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FROM: CHIEF SECRETARY
DATE: 14 October 1988

PRIME MINISTER

SCIENCE AND TECHNOLOGY

E(ST)(88)4th Meeting invited me to report on the reallocation to basic science of PES savings from departmental science and technology (S&T) programmes, and on my discussions about Departments' future S&T programmes. I have now seen all the interested Ministers and reached settlements on their PES programmes which, I believe, are both sound in themselves and provide an effective basis for enhancing basic science research.

2. In the light of that, and of the fuller details set out below, you may well feel that there is no need for a further meeting of E(ST).

The Overall Outcome

3. Table 1 summarises my bilateral discussions and table 2 sets them in the wider context of our total S&T spending.

4. Over the three Survey years, I have secured net savings of £138.7 million (£101 million of which comes from the run-down of DTI launch aid) against increases in the Science budget of £373 million, which leaves a gap of £234.3 million. This is disappointing and leaves the Exchequer bearing a considerable extra burden at a time when private sector profitability is high and its R&D expenditure rising. That underlines the need to secure further savings next year.

5. Expenditure on redundancy and restructuring will rise during the Survey years though it should fall again at the end of the period.

THE BILATERAL PES DISCUSSIONS

Department of Energy

6. Savings result principally from the nuclear area in particular the run-down of the fast reactor and fusion programmes. The net outcome (taking account of all redundancy and restructuring costs) is £15.2 /-2.5/-31.4 million. Savings would have been greater had not E(A) decided to delay the run-down at Dounreay to ease the consequences for employment. Malcolm Rifkind has agreed to savings which offset half the extra cost associated with this decision.

Agriculture Departments

7. The settlement includes additions for administrative costs and new strategic research, with savings from charging more for agriculture advice and reducing near market research. These last, when added to those taken on account last year, equate to cutting Government funded near market research by £30 million a year(in full economic cost terms) from 1991-92. John MacGregor accepts that E(ST) may decide next year to go further. While I agree that it is premature to go further in advance of the report on the scope for industrial funding next July, I believe that we should agree now an objective of achieving a larger figure in the next Survey and say nothing publicly which implies we would settle for a reduction as low as £30 million. The combined effect of the agriculture settlement is £1.1/-3.6/-11.5 million (though this may be reduced by, as yet, unquantifiable redundancy costs).

Department of Trade and Industry

8. The DTI settlement covers innovation, aircraft and aeroengine R&D, industrial research establishments and space. The need to accommodate EUROPES requirements has cut some £20 million from DTI's innovation programme in 1991-92 though this reflects a relocation of S&T activity rather than a real reduction. There is also an estimating reduction of £101m in

1991-92 from the run-down of launch aid. If we exclude this, the net outcome for DTI is £-15/-16/+3 million compared with original baseline figures of £384/403/400 million.

Department of Education and Science

9. The increases agreed in this settlement of £121/131.7/120.3 million cover national scientific commitments, basic science and restructuring (including establishing five new IRC s) and the 40 per cent of university expenditure attributable to S&T. The figures are considerably below those demanded by the ABRC but provide the minimum needed to maintain our national scientific commitments, such as CERN and the British Antarctic Survey, while providing for 20 per cent growth in basic science spending between this year and next. This will allow the reshaping of the science base to continue; enable important new research programmes to be started; and allow selective re-equipment to be put in hand. The DES settlement overall is a tight one but the shift of resources into S&T reflects the very high priority which Kenneth Baker places on this part of his overall programme.

FUTURE SCIENCE AND TECHNOLOGY EXPENDITURE

10. This year's Survey has seen a substantial increase in provision for basic science and some shift with in our overall S&T spending. Between this year and next the S&T budget for DES will increase by over 10 per cent and in basic science, growth will be double that. In the short term most of this improvement comes from the Exchequer as reallocated savings have been smaller than we intended. While DEn has now contributed all that we can reasonably expect, I believe that significantly more savings can be found in both the Agriculture Departments and DTI. While I understand that we cannot go further this year, we should return to both in the 1989 PES round. Indeed, considerable further savings are essential if we are to reduce, in line with E(ST)'s conclusion, the burden which the Exchequer has assumed in this Survey.

11. Nevertheless, the current outcome leaves us with a good story to tell. We can present positively the increases made in basic science, and in the case of both MAFF and DTI some of the work from which their money has been withdrawn will continue with industrial or EC financial support.

CONCLUSION

12. Significant increases have been agreed for basic scientific research, financed partly by the Exchequer and partly by savings from the S&T programmes of DEn, the Agriculture Departments and DTI. A substantial gap (£234.3 million) remains between those savings (£138.7 million) and the increases agreed in the S&T budget of DES (£373 million). We will need to pursue the E(ST) objective and find further significant savings in the 1989 PES round, from both DTI and the Agriculture Departments, to reduce the gap as much as possible. In the meantime, we can present very positively the advantages to be gained from the changes made in this year's Survey.

13. Copies of this minute go to the other members of E(ST) and to Sir Robin Butler and John Fairclough.

Cary Evans

JOHN MAJOR

(approved by the Chief Secretary and signed in his absence)

TABLE 1: SCIENCE AND TECHNOLOGY EXPENDITURE BY MAJOR DEPARTMENTS

14-Oct-88

£ million

	1988-89 ESTIMATED OUTTURN	1989-90 BASELINE	1989-90 DEPARTMENT OUTCOME	1990-91 BASELINE	1990-91 DEPARTMENT OUTCOME	1991-92 BASELINE	1991-92 DEPARTMENT OUTCOME
Agriculture Departments	206.8	204.4	1.1	205.9	-3.6	211.0	-11.5
Department of Trade and Industry	516.0	540.0	-14.7	510.0	-17.9	523.0	-98.5
of which Launch Aid	112.5	131.4	-0.1	75.3	-2.1	77.2	-101.3
Department of Energy *	211.0	203.8	15.2	211.0	-2.5	216.2	-31.4
Other Departments	276.8	280.0	10.3	287.2	8.1	295.6	6.7
Total sums reallocated							
including Launch Aid			-11.9		15.9		134.7
excluding Launch Aid			-12.0		13.8		33.4
Department of Education and Science	1,570.0	1,616.0	121.0	1,636.0	131.7	1,677.0	120.3
of which Basic Science & Restructuring	605.7	649.3	78.8	673.3	72.6	689.6	72.2
TOTAL CIVIL SCIENCE AND TECHNOLOGY:							
CHANGES including Launch Aid			132.9		115.8		-14.4
CHANGES excluding Launch Aid			133.0		117.9		86.9
LEVELS including Launch Aid	2,780.6	2,844.2	2,977.1	2,850.1	2,965.9	2,922.8	2,908.4
LEVELS excluding Launch Aid	2,668.1	2,712.8	2,845.8	2,774.8	2,892.7	2,845.6	2,932.5

* No allowance has been made for (a) the transfer of responsibility for nuclear safety research to the NII, on which an announcement has yet to be made (it would allow savings of some £10 million a year in 1990-91 and 1991-92 to be scored in the table) or (b) the £6/2/1 million contribution from the Scottish Office in recognition of the slower rate of run-down at Dounreay.

N.B. The bid figures in this table (and in table 2) are on a PES basis. The baseline figures are calculated on a full economic cost basis (i.e. inclusive of Civil Service and some other superannuation costs.)

14-Oct-88 TABLE 2 £ million

	1988-89 ESTIMATED OUTTURN	1989-90 BASELINE	1989-90 DEPARTMENT OUTCOME	1990-91 BASELINE	1990-91 DEPARTMENT OUTCOME	1991-92 BASELINE	1991-92 DEPARTMENT OUTCOME
Overseas Development Administration	34.0	34.0	0.0	35.0	0.0	36.0	0.0
Agricultural Departments	206.8	204.4	1.1	205.9	-3.6	211.0	-11.5
Department of Trade and Industry	516.0	540.0	-14.7	510.0	-17.9	523.0	-98.5
of which Launch Aid	112.5	131.4	-0.1	75.3	-2.1	77.2	-101.3
(DTI excluding Launch Aid)	403.5	408.6	-14.6	434.7	-15.8	445.8	2.8
Department of Energy	211.0	203.8	15.2	211.0	-2.5	216.2	-31.4
Department of Employment	24.0	25.0	0.0	26.0	0.0	27.0	0.0
Department of Transport	31.0	32.0	0.5	32.0	1.3	33.0	0.7
DoE - other Environment Services	68.0	67.0	4.5	69.0	1.5	71.0	0.7
Home Office (inc. LCD)	16.0	17.0	0.3	17.0	0.3	18.0	0.3
Office of Arts and Libraries	13.0	14.0	0.0	15.0	0.0	15.0	0.0
Health and Social Security	37.0	35.0	5.0	36.0	5.0	37.0	5.0
Other Departments	53.8	56.0	0.0	57.2	0.0	58.6	0.0
Department of Education and Science	1,570.0	1,616.0	121.0	1,636.0	131.7	1,677.0	120.3
of which National Commitments	93.0	80.0	25.0	58.0	34.0	60.0	33.0
Basic Science & Restructuring	605.7	649.3	78.8	673.3	72.6	689.6	72.2
Universities (40% of total)	770.0	780.0	17.2	800.0	25.1	820.0	15.1
Technology Transfer etc.	101.3	106.7	0.0	104.7	0.0	107.4	0.0
TOTAL CIVIL SCIENCE AND TECHNOLOGY:							
CHANGES including Launch Aid			132.9		115.8		-14.4
CHANGES excluding Launch Aid			133.0		117.9		86.9
LEVELS including Launch Aid	2,780.6	2,844.2	2,977.1	2,850.1	2,965.9	2,922.8	2,908.4
LEVELS excluding Launch Aid	2,668.1	2,712.8	2,845.8	2,774.8	2,892.7	2,845.6	2,932.5
Ministry of Defence	2,458.0	2,408.0	96.0	2,352.0	107.0	2,411.0	94.0
Total Science and Technology (levels)	5,238.6	5,252.2	5,481.1	5,202.1	5,424.9	5,333.8	5,413.4