6. The manpower resources consumed by the Defence R & D Establishments at April 1984 are shown below, compared with those which applied in April 1981, the baseline for the Payner Review of R & D support services.

	<u>April 1981</u>	<u>April 1984</u>
Manpower	25,771	23,303

7. The reduction in manpower reflects, in addition to the savings arising from the Rayner Review, the effects of other factors which have come into play during this period. These include organisational and managerial changes, and the implementation of the Strathcona report, leading to greater devolution to industry and the increased use of contractors for the provision of domestic and technical support.

IMPLEMENTATION OF THE RAYNER REVIEW IN MOD

1. The Departmental studies in MOD were undertaken in 1981 and covered seven major support areas: transport; reprographics; stores; messengers; aircraft servicing; secretaries departments; (by Dr Miles), and, in a slightly later timescale, workshops (by Mr Evans). The reports included a large number of detailed recommendations and estimates of the manpower savings which might be achieved. Action documents were prepared, and approved by MOD Ministers, showing these recommendations with a target date in each case.

2. Action has proceeded on the basis of these documents to implement the recommendations of the review both in MOD headquarters and at establishments. While action remains to be completed on some recommendations, and there are examples of over and under achievement within individual study areas, the total saving of 1098 employees proposed by the MOD reports has been achieved at 1 April 1984, and some additional savings have been made. Details are shown in Annex D. The savings which have been made have been achieved partly by the use of the methods recommended in the reports, partly by adaptations of these recommendations and partly by other means (such as, for example, organisational changes). Thus, Annex D reflects the total reductions in strengths in the relevant support areas between April 1981 and April 1984. It is possible to state that the Rayner review has given substantial additional impetus and direction to the economy drive in MOD.

3. Comments on the individual areas are as follows; with the proposed staff savings shown in brackets:

a. Transport (80). These recommendations are principally concerned with the scope for making greater use of commercial hire vehicles in preference to, for example, the use of private cars on duty (attracting payment of MMA) and of coaches for the movement of large numbers of personnel. These recommendations have been implemented at most establishments (for example, through the introduction of self-drive hire schemes), although two establishments are still considering detailed cost comparisons. The proposed staff savings have been fully achieved, and some additional savings made.

b. Reprographics(20). The total recommended savings have been achieved, principally through a change to more efficient electro static copiers, and a reduction in the number of dispersed photocopiers (but see (d.) below).

c. Stores (516). The Miles study of stores relied on extrapolation of the results obtained at the relatively few Establishments visited in order to produce the total saving for the R & D stores area as a whole. Because there were substantial doubts as to the validity of this method, especially when applied to Establishments fulfilling diverse roles and possessing distinctive features (such as their geographical layout, affecting in turn the requirement for dispersed stores

holdings) it was decided that the MOD Inspectorate of Establishments should undertake a series of inspections to examine stores departments in greater detail than had been possible in the Miles Study. Although this follow-up process is not yet complete (in the sense that actions remain to be undertaken on certain of these reports) it has become clear that the savings projected in the Miles report were optimistic and cannot be fully achieved. Nevertheless, a substantial and worthwhile saving of 254 posts has been achieved, and there is the prospect of further savings when the follow-up studies have been fully implemented.

d. Messengers (100). Savings have been achieved at almost all establishments through the reduction in the number of daily messengers' rounds, the adjustment of hours to provide a better match with local mail deliveries and other measures such as bulk mail drops. However, there is some shortfall against the proposed saving, to some extent at least because a reduction in the number of messengers is incompatible with the Miles report recommendation that the number of dispersed photocopiers should be reduced: where this has occurred, it has not been possible to cut messenger services to the full extent proposed because of the need to maintain an adequate link between dispersed locations and central reprographic pools.

e. Aircraft Servicing(110). The RAE and A & AEE have found it possible to contract out a substantial proportion of their aircraft servicing work, producing staff savings in excess of those proposed in the Miles report. Further contracting out is under consideration.

f. Secretaries Departments (152). The Miles report recommended that savings could be made by better control of practices and procedures, centralisation of tasks, more collocation and sharing of administrative staff, greater use of office technology, and the elimination of unnecessary tasks. Reviews were undertaken by all establishments and significant savings, in excess of those proposed, have been achieved. Further savings are in prospect through the further progressive implementation of these recommendations.

g. Workshops (120). The Evans report on workshops recommended that more work should be contracted out, that facilities should be rationalised between establishments and that some facilities should be closed. There has been a substantial saving, well in excess of that recommended, at the establishments visited. Further savings may be expected from the follow-up study of workshops at establishments not visited by the

Evans team: the report of this further study is expected shortly

4. In toto Annex D shows that in the support areas studied by Miles and Evans staff savings of 1495 have been made by 1 April 1984 (with about 100 further savings either firmly in prospect or under study), against savings proposed in the reports of 1098. Now that most Establishments have completed the majority of the actions they are required to take as a consequence of the Miles and Evans reports and have reported to CERN Headquarters, action is proceeding to examine the establishments' reports centrally with a view to determining whether any further savings might be achieved by "reading across" the action taken at one establishment to another. It is possible that a few further savings may result, but it should be borne in mind that this process is likely to be a lengthy one, and that functional and organisational differences render any direct comparison between estab-

RAYNER REVIEW - R&D SUPPORT SERVICES 1.4.84

AREA	1 SAVINGS PROPOSED		2 SAVINGS MADE		3 ADDITIONAL SAVINGS MADE		4 FIRM SAVINGS IN PROSPECT		5 SAVINGS/REJECTED UNOBTAINABLE		6 SAVINGS UNDER CONSIDERATION	
	£K	MANPOWER	£K	MANPOWER	£K	MANPOWER	£K	MANPOWER	£K	MANPOWER	£K	MANPOWER
TRANSPORT	850	80	850	80 100%	468	44 55%	43	4 5%				
REPROGRAPHICS	120	20	120	20 100%	216	36 180%	12	2 10%			72	12 60%
STORES	3160	516	1556	254 49%	-	-	214	35 7%			1390	227 44%
MESSENGERS	490	100	382	78 78%	-	-	29	6 6%	79	16 16%		
AIRCRAFT SERVICING	750	110	750	110 100%	443	65 59%	-	-				
SECRETARIES DEPARTMENTS	1300	152	1300	152 100%	1574	184 121%	68	8 5%			85	30 7%
WORKSHOPS	808	120	808	120 100%	2370	352 293%	101	15 12%			40	6 5%
TOTAL	7478	1098	5766	814 77%	5071	681 62%	467	70 6%	79	16 1%	1587	255 21%

NOTE: 1. All prices at 1981/2 levels.

2. Further saving made of £1.5M on inventory expenditure.

DEPARTMENT OF THE ENVIRONMENT

REVIEW OF R AND D SUPPORT SERVICES: IMPLEMENTATION

I. Implementation of Departmental Report

B. Implementation Progress Report: Building Research Establishment

1. The figures in the Table and quoted below are annual savings using 1981/82 and 1 April 1981 baselines and price levels to provide consistency with the original report. These annual savings are net of costs of contracting out work to the private sector, but do not allow for once-for-all costs of actions. The main contribution to these is likely to be the cost of buildings to accommodate PRL staff at Garston (see 3 below). There have been changes in demand for support services since the Rayner Review due to reactions to and changes in the Research Programme. It is difficult therefore to make precise comparisons and this must throw considerable doubt on the validity of the exercise as the original baseline recedes further. Progress in the implementation under each of the main sources of savings identified pp26, 27, Annex 1 of Lord Rayner's report is as follows.

2. Unrealistic charges

BRE accepted that a wider range of its Advisory work should be charged for and new procedures have been implemented to ensure this. During 1983/84 income from the Advisory Service increased by £94k to a level of £244k and the target income for 1984/85 has been set at £272k, bringing it to the level suggested by the Review. A scheme under which BRE publications (with the exception of promotional material) will be sold rather than, in part, distributed free has been agreed within the Department and is now being discussed with Treasury. The scheme envisages greater responsibility passing to BRE for the administration of a feasible subscription scheme for BRE leaflet output with HMSO retained as publisher of books. The scheme is planned to start on 1 October and it is projected that, after 3 years income and expenditure will be in balance at ca £363k (Review figure £315k). Responses to the more straightforward Advisory Service enquiries will be made in terms of sales of publications.

3. Waste of Land and Buildings

Detailed design work is now in hand on the accommodation to accommodate PRL research at Garston, it having been decided to proceed with the move although the costs estimated in a detailed feasibility study of accommodation requirements (mainly specialised laboratory facilities) are much higher than estimated in the Review (Building work £3.3M + VAT, other transfer costs £1.1M). Transfer is planned over the first half of 1987. With savings of 19 support posts overall savings of ca £350k p.a. have been confirmed and substantial 'management' benefits from closer integration of the research programme are envisaged. The proposed Maintenance Economy Review has been completed (see below). This has indicated the possibility of making greater use of accommodation at FRS. Further studies of this and of the best use of sites at Cardington are in hand.

4. Too many services in-house

Cleaning services were contracted out in March 1983 yielding a saving during 1983/84 of £94k. Contracting out of site security began March 1984 with an estimated net annual saving of £80k. The Rayner Review also recommended that 'feasible' work should be contracted out from the engineering workshops. The Departmental response considered that the estimate of savings were excessive and BRE were instructed to carry out a detailed study. It has been concluded that contracting out to replace natural wastage of staff, but avoiding redundancy payments, is an appropriate economic and operational strategy for a limited number of service functions. These functions are different from those proposed in Rayner Review but, in the longer term, similar staff savings (bearing in mind the change in workload) are likely to be made. Savings of accommodation for use, after refurbishment, by PRL, have been made as a result of rationalisation rather than contracting out from engineering workshops.

5. Over provision of services

The recommended savings and in some cases more, have been achieved by centralisation and rationalisation of Typing, Personnel, Finances, Stores and Library Services. Natural wastage has allowed this to be carried out without any redundancy. The level of service has been reduced to a level which is considered to be the viable minimum.

6. Maintenance and running costs

The Review considered that BRE (and particularly BRS) maintenance and running costs are excessive and recommended a possible saving of £124k p.a., and proposed a Maintenance Economy Review (MER). This has demonstrated that current maintenance and running costs are reasonable compared with a wide range of similar research establishments. The Rayner target savings are therefore unavailable. There is no evidence that the transfer of a small proportion of maintenance costs into BRE's responsibility has resulted in significant savings.

7. Other recommendations

These fall broadly under 4 sub-headings

- (a) Project costing - a full project costing/management accounting scheme has been introduced, within which all significant service and support costs are allocated to projects and cost centre financial management is improved.
- (b) Procedures - it was recommended that procedures related to purchasing, staff management, approval of publications, purchase of computers, financial control be streamlined. The situation is kept under review, only minor changes have been made to date in particular the possibilities of virement have been clarified. A wider range of PSA services is now paid for direct under PRS. Consideration is being given to BRE being given responsibility wider than the norm. (A proposal reheated in the MER.)

- (c) Organisation of Services - the senior management of services has been changed with economy. The organisational structure spelled out in the departmental response is now being implemented and, as agreed, a study of the project engineering section at TRRL has been made.
- (d) Service efficiency - recommendations have been followed. The Typing Pool has been included in a study of the need for word processing facilities, and word processors are to be introduced shortly at all major stations. Some further staff savings may be possible as a result.

8. Savings under consideration

The possibility of hiring the Lecture Theatre to outside bodies remains, though, in the light of the limited associated services in comparison with conference centres and hotels, it is considered somewhat remote. The studies of accommodation at FRS and Cardington, arising as a result of the MER may indicate savings, previously not mentioned, to be achieved.

BRE INFORMATION UNDER ITEM IA OF IMPLEMENTATION OF DEPARTMENTAL
REPORT

	£
1. BRE Gross Cost 1983/84	13,441,315*
Appropriations in Aid	2,642,834
BRE Net Cost	10,798,481

Expenditure by DOE (provision of buildings, works, Services) and by HMSO (printing, stationery) estimated at between £2M and £2.5M.

2. Total BRE staff in post 1 April 1984 was 788½; (627 NI plus 161½ I).

3. Total areas of land and buildings on BRE sites at BRS Garston FRS Borehamwood, PRL Princes Risborough, and Scottish Laboratory East Kilbride are

Land	-	121 acres
Buildings	-	85,500 sq metres

*It should be noted that the expenditure figures remain provisional and may be subject to small adjustments.

TABLE: SAVINGS IN R & D SUPPORT SERVICES

Col. 1		Col. 2		Col. 3		Col. 4		Col. 5		Col. 6	
Savings Recommended		Savings Made at 1/4/84		Additional Savings Made at 1/4/84		Firm Savings in Prospect		Savings Under Consideration		Savings Unavailable/Rejected	
£	Manpower	£	Manpower	£	Manpower	£	Manpower	£	Manpower	£	Manpower
1.7M	116										
Firm savings 81/82		(28%)	(59%)	(14%)	(29%)	(52%)	(37%)	(1.4%)		(21.5%)	(13%)
82/83 under or for immediate consideration in Departmental response were											
350k	69½	469	68½	245k	33½	878k	43	25k		365k	15½

REVIEW OF R & D SUPPORT SERVICES:
IMPLEMENTATION IN THE DEPARTMENT OF TRADE AND INDUSTRY

PROGRESS REPORT TO THE MPO

Activities of DTI Research Establishments

The Department of Trade and Industry has four Research Establishments: the National Physical Laboratory (NPL) at Teddington, Warren Spring Laboratory (WSL) at Stevenage the National Engineering Laboratory (NEL) at East Kilbride and the Laboratory of the Government Chemist (LGC) in London.

2. NPL is the UK National Standards Laboratory. It develops and disseminates the metrological standards on which all the measurements of Industry, Commerce and Government ultimately depend. It also has programmes in the key fields of Engineering Materials and Information Technology. It also pursues research and promotes the uptake of these technologies by UK industry. WSL conducts research in atmospheric pollution and marine pollution, largely for other Departments, and into material procurement and recycling technology, bulk materials, handling and control, largely for the process industries. NEL carries out research, development, design consultancy and testing in most branches of mechanical engineering. LGC provides a comprehensive analytical service to government Departments, public institutions, local authorities and official international organisations, and carries out certain statutory function.

3. Comparative data of resources deployed at the establishments are annexed, and summarised below:

	Staff in post		Net running costs (£000)		
	1.4.81	1.4.84	1981/82 (no PRS charged)	1983/84 excluding PRS	1983/84 including PRS
All establishments	2,411½	2,141½	£22,714	£25,957	£34,105

Over three years, staff have been reduced by 11.2%; and, excluding the property repayment system charge in 1983/84, running costs increased by 14.3% between 1981/82 and 1983/84.

Summary of Savings Achieved

4. The attached table sets out the savings achieved and those in prospect which flow directly or indirectly from implementation of the central and Departmental reports. Although only two REs were subject to scrutiny (NPL and WSL) the conclusions were applied to the other two REs. The table shows that the savings achieved and in prospect are larger than the practicable amount of savings identified, both in terms of expenditure and manpower as the following summary shows:

	<u>£000 pa</u>	<u>Staff</u>
Savings recommended	1400	90
Less unavailable/rejected	<u>648</u>	<u>21</u>
	<u>752</u>	<u>69</u>
Recommended savings made	336	65½
Additional savings made	275	60½
Firm savings in prospect	<u>548</u>	<u>2½</u>
Total savings	<u>1159</u>	<u>128½</u>
Savings under considerable	60	6½

Accommodation

5. The Rayner review target of £638,000 was drawn from anticipated savings at the National Physical Laboratory. Of that sum £385,000 is a firm saving in prospect because savings will eventually accrue as space is released to other users at the Teddington site. However the timing of these savings depends primarily on the PSA being able to devote adequate resources to NPL's smaller building projects. The remaining £250,000 was, however, incorrectly identified because it referred to an area not occupied by NPL: it has therefore been counted in the table as "savings unavailable".

Overprovision of Services/Too Much Bureaucracy

6. Significant savings in finance and manpower have been achieved in this area in all REs but particularly at NPL where the number of messenger posts has been reduced. Certain other savings at NPL have however proved to be unavailable: an investigation carried out by the Department's management services team showed that only a smaller reduction in staff than that recommended in the review was practicable. Nonetheless, staff inspection with O & M support work later this year will review the position.

7. Savings from computerisation have not been attributed to the report, largely because it has been overtaken by an extensive computerisation programme - the development of a Research Establishments Management Information System (REMIS) - which will cover existing procedures such as inventory control: it is expected to be operational by mid 1985 (see para 16).

Too many Services In-House

8. Savings in manpower and costs have also been made with contracting out services wherever this has been feasible. At NPL for example, security and cleaning services have been contracted out; in addition photographic and workshop activities have been put on a 'bought-in' basis where appropriate. Cleaning

at WSL have been contracted out. Cleaning at NEL also been contracted out, although the security services have been retained in-house on the advice of the MPO. Reviews of engineering services at NPL and NEL will be undertaken this year as part of the Departmental staff inspection and O & M programme in a joint DTI/MPO study, although savings in the workshops have already been made.

9. Paragraphs 10 to 16 sets out the further efficiency work being carried out in REs.

Related Work Programme in REs during 1984

10. There is a considerable amount of work planned, or in progress at REs which will contribute further to the efficiency of the REs which in some measure was the objective of the Departmental report on NPL and WSL Support Services.

11. **Staff inspections.** Partial staff inspections of NEL and NPL, with O & M involvement, are to be undertaken, beginning at NEL in June 1984, with the NPL inspection following. The inspections will concentrate upon the support services within the organisations and upon posts with responsibility for management of staff and resources. The objective is to ensure that these parts of the Laboratories' work are carried out with maximum cost-effectiveness, applying normal staff inspection criteria. The inspection will provide an opportunity to monitor the effect of implementation of recommendations in Lord Rayner's Review.

12. **Further O & M Work.** Following Management Services Reviews of Messengers and the Divisional General Offices at NPL which were undertaken as a consequence of the Darnbrough Report, and in addition to O & M involvement in the staff inspections described above, further work has been and will be undertaken by the O & M Unit. An O & M team undertook a review of inventory control in Autumn 1983 at NPL and extended this work to the remaining Research Establishments. The conclusions of the review were endorsed by the MPO and the Department's Internal Auditors, and the Department's Accounts Branch are issuing a revised Accounting Memorandum. Some of the report's recommendations have already been implemented throughout the Research Establishments, and the rest will follow upon the issue of the Accounting Memorandum.

13. A member of the O & M Unit working as part of the computer system design team is about to start work on the analysis and design of clerical procedures for a common management information system for all four Research Establishments (see below).

14. In addition to working with the staff inspectors at NEL and NPL, an O & M assignment officer will take part with two assignment officers from the MPO in a review of engineering services. The reviews will be produced as individual reports on NEL and NPL but will also contribute to a wider review aimed at the formulation of Management Guidelines to be published by MPO in eighteen months time.

15. During the course of work at NPL and NEL the O & M assignment officer will pay particular attention to administrative checking procedures with a view to eliminating unnecessary checking. The results of any findings will be "read across" to the other two establishments.

Research Establishments Management Information System (REMIS)

16. A computer study has been started with the objective of introducing an Administrative computerised project management and financial management system to serve the needs of the Research Establishments. A detailed review of users' requirements has been completed and progress is being made. A Detailed User Specification (DUS) has been agreed and work on the design stage has started. The development stage will follow and implementation is planned for mid-1985. At WSL the question of using a computer for stores management has been subsumed in the examination of the administrative computer needs in this REMIS project. Potential savings in the Darnbrough Report are therefore being pursued in the context of this wider approach.

MSM 2
14 June 1984

RUNNING COSTS IN 1983/84

Note: 1. PRS charges were not payable in 1981/2 and 1983/84 forecast figures have been shown both with and without PRS.

2. DoE Capital Vote, Major Works expenditure data is unavailable for 1983/84. It has therefore been excluded from 1981/82 data:

EXPENDITURE

	£K (1983/84 Forecast Outturn)		
	(a) including PRS	(b) excluding PRS	£K (1981/82)
	NPL	22,617	19,457
WSL	6,308	5,333	4,800
NEL	14,943	11,929	11,185
LGC	6,462	5,463	5,196
	<u>50,330</u>	<u>42,182</u>	<u>38,003</u>

INCOME

	£K (1983/84 Forecast Outturn)		£K (1981/82)
	(a) including PRS	(b) excluding PRS	
NPL	3,114		2,149
WSL	3,726		3,959
NEL	3,640		3,210
LGC	5,683		5,971
	<u>16,163</u>		<u>15,289</u>

NET RUNNING COSTS

	£K (1983/84 Forecast Outturn)		£K (1981/82)
	(a) including PRS	(b) excluding PRS	
	NPL	19,503	16,343
WSL	2,582	1,607	841
NEL	11,303	8,289	7,975
LGC	779	- 220	- 775
	<u>34,167</u>	<u>26,019</u>	<u>22,714</u>

The number of staff in post at 1 April 1984 was:

	1.4.84	1.4.81
NPL	831	925
WSL	310	356.5
NEL	651.5	740
LGC	349	390
	<hr/>	<hr/>
TOTAL	2141.5	2411.5

TABLE: SAVINGS IN R & D SUPPORT SERVICES

TABLE A

COL 1 SAVINGS RECOMMENDED IN SCRUTINY REPORT		COL 2 SCRUTINY SAVINGS MADE AT 1.4.84		COL 3 ADDITIONAL SAVINGS (including "read across") MADE AT 1.4.84		COL 4 FIRM SAVINGS IN PROSPECT (including "read across")		COL 5 SAVINGS UNDER CONSIDERATION (including "read across")		COL 6 SCRUTINY SAVINGS UNAVAILABLE/REJECTED	
£K pa	Manpower	£K pa	Manpower	£K pa	Manpower	£K pa	Manpower	£K pa	Manpower	£K pa	Manpower
1400	90	336 (24%)	65.5 (73%)	275 (20%)	60.5 (67%)	548 (39%)	2.5 (3%)	60 (4%)	6.5 (7%)	648 (46%)	21 (23%)

REVIEW OF R&D SUPPORT SERVICES: IMPLEMENTATION

I. IMPLEMENTATION OF DEPARTMENTAL REPORT

A. Introduction

ODA's Research Activities

Within the limits of its resources the Administration sponsors and supports a programme of research aimed at gathering new knowledge and evolving new techniques directly related to the needs of developing countries. The emphasis is on research likely to be of practical use in a reasonable period of time and special priority is given to R&D of direct relevance to the poorer sectors of the poorer countries. Expenditure on research development (R&D) during 1981/82 was £16m and for 1983/84 is estimated at £18.6m (1.7% of the cost of Britain's aid programme as a whole). R&D expenditure has three major components:-

i. Work funded from the research and development subhead of the Overseas Aid Vote. This is the source of grants for research projects carried out on a contract basis by individual researchers or teams, usually based on universities or similar institutions. Expenditure under this subhead in 1981/82 was £5m and is estimated at £5.2m for 1983/84.

ii. Support to international centres undertaking R&D on the problems of the developing countries. £2.9m was allocated for this purpose in 1981/82. The allocation was £4.0m in 1983/84.

iii. Support to British scientific establishments, including the Scientific Units of the ODA. The ODA contributes to the recurrent costs of over 30 centres in Britain which give scientific and technical help to the developing countries. In 1981/82 £7.2m of ODA money was spent by these centres on R&D. The comparable figure in 1983/84 is estimated as £9.4m.

2. In 1981/82 the ODA had two Scientific Units with a substantial R&D element. These were:-

i. The Tropical Products Institute (TPI) concerned with agricultural,

animal, fisheries and forest products at the harvest stage and after. It carried out R&D on the use, handling, processing, quality control, preservation and storage of harvested natural resources and their residues. Its expenditure for 1981/82 was £4.792m, of which 57% was for R&D.

ii. The Centre for Overseas Pest Research (COPR) carried out R&D in the control of insect pests. Its expenditure for 1981/82 was £2.384m of which 50% was for R&D.

Corresponding figures for 1983/84 for TDRI were £7.669m of which approximately 50% was for R&D.

ODA's in-house Research Establishments' Running Costs 1981/82 and 1982/83

Since the Review TPI and COPR have been amalgamated as the Tropical Development and Research Institute (TDRI). This amalgamation took place on 1 April 1983. For the purposes of this progress report the units are regarded as one. The 1981/82 financial baseline figures for the combined Units' running costs were shown in the departmental study report as £8.1m (TPI £6.0m; COPR £2.5m) based on a calculation of actual and notional figures in 1980/81. Those figures, in 1981 prices, have now been recalculated as £9.0m (TPI £6.0m; COPR £2.7m) as the 1981/82 total costs. The manpower figures for 1981/82 were stated as 417. Comparable figures for 1983/84 total running costs, actual and notional, and staff in post figures at 1 April 1984 are shown in the following table:-

	1981/82	1983/84	<u>£000 in 1981 prices</u> Percentage Reduction
Total running costs	<u>8,760</u>	<u>7,686</u>	12.3%
	1.4.81	1.4.84	
Departmental Manpower	417	371	11.0%

B. Implementation Progress Report

1. The Annex shows savings in Research Support Services at TDRI. The figures in column 2 of the table are the annual savings arising from the dropping

of support posts as recommended in the study (15.5) up to 1 April 1984 (£134,000) and savings in General and Administrative expenditure in 1983/84 (£401,000).

2. The figures in column 3 represent the annual savings from the dropping of an additional 32.5 support posts by 1.4.84. The figures in column 4 of the table are those firm manpower and other annual cost savings expected to be achieved in support areas by 1.4.86.

3. As to column 5, there are now only four recommendations (33, 35, 36 and 44) which are still under consideration. (32 have been implemented or are in the course of implementation). Recommendation 44 corresponds to Lord Rayner's Main Report recommendations 5 & 6 (internal delegation of financial responsibility). This is recognised to be highly desirable in principle but it has also to be recognised that the Director is currently integrating two Establishments; strengthening and amalgamating two financial management systems; and introducing a major organisational change with the commissioning of two-thirds of his total resources. Substantial line delegation must await a greater degree of stability than now exists.

4. Overall, the annual financial savings proposed (£475,000) can be compared with a net total of annual savings made or in prospect of £904,000. Compared with support manpower savings proposed of 23 posts, ODA is planning a reduction of at least 52 such posts by 1 April 1986.

5. The savings summarised in the table are those arising from recommendations which Lord Rayner's report classified as "Over-provision of services". Other important recommendations in the Departmental Study were those relating to the improvement of the units' costing systems so that a judgement could be made of the value of competing claims on aid funds. A new project costing system based on that agreed for the purposes of Part II of the Departmental Study has been adopted. The Director of the new Institute has been given his "charter" making clear his responsibility for managing his programme efficiently.

6. Lord Rayner's report's Annex 1 - ODA, mentioned further work being undertaken to compare the costs of scientific work at the units with those of outside organisations. This further study covered a relatively small sample of the work of the units and it recommended that a fundamental review of

the units was required. Such a review had meanwhile been set in hand and the conclusions of this were agreed in correspondence with Lord Rayner in August/September 1982 and, apart from a decision on relocation, are now being implemented. The two units have been amalgamated. The new unit's terms of reference require it to concentrate on those areas in which it has a comparative advantage in terms of experience, knowledge and cost-effectiveness. "Commissioning" has introduced a formal customer/contractor relationship and strengthened the project oriented approach. Two-thirds of the work has been commissioned for 1984/85. As for relocation a preliminary cost-benefit study shows a clear advantage in relocating outside London. PSA expects to complete a feasibility study in August 1984. This is analysing three possible sites, the work required at each, costs and timing.

TABLE: SAVINGS IN R & D SUPPORT SERVICES

Col. 1 Savings Recommended		Col. 2 Savings Made at 1.4.84		Col. 3 Additional Savings Made at 1.4.84		Col. 3 Firm Savings in Prospect		Col. 3 Savings Under Consideration		Col. 3 Savings Unavailable/Rejected	
£	Manpower	£	Manpower	£	Manpower	£	Manpower	£	Manpower	£	Manpower
475000	23	535000 (113%)	15.5 (67%)	275000 (58%)	32.5 (141%)	Recommended 72000	2	56000 (12%)	5.5 (24%)	3000 (0.6%)	0 (0%)
						Additional 22000	2				
						Total 94000	4				
						(20%)	(17%)				

DEPARTMENT OF TRANSPORT

1. Implementation of Departmental Report

A. Introduction

The research programme of the Department of Transport comprehends four main headings: Highways, Safety, Transport Systems and, since last summer, Shipping and Aviation. This last category falls outside the scope of this paper, since it was in no way included in the Rayner review.

Highways - Research in this area supports the Government's expenditure on the design, construction and maintenance of roads and bridges, and on means of helping traffic flow more smoothly.

Safety - As human error contributes to more than 90% of road accidents, a major object of research in this area is to identify effective ways of persuading people to behave more safely when using the roads, whether as drivers, passengers or pedestrians.

Transport Systems - Research in this area investigates the planning and operation of the road, rail and ports systems, and their effects on people and their environment. This area includes substantial joint programmes with British Railways (£4,519K) and London Transport (£2,800K).

The total gross expenditure on the Department's R & D programme in 1983/84 was £30,670K. Staff in post at TRRL (including its Scottish branch in East Lothian) was 805½ on 1 April 1981; this figure fell to 728 by 1 April 1982, to 693 at 1 April 1983 and to 627½ at 1 April 1984.

B. IMPLEMENTATION NARRATIVE FOR TRRL

1. **Waste of Land and Buildings:** Steady progress on vacating buildings on the main site at Crowthorne and storage at Culham has been maintained and savings of £371K have already been made. Savings of £37K are firmly in prospect for 1984/85: £100K is unobtainable due to an underestimation by the Study Team of costs of re-accommodation of staff, and provision of specialist research facilities.

2. **Too Many Services In-House:** Savings of £171K, 23 posts, have already been made. A further savings of 13 posts (£38K) is in prospect, arising mainly from privatisation of Security Services.

Now that Ministers have approved pricing of TRRL publications to ensure their full cost recovery, savings of £150K are in prospect in 1984/85 and some £300K in each subsequent year. Three extra staff are required to administer this new policy, but their costs will be fully recovered. This supercedes the Study Team's proposals for a quarterly Journal of Road Research (which is impractical and unsuitable for dissemination of the output from the Department's Research Programme) and the associated savings of £268K.

Savings of 17 posts on Publications work is not possible (over-estimate by Study Team); pending resolution with MPO of the extent to which workshops services can be cost-effectively bought in 16 posts are in suspense. But overall complement at TRRL has been reduced to such an extent since the Rayner Review in 1981, that this latter figure may be lower.

3. **Over-Provision of Services:** Savings of £150K and 29 posts have already been made; further savings of £39K and 3½ posts are in prospect for 1984/85. Additional savings of £50K have already been made by reducing the amount of cleaning required under contract.

Savings of £399K and 18½ posts proposed by the Study Team are not possible because:

a. The Study Team estimated an income of £270K from Computer Services by hiring out surplus capacity. This was an over-estimate; computer capacity is fully utilised, resulting in a notional income of £100K to DTp. £170K of the Study Teams proposed savings is thus unobtainable.

b. Savings of £5K on returns from released office space and £5K from the removal of CCTA levies are under consideration, but the latter cannot be achieved without a change in Civil Service procedure.

c. Suggestions for saving £32K and 4 posts in Finance Section are rejected because the Study Team did not recognise the legal and financial complexities involved in many R&D contracts; procedures used at TRRL are those operated throughout the Service in the interests of public accountability.

d. Savings of £135K (14½ posts) distributed among Safety and Accommodation, Photographic, Stores, Messengers and Gardeners are rejected on the basis of incorrect assumptions about work load, the extent to which services can be rationalised and the higher cost of buying in such services.

4. The savings unobtainable or rejected (£767K and 51½ posts) are offset to a large extent by additional savings and firm savings in prospect (£598K and 30 posts) mainly outside those envisaged by the Study Team. All savings are broadly net of implementation costs.

TRRL

June 1984

TABLE: SAVINGS IN R & D SUPPORT SERVICES

Col. 1		Col. 2		Col. 3		Col. 4		Col. 5		Col. 6	
Savings Recommended		Savings Made at 1/4/84		Additional Savings Made at 1/4/84		Firm Savings in Prospect		Savings Under Consideration		Savings Unavailable/Rejected	
£k	Manpower	£k	Manpower	£k	Manpower	£k	Manpower	£k	Manpower	£k	Manpower
1742	106	891	53	146	13½	452	17	10	16*	767	51½
		(51%)	(50%)	(8%)	(13%)	(26%)	(16%)	(0.6%)	(15%)	(44%)	(49%)

With minor exceptions, all figures above are annual savings as from 1.4.84. Savings achieved each year prior to that were, by definition, lower but increasing each year as Rayner recommendations were implemented.

* only 14
in post at
1/6/84
reducing to
11.

SECTION II IMPLEMENTATION OF LORD RAYNER'S CENTRAL REPORT

8. Action taken by MAFF to implement the recommendations in Section 4 of Lord Rayner's Report is as follows:-

Recommendation 2

The arrangements for monitoring research and development have been reviewed and amended, in particular to provide for systematic submissions to the Minister himself about the progress and results of the cycles of research reviews. The arrangements co-ordinate all agricultural, food and fish research and development commissioned by Government whether this is carried out in MAFF, DAFFS OR ARC establishments or elsewhere. Following the report of the House of Commons Agriculture Committee, 1982/83 Session, on Organisation and Financing of Agricultural Research and Development, the Government has announced that it is establishing a new Priorities Board which will advise, United Kingdom-wide, the four Agriculture Departments and the Agricultural and Food Research Council, on research and development priorities in agriculture and food and on the allocation of their research budgets. The Board will be small, with an independent chairman and a majority of independent members, but including the Minister's Chief Scientific Adviser, the Secretary of the AFRC and the DAFFS Scientific Adviser. The DANI and WOAD will appoint assessors to the Board. There will thus be a functional link between the Board and the bodies managing the research programmes. The Commodity Committees, which currently give independent industry advice in relation to our four-yearly reviews of each sector of agriculture and food R&D, will continue their work. The Ministry's commissioning arrangements with the AFRC have also been revised. Programmes in specific areas will be commissioned by the Ministry and financially managed between the Ministry and AFRC headquarters whilst on the detailed progress of research, Ministry scientists will deal directly with the scientists concerned at the institutes, enabling the institutes to keep in touch with the Ministry about the progress of work and any need for change.

Recommendations 3 and 5-8

The substance of these recommendations is being secured by work within MAFF under the FMI. Heads of Scientific Establishments will have clearly stated objectives, the achievement of which will be delegated to them together with the necessary resources. Objectives set and resources committed will be drawn together and reported to Ministers through the MINIM system. A fully developed management information system will permit accurate disaggregation of an establishment's budget, though close attention will need to be paid to cost effectiveness in carrying out such disaggregation.

Recommendation 4

This recommendation has been accepted by MAFF. There will be

a clearer identification of objectives as a direct consequence of the follow up work to the FMI: this will facilitate closer surveillance of an establishment's activities. Audit staff (and other central management staff such as staff inspectors) have a role in this surveillance. In addition the Chief Scientists Group carry out regular scientific audits of the work at MAFF's various research establishments.

Recommendation 9 and 10

All heads of scientific establishments have designated a senior manager to be responsible for co-ordinating and clarifying accommodation requirements to PSA.

MINISTRY OF AGRICULTURE, FISHERIES AND
FOOD

JUNE 1984

IMPLEMENTATION OF LORD RAYNER'S CENTRAL REPORT

1. Action has been taken by the MOD on the 12 recommendations in Lord Rayner's central report to the Prime Minister as follows.

Recommendation 1. Implemented: Action documents were prepared and approved by MOD Ministers.

Recommendation 2. Implemented. There are formal procedures to enable Ministers to consider and evaluate the progress of the more important Defence R & D projects. These procedures are based on stage by stage approvals - successively feasibility study, project definition and full development - and no project proceeds until progress so far has been evaluated and the next stage specifically authorised. If in addition the project breaches set time and/or cost tolerances, it must be re-submitted for Ministerial approval. A review of these arrangements in 1981 confirmed that they were satisfactory in principle though a number of detailed proposals for improvements have subsequently been implemented. Additionally arrangements are being made for an annual report to Ministers on the overall research programme and the work of the Establishments.

Recommendations 3 and 5. Implemented. Charters have been issued to Directors (and also Secretaries) of research and development establishments.

Recommendation 4. Implemented. Appropriate instructions have been issued to the Department's internal audit organisation.

Recommendations 6, 7 and 8. Not yet implemented. All are subject to the introduction in MOD of executive responsibility budgets. Following a trial at one R & D Establishment, ERB's will be introduced at the remainder from 1 April 1985 (it is possible that one or two establishments may not be able to introduce responsibility budgets until April 1986). It is anticipated that the full introduction of responsibility budgets at CERN establishments will meet the requirements of all three recommendations.

Recommendation 9. Implemented. Establishment Directors have been instructed to ensure that overall responsibility for lands and accommodation matters is allocated to an individual at about Board of Management level (it is accepted that detailed day-to-day management will need to be delegated).

Recommendation 10. Not yet implemented. Trials are in progress elsewhere in the Ministry of Defence in which Commanding Officers have been given direct responsibility for minor works under £1K. The outcome of these trials (which will be completed in October 1984) will determine whether this concept is introduced at R & D establishments.

II IMPLEMENTATION OF LORD RAYNER'S CENTRAL REPORT

The actions taken by the Department to implement the recommendation of Lord Rayner's central report are outlined below.

RECOMMENDATION 2

At present the research programme is submitted to Ministers annually for approval. A statement of technical and financial progress to date is included. In addition, a general statement of results together with a financial summary is published in the annual research and development report, which is approved by Ministers. A further aid to monitoring is that programme formulation has been dispersed to individual customer directorates and research results are directly available to these directorates.

Procedures for assisting value for money from research have been considered in the light of a study commissioned by the Permanent Secretary. Two main measures will be adopted; firstly a research management information system covering all DOE research will be set up, which will enable up-to-date reports on technical and financial progress to be available for Ministers as required; secondly, procedures are being established for conducting regular research audits of selected groups of research projects over brief periods (2-4 months) spanning such aspects as the adequacy of research management, the usefulness of the results and the value-for-money obtained.

RECOMMENDATION 3

Following detailed consultations between the Director BRE, and customer and finance divisions, a charter has been issued. A copy is attached.

RECOMMENDATION 4

For BRE this is largely done already through Ministers' approval of the programme each year. Control will be strengthened through the Director's Charter, which sets out the scope and objective explicitly, and through the requirement that the Director should give Ministers an annual report.

RECOMMENDATION 5

The charter places this responsibility firmly on the Directors.

RECOMMENDATION 6

During 1982/83 a new system of project/management accounting was introduced within BRE. This was fully operational, and computerised, for 1983/84. The initial objective is to provide a much more detailed and comprehensive allocation of costs to projects or cost centres, improved budgeting, greater cost consciousness, and wider responsibility to line managers for the various elements of project costs. This will provide the information necessary for a move to full recharging, the mechanisms and procedures for which are to be explored during this year.

RECOMMENDATION 7

The new MAXIS system of cost centre budgeting and control came into operation in DOE(C) on 1 April 1983. In view of the development of BRE's own system of cost control (c.f recommendation 6) BRE will form a single large cost centre for the purposes of MAXIS, more detailed information for internal control purposes being provided by BRE's system.

RECOMMENDATION 8

BRE already has substantial financial delegations, and the Director is broadly satisfied with the position. The Director's Charter sets out the extent of the Director's scope to vire between expenditure categories.

RECOMMEDNATION 9

The Deputy Director BRE has been designated.

D. Watson

CHARTER FOR DIRECTOR, BRE

These instructions are given to you in your capacity as Director of the Building Research Establishment. The present scope, objectives and principal activities of the Establishment are attached at Annex 1 and will be subject to review from time to time.

You are responsible for all the work undertaken by the Establishment. You must ensure that this work is within the scope of BRE as defined in these instructions; that it is executed to appropriate professional standards; and that full regard is paid to financial propriety, economy and efficiency. You must also ensure that BRE's research and technical advisory capacity is maintained. You must take full account of specific instructions which you may receive from time to time from Ministers, the Chief Scientist or myself. You must take account of the advice provided by such bodies as Ministers may appoint for that purpose.

For each financial year, you should consult and agree with the Principal Finance Officer and the Principal Establishments Officer a financial and manpower budget for the Establishment consistent with the appropriate public expenditure provision and with the allocation in the Department's manpower budgets. It will then be your responsibility to manage these resources within the agreed budget so as to carry out the Establishment's programme in accordance with paragraph 2. You will be directly and personally accountable to me as Accounting Officer for the manner in which you discharge this responsibility.

You should formulate annually a programme which covers the next year in detail and indicates the implication of that proposed activity for the succeeding two years. This will be subject to approval by Ministers. It should cover all the research work to be carried out by the Establishment, but should distinguish:

- a. work proposed to be carried out on behalf of customer commands in the Department of the Environment including the PSA;
- b. work proposed to be carried out on behalf of other government departments;
- c. work proposed to be carried out on behalf of other customers (whether non-Exchequer bodies or private sector bodies or individuals), and the prospects for additional work on a short-term, opportunity basis;

In addition, the programme may include:

- a. work proposed in order to maintain the Establishment's capability to meet its objectives and to enable it to respond to future customer requirements;
- b. work of a general advisory nature, and work in the nature of promotion or dissemination of government policies or research results.

Work in the last two categories will normally be agreed with and carried out on behalf of customer commands in the Department of the Environment including the PSA, and the arrangements under which such work is planned will be a matter for direct negotiation. It will, however, be open to you to specify unilaterally in your annual programme, should you deem it necessary, a certain amount of work in these categories which you consider to be essential to maintain BRE's research and technical advisory capacity.

You should indicate the proposed distribution of expenditure and of staff effort between the various categories of work, and distinguish between work in progress and proposals for new work. For work in progress the programme should indicate technical and financial progress to date.

In formulating the programme it should be assumed that all work for other government departments and outside customers must be carried out under contracts providing for full cost recovery, and that advisory and information services should likewise be subject to full cost recovery except where this requirement has specifically been waived.

Specific provision for the net expenditure (ie gross expenditure less receipts from other government departments and outside customers) of the Establishment is made within the Department's programmes in the Public Expenditure Survey. The Department's manpower budget likewise makes specific provision for the staffing of the Establishment. The Establishment's research programme should be formulated so as to be consistent with these provisions, and the allocation of resources to the agreed research programmes should be agreed with the relevant customers. It should be your aim to move to a situation where all research projects, whether for DOE, other government departments or other customers should be charged at their full cost, taking into account the appropriate proportion of all relevant overheads.

Once the programme is approved, it will be your responsibility to carry it forward. You may make adjustments to methods, timescales and the detailed content of projects on your own authority in the interests of economy and efficiency, and in the light of availability of resources, but subject always to the following requirements:

- a. you should ensure the proper discharge of the Establishment's liabilities under contracts with outside customers and other government departments;
- b. you should consult DOE including PSA customers if and as soon as circumstances arise which are likely to justify or necessitate significant changes in the nature or timing of projects which they have sponsored;
- c. you may adjust the programme to admit minor additional contractual liabilities in relation to non-DOE/PSA customers, but only after assessing the effect on the programme for DOE and PSA customers, and obtaining their agreement where this would be significant. Ministerial approval must be obtained to the addition of major new commitments to outside customers in the course of the programme.
- d. you should not incorporate new DOE funded work (other than exploratory studies to test the feasibility of new approaches or to probe potential new fields) into the on-going programme without specific Ministerial approval;
- e. you should at all times keep customers informed as to the technical and financial progress of work that they are sponsoring.

These instructions, while setting out general principles, do not seek to regulate in detail all aspects of the Establishment's relationships with DOE customer commands. There will, for example, be considerable liaison in drawing up both customer and BRE programmes, and special arrangements may be agreed with individual customers. Such matters are for direct discussion between BRE and DOE customers, subject to Ministerial approvals where appropriate.

You should also consult with the Principal Finance Officer and the Principal Establishments Officer to ensure that financial and contractual procedures and personnel management policies within the Establishment accord with overall Departmental standards and that they are consistent with requirements laid down by the Treasury or the Management and Personnel Office and with agreements with the Trade Union Side, whether at National or Departmental level. Subject to this, the manner in which you exercise the responsibility conferred by paragraph 3 above is for you to decide and in order to enable you to exercise this responsibility effectively the financial delegations are set out in Annex 2.

You will in addition be responsible for ensuring that the Establishment's work is carried out with due regard to the need for efficiency, economy and the avoidance of waste, and for encouraging cost-consciousness in all your staff. For this purpose it will be essential that line managers are fully informed of the costs arising from their work and decisions, and are themselves responsible for controlling those costs. You should institute and maintain a management system based on the cost-centre approach in which clear lines of responsibility for financial control apply at all management levels both in research and support services.

You should appoint a senior manager with specific responsibility for ensuring that the Establishment's accommodation and land requirements are continuously reviewed and kept to a minimum.

You should make an annual report to me of the steps taken during the year to ensure the Establishment's efficiency and effectiveness. In particular, you should provide in respect of projects completed during each year, an account of how their duration, cost and achievement compared with what was estimated when they were approved, and how the results are being applied. Such reports should be in a form consistent with whatever arrangements are currently in force for monitoring the effectiveness and value for money of research projects.



George Moseley

28 November 1983

cc. PS/Mr Gow
Dr Holdgate
Mr Harrop
Mr Johnston
Mr Ennals
Mr McIndoe
Mr Jeanes
Mr Routh
Mr Crane
Miss Tindale
Mr Hopkins
Mr Robson
Miss Prest

INSTRUCTIONS FOR DIRECTOR BUILDING RESEARCH ESTABLISHMENT

SCOPE

1. BRE is a national centre for research into buildings and related fields, for the provision of technical advice based on that research, and for the interpretation and dissemination of information arising from that research.
2. The Principal areas of present research are:-
 - i. Studies of the regimes in which buildings, components, materials and associated systems for buildings must perform satisfactorily both in UK and appropriate overseas countries; the performance in use required; means of achieving, specifying, guaranteeing and maintaining that performance with particular reference to health and safety of people in and around buildings, conservation of energy and natural resources, and economy.
 - ii. The economies of and processes involved in the management of the construction activity including the prediction of needs and problems of supply of materials and other resources.
 - iii. The economics and statistics of, detection of and protection from fire in buildings; the behaviour of structures, assemblies and materials in fire and the resulting hazards.
 - iv. Impact of industrial chemicals upon the environment and development of means of control; geotechnical and material aspects of containment and disposal of radioactive waste.
 - v. Studies of the behaviour of the ground under loading conditions imposed by buildings, other structures and retained water; the performance required of earth structures and means of achieving, specifying, guaranteeing and maintaining that performance.
3. The scope of BRE will be subject to review from time to time.

OBJECTIVES

4. To provide a high quality research and technical advisory capability to act:
 - i. as a principal contractor to DOE for scientific research and technical advice on subjects for which that Department is responsible.
 - ii. when called upon, as collaborator and contributor to the development and execution of DOE policy;
 - iii. on repayment terms, as a contractor to other government departments and to the construction community generally for scientific research and technical advice;

in order to support improvements in the environment and encourage responsible innovation, development and improved performance by the construction and other relevant industries.

PRINCIPAL ACTIVITIES

5. The following lists describe broadly the main activities to be carried out at the BRE. It is not intended to be exhaustive, nor to be interpreted rigidly. The intention is to describe what are the prime activities of the Establishment, and to distinguish these from other activities which may be carried out for the BRE by other agencies.

In Pursuit of Objective i you should:

- a. contribute to the formulation of customer programmes to ensure that customers are well advised on the future possible problems and research opportunities in their fields, and on the resources required to meet their needs;
- b. undertake research programmes as agreed with the customers (including the management of extra-mural research);
- c. publish, whenever possible, the results in the scientific literature, and contribute to conferences etc so as to ensure that BRE's work is subject to peer scrutiny;
- d. respond to specific requests for advice when called upon;
- e. bring to the attention of relevant officials and Ministers, where appropriate, technical developments of importance, and make proposals for research in areas where no specific customer is established (ie in relation to emerging needs);
- f. keep fully aware of technological development in other countries where this may benefit UK;

In Pursuit of Objective-ii you should:

- a. contribute to the development of policy by attendance at committees, providing review papers etc;
- b. represent DOE policy as specified by policy directorates, as agreed;
- c. disseminate results of research by publications, films, exhibitions, patents, licensing etc;
- d. contribute to the development of British and International Standards through service on technical committees, and codes of Professional and Industrial Institutions and Associations;
- e. assist British Board of Agreement in providing advice, undertaking specific studies either on repayment or as agreed by appropriate customers;
- f. contribute through advice, providing lecturers, arranging occasional courses (on repayment terms) to the training and education of practitioners and the improvement of lecturers in the field.

In Pursuit of Objective iii you should:

- a. initiate and develop proposals for research for potential customers;

b. undertake research commissioned by OGD and private sector customers on the basis of agreed contracts;

c. provide advisory service to industry, local authorities and building owners and occupiers;

d. promote BRE expertise and services in UK and abroad as appropriate to the scale of activity agreed.

1983

Implementation of Lord Rayner's Central Report

Action taken to implement Lord Rayner's Central Report to the Prime Minister is set out below.

Recommendation 1

Implemented Action Documents for the two REs scrutinised, and for the two "read across" REs were approved by the Minister of State for Industry (Mr Baker) in October 1982.

Recommendation 2

Implemented Sir Peter Carey, the then Permanent Secretary, submitted a comprehensive review report to Ministers on 14 January 1983. The review, augmented by presentations by each RE, was accepted by the Minister of State for Industry.

Recommendations 3 and 5

Implementation in hand. This is a formalisation of existing practice and current management developments. Charter has now been agreed and was issued to Directors on 17 August. A copy is attached.

Recommendation 4

Implemented Existing practice.

Recommendation 6

Implemented The general principle is in practice in all REs. The REs charge customers economic costs based. For work of wider national benefit costs are attributed and controlled on the basis set out in the Rothschild Report: 'A framework for Government Research and Development' (1972).

Recommendation 7

Implemented Following a successful pilot study at LGC, all REs were designated as Responsibility Cost Centres from 1 April 1984.

Each Director is therefore responsible for operating his RE within agreed delegated manpower and financial budgets.

RECOMMENDATION 8

Implemented Existing practice within REs. In addition, selected parts of the R & D programme are examined by a headquarters Assessment Unit which reports to the relevant Requirements Board, thereby ensuring control over major blocks of budget. The Department has set up an Evaluation Working Group to consider, across all its activities, how evaluation work can be strengthened.

RECOMMENDATION 9

Implemented Existing Practice. Each RE already has a designated Senior Manager responsible for accommodation.

THE DEPARTMENT OF TRADE AND INDUSTRY
RESEARCH ESTABLISHMENTS' DIRECTORS' CHARTER

1 On a regular basis, the Directors of the Department's Research Establishments will submit the work programmes of their Establishment to the Chief Engineer and Scientist, Permanent Secretary and Ministers for approval.

2 They will give first priority to work that is required of them by statute and to work that supports Government functions such as regulation and planning, and the development and dissemination of measurement standards.

3 Their work will be consistent with the aims of the Department of Trade and Industry.

4 They will conduct their programmes on the basis of a customer/contractor relationship. Customers for their work may be the Department of Trade and Industry, other Government Departments, international organisations such as the European Commission and ESA, industry and universities. The balance of work for these groups of customers will be agreed with the Chief Engineer and Scientist. The Establishments will be given targets for the income to be earned from external customers by technology transfer and by technical and scientific problem solving within the constraints imposed by paragraph 2 above.

5 Other Government Departments will be charged full economic costs for work unless specific Departmental policy justifies an element of subsidy. External customers will be charged for work at the market price which will normally not be less than full economic cost. The Establishments' income on a year by year basis from external customers will always be equal or greater than the full economic costs incurred.

6 Work which is paid for from the Department's Science and Technology Vote will normally be agreed by the Department's Requirements Boards. Proposals for research programmes will show the duration and cost of the programme and the staff resources needed. They will set out specific objectives for the work and show how these are related to the Department's aims. Programmes will provide for periodic reviews of progress against an agreed timescale. A date will be agreed for completion of the work and Directors will report to Boards on the outcome of the programme.

7 Directors will make every effort to ensure that the results of their Establishments' work are disseminated and exploited and programme proposals will give details of plans for the way in which this is to be achieved. Directors will have an agreed budget for general publicity for their work.

8 Up to 10% of the full economic cost of the Establishment may be devoted to research which underlies its general remit. The work programme will be determined by the Director who will report on the programme annually to the Chief Engineer and Scientist and the Permanent Secretary. The cost of this general research will be recovered by adding an appropriate surcharge to all other projects.

9 The Establishment staff complement will be agreed with the Chief Engineer and Scientist and the Permanent Secretary on a regular basis. Directors will have regard to the need to maintain the capability of their staff to contribute to the wider needs of the Department including Headquarters.

10 Directors will contribute to the Department's annual report on Science and Technology. They will separately report to the Chief Engineer and Scientist on the steps they have taken to maintain and improve the efficient operation of their Establishments.

Chief Engineer & Scientist

17 August 1984

II. IMPLEMENTATION OF LORD RAYNER'S CENTRAL REPORT

RECOMMENDATION 2

The Minister for Overseas Development has arranged for a report to be made to him each year on the R&D programme, giving the information indicated in paragraph 4.10 of Lord Rayner's report.

RECOMMENDATION 3

The Director of the amalgamated TPI/COPR (the Tropical Development and Research Institute) received such a charter on his appointment with effect from 1 April 1983. A copy is attached.

RECOMMENDATION 4

The responsible Under Secretary/Chief Natural Resources Adviser and the responsible Management Division in ODA have primary responsibility for this. Internal Audit will continue to review activities and procedures to ensure compliance with the 'charter' and annual programme as well as value-for-money aspects.

RECOMMENDATION 5

Control over the work programme of the new Unit is now exercised through a new system for commissioning work which makes more explicit the customer/contractor relationship. The Director of the new Unit has a 'charter' which makes clear his responsibility for managing his programme efficiently and the financial authority within which he will operate.

RECOMMENDATIONS 6 & 7

The Director, in consultation with ODA, is required to develop a system for increasing the responsibility delegated to managers of individual research projects. As part of this, taking account of ODA's work on cost centres in response to the Financial Management Initiative, information for full costing of research projects will be generated and the scope for increasing budget holders' control over the range of costs will be carefully considered.

RECOMMENDATION 8

Progress will be made on this once the new Unit has been stabilised.

RECOMMENDATIONS 9 & 10

Under the PRS arrangements the Director now has such control. This is in principle advantageous although the arrangements impose some additional administrative problems when the Institute occupies 10 scattered sites with much specialised building. The Director has specified to PSA his future accommodation needs on relocation and a PSA feasibility study is in hand. It is due to be provided at the end of August 1984.

Overseas Development Administration

June 1984



OVERSEAS DEVELOPMENT ADMINISTRATION

ELAND HOUSE

STAG PLACE LONDON SW1E 5DH

Telephone 01-213 4819

Sir William Ryrice KCB

Permanent Secretary

28 March 1983

Dr Malcolm Thain
Tropical Products Institute
127 Clerkenwell Road
London EC1R 5DB

Dear Malcolm,

I am writing to convey formally your instructions on appointment as Director of the TDRI. The Terms of Reference for the Institute are those approved by the Minister. The text is attached to this letter (Annex 1).

2. You are personally accountable for all the work undertaken by the Institute. Only work covered by the Institute's Terms of Reference should be carried out. You are required to ensure that it is executed to appropriate professional standards and with full regard to financial propriety, economy and efficiency.
3. The programme of work will be agreed annually with the Chief Natural Resources Adviser, subject to approval by the Minister. When submitting your programme for approval you should show when each project started, the technical and financial objectives at the time; the technical and financial progress to date; the estimated expenditure to completion and the degree to which technical objectives are expected to be met. For projects completed during the year you should give an account of how their duration, cost and achievement compared with what was estimated when they were approved, and how the results are being applied. For new project proposals you should provide the technical and financial objectives, intended duration, cost and phasing.
4. Any work which you take on for international organisations, other public bodies or private industry should be justifiable within the agreed objectives of your programme and should not constitute more than 10% of your programme in overall manpower terms without prior written authorisation. You will be accountable for ensuring that charges are raised on the customers which reflect the full costs.
5. As Accounting Officer I have responsibility for the financial well-being of the Department. I delegate to you the responsibilities set out in the attached Financial Accounting and Administrative Procedures Notice (Annex 2) in respect of your Institute. You

/are



are thus personally accountable for ensuring that the Institute's work is carried out within cash limits and with due regard to the need for economy, efficiency and the avoidance of waste. The Internal Audit Unit will include the Institute in its reviews.

6. The cash limits to which I refer in the immediately preceding paragraph will be conveyed to you annually. Meanwhile you should assume a decrease of 14% in your financial provision from 1 April 1983 to 1 April 1986, and a comparable and staged reduction in core manpower from 416 to 358 over this period.

7. In my capacity as Permanent Head of the ODA I must remain ultimately responsible for all matters relating to staff management, including promotions, recruitment and discipline. Your staff will continue to be governed by the detailed rules and regulations in the Civil Service Pay and Conditions Code. It is my intention however, that as much day-to-day authority as possible should be exercised directly by you, in consultation with the Principal Establishment Officer who will review with you such specific delegations as may be practicable.

8. I retain responsibility for rent and major works in the buildings occupied by the Institute but it is my intention to delegate to you, through the Chief Natural Resources Adviser, authority for some accommodation matters.

9. The Administrative Secretary and his staff have training and experience with which they can assist you in discharging your responsibilities. You should consult them on all matters touching the Accounting Officer responsibilities. But whether or not you accept their advice the responsibility for decisions is yours.

10. You are accountable for encouraging cost consciousness in all your staff. The importance of securing value for money should be understood by all as part of day-to-day management. You should aim to delegate authority as far down the line management chain as is consistent with the capabilities of individual staff members. Such delegations should be made so that those concerned are clearly accountable to you. The role of the Administrative Secretary in explaining and advising on financial matters should not detract from the responsibilities of line managers.

11. You are required to contribute to the annual review of the Department's R and D programme.



12. At the same time you should make an annual report to me, through the Chief Natural Resources Adviser, on the improvements in the Institute's efficiency and effectiveness which have been made during the year.

Yours sincerely,

Bill Law

4/15/61

TERMS OF REFERENCE OF TROPICAL DEVELOPMENT AND RESEARCH INSTITUTE

The Tropical Development and Research Institute is established under the UK Aid Programme to contribute to economic advance in developing countries through work on Renewable Natural Resources in the fields of post-harvest technology and pest and vector management. The Institute will deal mainly with tropical plants and animals. Its activities will centre on food production and preservation and animal foodstuffs but will also include some non-food cash crops of particular importance to developing countries.

The Institute will apply science, technology and economics to the solution of problems in the above fields; provide relevant training and information services in the UK or the recipient country as appropriate and advise overseas governments and other agencies in those fields.

As post-harvest technology and pest and vector management are broad and varied subjects, the Institute will concentrate its activities in those areas where it has comparative advantage in terms of experience, knowledge and cost-effectiveness.

The Institute will co-operate closely with government organisations, universities and industry in developing countries, the UK and other industrialised countries and with multilateral and bilateral aid agencies.

Requests from governments of developing countries which qualify for British aid will be channelled through the Overseas Development Administration which may commission the Institute to do the work if it lies within the scope of the terms of reference and if resources are available. In addition, the Institute may, subject to the claims on its resources commissioned by ODA, accept contracts from multilateral aid agencies and other organisations for relevant work on behalf of developing countries.

2. Implementation of Central Report

RECOMMENDATION 2

1. At present Ministers are involved in the DTp research programme at three stages:

- i. In approving the programme for a forthcoming financial year in advance;
- ii. In authorising specific projects which are referred to them during the year;
- iii. Through reports either on the significant findings of major studies or on the outcome of the programme as a whole.

Approval of Programme

2. The first of these activities indicates the overall dimensions of the programme, the balance between its components, and in annexes the detailed proposals. Ministers are specifically consulted about any outstanding issues and their attention drawn to points of major policy significance. After endorsement the programme is translated by the Controller of R&D into practical proposals for action.

Authorisation of Specific Projects

3. From time to time customers encounter gaps in the information available to them which they believe should be filled by specific research projects. Ministers may also request that the Department undertakes research as a result of policy reviews. Under such circumstances proposals for specific projects are likely to come forward and be passed to Ministers. A similar specific submission is made whenever Ministers query particular components of the overall research programme, or where an issue is of such importance as to merit this treatment.

Reports

4. The machinery for reporting back to Ministers on progress in the course of R&D projects and the value for money obtained is the least complete element in our system.

Ministers are specifically advised of the outcome of projects in which they have indicated particular interest or where the results are important enough to be brought to their attention in any event. There is not however at present a procedure for analysing and reporting back in an audit sense.

5. The Department has recently (in 1982) initiated a very limited series of research audits in order to assess for ourselves the extent to which elements in the programme have met expectations, satisfied customers and provided good value for money. These however are concerned with selected topics rather than broad programme areas.

6. As a consequence of recommendation 2, the Chairmen of the three Research Requirement Committees, through which the Department's research programme is formulated, prepared a report for Ministers in the autumn of 1983 on the work done during 1982-83. It is presently envisaged that such reports will be arranged in policy areas, stating the objectives of the work, the results (including the negative findings where these constituted a valid result of exploratory research) and the implementation of results. It is also proposed that the work could identify future research topics and should point out that forethought in planning research programmes enables policy developments to be made.

RECOMMENDATION 3

A draft Charter is being prepared and will be presented to Ministers shortly.

RECOMMENDATION 4

The Department has recently (in 1982) initiated a series of research audits in order to assess for ourselves the extent

to which elements in the programme have met expectations, customers and provided good value for money. RRC review procedures also meet this recommendation.

RECOMMENDATION 5

The Charter will place this responsibility firmly on the Director.

RECOMMENDATION 6

Full recharging for all research projects is now possible under the Financial Information System.

RECOMMENDATION 7

The new MAXIS system of cost centre budgeting and control came into operation across the Department on 1 April 1983.

RECOMMENDATION 8

This recommendation is in accord with current procedures. Customers are involved in the definition of major blocks of expenditure in the form of the Subject Area Groups, with individual spending units (Agreed Programme Units) being the responsibility of TRRL.

RECOMMENDATION 9

Mr T Barrett (Superintending Engineer) has been designated to deal with PSA and minimise accommodation costs.

RECOMMENDATION 10

The nominated senior manager (see Rec 9) will pursue this.

RECOMMENDATIONS 9 & 10

PSA has fulfilled its remit to implement **recommendation 9** of the central report. We have now gauged the effects of implementing this recommendation and the consensus amongst our Regions is that the appointment of a senior manager to clarify and co-ordinate establishments' requirements and priorities for land and accommodation has proved to be a major aid to the proper planning and carrying out of works services. It also reflects a resolve on the part of establishments to maintain a proper control over demands for works services.

2. As regards **recommendation 10** of the central report, a total of 8 PSA Regions have now concluded discussions with their research establishments on the demarcation of specialised work and target levels of service. As to the effects of implementing this recommendation, the Regions report that, where they have been agreed, establishments are satisfactorily exercising their increased delegations of responsibility for specialised building and maintenance work. Any teething problems have been settled at local level, and on the whole the new arrangements are proving beneficial to both PSA and the R&D establishments.

3. Eastern Region have now examined in depth 5 of their 8 specialised establishments, but no final decisions will be taken until all the laboratories have been examined and the detailed recommendations discussed by senior management. North West Region have drafted a detailed agreement with their one major establishment, the HSE Explosion and Flame Laboratories at Buxton, and they are hopeful that it will be formally endorsed within the next month or so. These 2 Regions have been asked to make every effort to conclude the discussions by 30 September 1984.

4. Examples of new demarcations include:

(i) South-East Region have agreed that the Home Office's Scientific Research and Development Branch at Langhurst should take over responsibility for the installation of certain types of equipment or structures;

(ii) the MAFF Fisheries Laboratory at Conway where PSA Wales have agreed that minor temporary plumbing and electrical work associated with specific R&D projects can be carried out by the establishment staff.

RECOMMENDATION 11

The Treasury considered that the most effective single step which might be taken to meet the Team's recommendations would be the introduction of a degree of end-year flexibility on capital and defence procurement expenditure. A scheme of this kind was announced by the Chancellor on 7 July 1983. Under the scheme, departments can carry forward underspends of cash limited capital expenditure of up to a maximum of 5 per cent. The scheme should act as an added incentive to investment in greater efficiency by ensuring that (within the 5 per cent limit) capital funds unspent at the end of the year remain available for departments' use. The first carry forward of underspends under the scheme, from 1983/84 to 1984/85 was announced recently. The total was £282 m, but only about £2.5 m of this was for support services such as accommodation, computers and office machinery. As yet it is too soon to assess the impact of the scheme on the management of capital programmes but the results will be monitored carefully over the next year or so in order to consider whether any further incentives are required.

2. It is also open to departments at any time to make proposals to the Treasury for incentive schemes to encourage the disposal of surplus assets. In such cases it may be agreed that departments may retain some of the proceeds of asset sales with a benefit both to the Exchequer and to the programme concerned.
3. These schemes do not cover current expenditure savings from greater efficiency.

RECOMMENDATION 12

Cabinet Office (MPO) have consulted senior scientists and technologists, who are convinced that MPO should continue to recruit to their areas principally on the basis of specialist skills. In the early part of their careers such specialists work almost exclusively in their chosen field and it would be counter-productive in terms of recruitment to change this practice. Senior scientists are convinced that future senior management should continue to be recruited by this method and have also stated that any change in the selection criteria which appeared to stress managerial skills at the expense of research ability could discourage some able scientists from joining the Service.

2. The principal initiative on training has been to ensure that departments review in depth their arrangements for the selection and training of scientists in order to groom technological generalists for higher posts in the Service. The first Progress Report on the Scheme was circulated in July 1984 and described the progress achieved by departments and research councils since the summer of 1982. Senior scientists have advised the Cabinet Office that the requirements of the scheme, laid down in GC/211, have essentially been met. But only two formal departmental schemes have been developed and it has not yet proved possible to quantify progress. In the next two years it is intended to pay particular attention to the quantified monitoring of the scheme to allow the second Progress Report, planned for 1986, to be more positively based.

3. As far as the Professional and Technology (P&T) Group is concerned, departments have agreed in principle that, where a formal technological generalist scheme has been developed for scientists, consideration will be given to the admission of P&T grades to the scheme.

4. Meanwhile the Senior Professional Administration Scheme (SPATS) continues to fulfil a useful function in providing the best specialists with training experience in administration work. The scheme has attracted an exceptionally high number of nominations this year.

5. The extension of unified grading to Senior Principal Scientific Officer level (now grade 6) has meant that previous members of the Science Group at this level have the opportunity to obtain experience of a wider range of managerial and administrative posts. The effects are being monitored by the Cabinet Office (MPO). Unified grading is expected to affect scientists and technologists serving in departmental headquarters rather than in R&D establishments because of the larger number of alternative posts available at the centre.

WIDER IMPLEMENTATION

The principles of the review's recommendations have been applied in other departments and non-departmental public bodies through related scrutinies and through action in direct response to the general conclusions of the review.

Related Scrutinies

- (i) Fisheries Research and Development (MAFF). This scrutiny was carried out in 1981 in parallel with the review, covering wider issues as well as support services. Annual savings of £421,000 and 20 posts, with £790,000 once for all had been made at 1 April 1984. A further £1.235m pa, 53 posts and £56,000 once for all is in firm prospect. Savings of £17,500 pa and 9 posts have been made by contracting out cleaning at the Lowestoft laboratory and arrangements have been made for the Torry Research Station and the DAFS Marine Laboratory to share the use of an electron microscope.
- (ii) Fisheries Research and Development (Department of Agriculture and Fisheries, Scotland). This scrutiny also took place in 1981. Annual savings of £197,000 and 27 posts had been made at 1 April 1984, with a further £326,000 pa and 35 posts in prospect by 1 April 1985. The research vessel "Explorer" has been withdrawn from service; savings have been made in vehicles; and the project costing system is being refined by the introduction of records of time spent on each project.
- (iii) Forensic Science Service (Home Office). This was the third scrutiny in 1981 alongside the main review. Savings of £338,000 pa and 33 posts had been realized at 1 April 1984 with a further £326,000 pa and 4 posts in prospect by 1 April 1986. Formal job descriptions have been issued to laboratory directors, stressing their responsibility for efficiency and effectiveness and for the cost-effective use of resources.
- (iv) Research Councils. In 1982/83 the four Research Councils with research facilities (Agricultural Research Council, Natural Environment Research Council, Medical Research Council and Science and Engineering Research Council) carried out a review, co-ordinated by DES and MPO, of selected support services. Savings of £3.3m pa, 211 posts and £5.3m once for all were identified in the areas of stores, workshops, libraries and estate management. The report on the review recommended that Heads of Research Councils should improve

arrangements for management audit and project costing, include value for money in their reviews of research projects and, with DES, explore the scope for greater co-operation within and between Councils on support services. Research Councils are now taking action on the accepted recommendations.

(v) The results of the review have also been taken into account in a scrutiny of the Agricultural Science Service (MAFF), which has just been completed, and in a scrutiny of the Veterinary Investigation Service, which is under way.

Other bodies

(i) Health and Safety Executive. On the initiative of the Director General, an internal review of support services in the Research and Laboratory Services Division was undertaken in 1982/83.

Progress to date is as follows:

Short term accommodation changes: The contraction to one floor of Steel City House, Sheffield was completed in January 1984.

Medium term accommodation changes: An investment appraisal and case for the relocation of the Cricklewood laboratories in Sheffield is at present with the Minister.

Transport: The review was completed in December 1983. Recommendations were that:

- the size of the vehicle fleet should be reduced. This will be achieved over a period when vehicles would normally be considered for replacement.
- that no employees should be retained whose duties consist wholly of driving. This involves four drivers currently employed and discussions are in hand with industrial trade union side representatives.
- that the usage and deployment of vehicles in sections should be reviewed by the managers of the Sheffield and Buxton sites during the course of 1984.

Registry: A review of procedures and systems has been undertaken and the central registry at HSE Headquarters has been consulted. Consideration has been given to the opportunity for computerisation. Some simplifications to procedures have been identified but the practicability of computerisation has yet fully to be investigated. Further progress will be dependent on staff resource availability.

Wages Computerisation: The Department of Employment's Central Pay Office will take on the responsibility for the calculation of the wages of industrial staff in Sheffield and Buxton. Their target date is April 1985. RLSD considered the possibility of local computerisation for the interim period but this was rejected on cost grounds.

Personnel Sections: The personnel function in Divisional Office has been redefined and savings of one-half EO and one-half CO posts have been made.

Computerisation of Purchasing Function: A feasibility study has been delayed in favour of a rationalisation of the purchasing function in RLSD. The function is in the course of being centralised at Sheffield and this will result in the saving of two CO posts. The purchasing procedure is about to be overhauled following which the opportunity for computerisation will again be pursued.

Research Planning Section: A review of this section will be initiated as soon as staff resources allow.

Other topics are to some extent inter-related. The improvements in the staffing and structure of the stores at Buxton are linked to flexibility in other support grades. Prudent management has resulted in the adoption of wide job descriptions by non-industrial support staff (eg, storekeepers, porters/messengers, telephonists, security guards) resulting in the saving of one post. With regard to industrial grades, discussions are well in hand with TU Side representatives over the future role and duties of experimental worker grades. The attribution of indirect costs to research projects will be considered as personnel record and financial management information systems are developed. A computer-based system of time recording is being introduced from 1 April 1984 which will be capable of identifying the direct effort put into each research project of activity in support of HSE. Following the delegation of financial management to the Head of Division, financial information is being gathered in a form which will enable some ascription to be made of the indirect support to direct staff effort.

(ii) Forestry Commission. Action has been taken in many areas in response to the recommendations of the review's central report as detailed below. Unfortunately, the Commission cannot provide an overall assessment of changes in output or expenditure as a result of the recommendations owing to difficulties of commensurability.

Recommendation 2 Accounting information to the year ending 31 March 1984 is now coming forward and expenditure by project group, one or more of which are the responsibility of a project leader, will be calculated retrospectively. In addition, output measures are being tested for such jobs as Drawing Office tasks and Silviculture Branches' field experiment operations.

The Commission is in the process of shifting its central data processing function for financial and general management purposes for the Scottish Office Computing Service to its own in-house computer. Programs for identifying expenditure on vehicles and machinery (VME) used by other management units in the Commission could not be altered in the course of 1983-84 to accommodate the needs of this Division. Manual computation of R & D expenditure on VME has therefore been carried out and the resulting data will be used in the retrospective view of 1983-84 expenditure by Branch and project group and in predetermined cost calculations for the current year. A fully operational computer system will be installed by 1/4/85 following revision of existing VME financial control programs.

Improved arrangements have been made for the leasing of equipment under test and appraisal by Work Study Branch, a second word processor has been purchased and emphasis has been laid on the importance of completing experiment closure reports in timely fashion.

Recommendation 3 A revised job specification for the Director R & D Division, has been adopted. It is also relevant to record that job descriptions for the two Chief Research Officers have also been revised and will be adopted shortly. In addition, job descriptions of Heads of Branches and of project leaders have been more tightly drawn to include target dates for specified publications.

Charging has been instituted in the area of advisory visits connected with arboriculture. Charges are already made for courses or individual lectures provided for commercial operators.

Recommendation 6 Final Accounts for 1982-83 by Branch have been compiled to include the services of Statistics Branches' analysis and computing and of

Research Information Section; this procedure replaces the past practice of regarding service functions as activities in their own right.

Recommendation 8 Work on modelling growth of tree crops shows promise of economies in the preparation of tabular guides to management. Further work is in hand to exploit more fully existing data, for example, relating crop growth to site factors, and to economise on the volume of growing stock data required for management purposes.

Further developments Those planned are largely in the field of project assessment, and concern ex post appraisals and the introduction of the discipline of formal assessments of future benefits of research before a new project is sanctioned. Closer attention will also be paid to the need for maintaining old experiments.

(iii) British Museum (Natural History). As a result of the Museum's Internal Audit team including in its tasks that of checking that Museum departments are adhering to objectives laid down by the Trustees, there has been a general tightening up on the activities and operations of the departments reviewed by the Internal Auditor so far. In particular, in the areas of the Publications Section, the provision of photocopying, photographic and electron microscope services to outside customers, and the operation of the Central Workshops, the stricter checking of activities against policy guidelines and the greater efficiency in operational procedures following recommendations by the Internal Auditor, have led to significant savings in expenditure and staff effort.

It is difficult to prove conclusively that savings have followed exclusively as a result of the implementation of particular recommendations or to quantify savings precisely but the Museum estimates that net savings, (after the deduction of the cost of Internal Audit) of the order of £60,000 per annum at 1983 prices will accrue as a result of the Internal Auditor's activities over the period April 1983 to March 1984.

In the area of financial management arrangements, the Museum has now computerised its accounting operation so that more detailed information on expenditure is available to management more quickly; through instruction on the principles and application of investment appraisal (including a series of seminars on the subject conducted at the Museum by staff of the Civil Service College) has been given to Museum staff, including scientists, with a liability to initiate expenditure proposals; the Museum has plans to expand the scope of its internal audit team so that it covers organisation and methods and manpower as well as finance and systems audit.

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PRIME MINISTER

MEETING ON GOVERNMENT PURCHASING - 29 OCTOBER 1984

Your meeting on 29 October will start with a presentation by the authors of the report. I have discussed the report with them. In my view, if the substantial benefits that are available are to be achieved the key points to settle during the subsequent discussion are:

1. How to get action from departments.

This report shows that the government's overall approach to purchasing, worth an estimated £7600 million a year, is insufficiently directed to getting value for money. I understand that Michael Heseltine's efficiency adviser, Peter Levene, has found the same situation for warlike goods and services. Departments need to be asked to establish plans for action. I see no good argument for delay.

2. How to put pressure on departments to make explicit savings.

The best way is to establish that you expect tangible improvement. A 5% target for savings over two years (worth over £400 million a year) would be a worthwhile but not overambitious start. From my business experience this target is feasible.

3. How to help those who must deliver the improvements.

The proposed small Central Purchasing Unit has a key part in this. It is essential that it should contain at least one person from the private sector with first class experience of buying. Its effect will be greater if it can have some direct involvement in selective buying.

4. How to get credit for what we are doing and encourage a more business-like approach in public purchasing more widely.

It is more difficult for departments to ignore uncomfortable findings if they are made public. Implementation of improvements is often more rapid if there is the risk otherwise of embarrassing questions. I would favour publication of the report and a statement of the government's response.

I have one further comment. There are other actions which are complementary to the suggestions in the report: for example, Michael Heseltine's plans to widen the scope for competitive tendering in Defence. But as this report shows, competitive tendering is not enough unless it is done better than is often the case in government, including Defence.

I am copying this to Lord Gowrie and to Sir Robert Armstrong.

Handwritten signature

ROBIN IBBS
26 October 1984

PRIME MINISTER.

26 October 1984

GOVERNMENT PURCHASING.

1. The formation of a Central Purchasing Unit is a key recommendation of this report if a more expert approach to Government purchasing is to be achieved. But technical standards and quality, a subject inadequately articulated at many levels nationally in spite of recent initiatives, is a critical component of this approach.

2. I endorse the recommendations on standards and quality with the proviso that in the case of 2.10 "good enough for the job" is not interpreted as "lowest short term cost". Government purchasing, because of its sheer size, can do much to improve standards and quality of the technological products of industry, through reference to appropriate quality assurance and certification schemes.

3. A prime reason why standards initiatives by Government in recent years has yielded little is the out-of-date institutionalised procedures for devising standards - I am told there are 3000 BSI Committees! In spite of, or perhaps because of this, we are still way behind the German DIN system. Questions need to be asked about the appropriateness of the British Standards Institution and its methods in modern standards-making, in relation to an increasingly competitive world market.

Robin B NICHOLSON
Chief Scientific Adviser

PRIME MINISTER

26 October 1984

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GOVERNMENT PURCHASING

This is an excellent report which we fully support. 1982 public expenditure on non-warlike goods and services was £7,600 million. The team estimate that improved purchasing could produce an annual saving of over 5%, worth £400 million a year. We think this is cautious. £1,000 million could be achieved if all the team's recommendations are followed through.

Implementation

A small Central Purchasing Unit (CPU) reporting to a Minister and designed to help departments improve their purchasing is a good idea. It would agree specific action programmes with departments with detailed completion dates and performance targets.

Government stocks are conservatively estimated at £5,000 million or eight months usage. The team are looking for a 2% improvement. We believe that at the very least a 50% reduction is required. This would mean still holding four months stocks compared to an average of one or two months in industry generally. Even allowing for the need to hold some non-warlike strategic materials this still seems generous. A halving of the stocks would yield a once off saving of £2,500 million! It could also save £100 million annually in stocking costs.

To make these savings we need mini-computers using near standard programme packages and providing on-line screens throughout Government. Speedy implementation would require that individual computers be introduced at departmental or sectional level rather than a single grand Whitehall scheme.

The team put a lot of weight on post-tender negotiation as a way to produce keener prices. This must be right, but negotiation can do more for us than this. On large projects we should start the negotiation in advance of the tender - perhaps only have a pre-qualifying tender round, followed by negotiation with at least two suppliers. Once in negotiation we must nibble away at the offer; go for free delivery, fixed price, penalties for late delivery, extended credit, and of course reduced price.

The team recommend that buying should be treated as a specialism, that duties and responsibilities should be clearly defined and that price and performance targets be set supported by merit pay. These are sensible steps. However, they propose that 1½ years should be allowed for departments to establish these targets and to implement most of the other recommendations.

We would propose that you should introduce targets forthwith and have most other recommendations in train by April 1985. This will be difficult, but is necessary if impetus is to be maintained and savings made. Departments should be asked to save 5% on all new contracts as from today. This is possible. (I have done it in companies I have run).

Peter Warry

PETER WARRY

*17600
billion*