

S
3007

Confidential Filing

PM's Luncheon with SCIENTISTS

SCIENCE AND TECHNOLOGY

on 19 February 1982 and
14 January 1991.

February 1982

Referred to	Date	Referred to	Date	Referred to	Date	Referred to	Date	
18.2.82		Series closed. PREM 19/3522						
7.1.91								
9.1.91								
18.1.91								
25.1.91								
28.1.91								
==								



file 6AM
CSRU's machine
(C: Pury/Lloyd)
CCGB
CO

10 DOWNING STREET
LONDON SW1A 2AA

THE PRIME-MINISTER

12 February 1991

Dear Ian,

I was pleased to learn that you and your colleagues found our meeting valuable. I was greatly interested in their helpful views. As I said at the meeting, I will chair a Cabinet Committee of the major spending Ministers and I propose to start with an overview of science and technology spending in the Spring. This, I believe, will achieve a co-ordinated approach to science and technology without the drawbacks I identified in the appointment of a Minister for Science. The question of funding for POST is a matter for the House of Commons Commission.

I am most grateful to you for your personal interest in science and technology, and your help in setting up the meeting.

Yours Ever,
John

Sir Ian Lloyd MP

pm/m/jds

aw
W0719

MR TURNBULL

6 February 1991

I attach a draft letter for the Prime Minister to send to Sir Ian Lloyd.

2. I have discussed it with Sir Robin Butler who is content.

WAPS

PROFESSOR WILLIAM D P STEWART
Chief Scientific Adviser

M type
r alted becoming
left

DRAFT LETTER FOR THE PRIME MINISTER TO SEND TO SIR IAN LLOYD.

I was pleased to learn that you and your colleagues found our meeting valuable. I was greatly interested in their helpful views. As I said, ^{at the meeting.} I will chair a Cabinet Committee of the major spending Ministers and ^{I propose to start this year with an overview of} we will overview the science and technology area ^{Spending in the Spring. This, I believe, will achieve a coordinated approach} with a view to sustaining a sound forward-looking ^{to science and technology, without the drawbacks I identified in the appointment of a Minister for Science} base. The question of POST is a matter for the House of Commons Commission. funding for

I am most grateful to you for your personal interest in science and technology, ^{and your help in setting up the meeting} ~~What I need now is a little time to progress these - and other matters.~~

Sir Ian Lloyd MP
House of Commons
London SW1

NBEM
AS 4/2

Andrew

UNIVERSITY OF OXFORD

PROFESSOR SIR DAVID WEATHERALL FRS

NUFFIELD DEPARTMENT OF CLINICAL MEDICINE

JOHN RADCLIFFE HOSPITAL

HEADINGTON

OXFORD OX3 9DU

Tel: Oxford (0865) 221340 or 60201

Fax: Oxford (0865) 750506

31st January 1991

R2/2

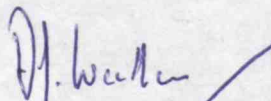
The Rt Hon John Major MP
Prime Minister
10 Downing Street
LONDON SW1

Dear Prime Minister

Just a brief note to thank you for your kindness in listening to my colleagues and me, when we came to talk to you about science on Monday last. It was particularly good of you to spare the time in what I know must be a very difficult period for you and the Government.

The fact that you saw us at all, and listened so sympathetically, is an enormous encouragement to those of us working in medical research. Although we are going through a difficult patch, the possibilities are so exciting and have such tremendous potential for our health services, that I did very much appreciate the opportunity of giving you a brief picture of the problems and potential.

Yours sincerely,



D.J. Weatherall



10 DOWNING STREET
LONDON SW1A 2AA

From the Principal Private Secretary

RL
EAM
cc: Sir Robin
Butler

**PROFESSOR STEWART
CHIEF SCIENTIFIC ADVISER**

MEETING WITH SIR IAN LLOYD AND COLLEAGUES

The Prime Minister was grateful for your note of 29 January setting out your reflections on the meeting with Sir Ian Lloyd's delegation. I will be in touch shortly about a date for the February meeting on the draft over-view paper. The Prime Minister would prefer to set the date for EA(ST) after that discussion.

The Prime Minister is happy to chair ACOST but wondered whether it would be possible to do it later than May. Are there any other meetings before the summer break which would be suitable?

Sir Ian Lloyd has written to the Prime Minister expressing his appreciation of the meeting - copy attached. There are two points which need to be taken up. First, Sir Ian continues to press for a Cabinet Minister with responsibility for science, even though it was my impression that a number of his colleagues accepted that having the Prime Minister chair EA(ST) was a better mechanism for achieving their objective. Secondly, he implies that the Prime Minister has given more support to public funding of POST than was in fact the case. My recollection of the meeting accords with yours, ie the Prime Minister did not respond on this point.

// Please could you provide a draft reply by 14 February to Sir Ian's letter dealing with these two points.

AT

ANDREW TURNBULL
31 January 1991

From Sir Ian Lloyd, MP



HOUSE OF COMMONS
LONDON SW1A 0AA

29th January, 1991 .

Dear Prime Minister,

May I begin by saying how much all those who had the privilege and opportunity of expressing a point of view on science policy, appreciated the indications which you gave that this subject will assume greater significance in your administration.

You will, of course, be aware that while there is virtual unanimity on the question of the "higher profile" which this topic must assume at all levels of debate, in the Commons as well as in the country, there are divergent views on how the responsibility for the national R and D effort as a whole should be divided. This is probably best summed up with a phrase which Sir Mark Richmond used in evidence to the Select Committee when he said that it was a subject on which he could "talk for hours." It was partly because my views on that issue have been published and are well-known that I did not intervene in support of Lord Porter and Lord Flowers. Nevertheless I remain convinced that, although the coordinating rôle of a supportive P.M. is a vital ingredient of the success which all seek, but which has certainly eluded the nation in parts over the last few decades, the missing ingredient is to be found in the fact that both R and D tend to be dominated in the six large departments which spend £1.87 billion in this area, by other other objectives.

I remain profoundly convinced that it is not necessary for a new structure to be "dirigiste" or to fall into the old trap of assuming that "Whitehall knows best", especially in this area, but that the legion of missed opportunities, of which I gave but one example yesterday (supercomputers) is at least partially attributable to the absence in Cabinet, of someone who will perform a similar rôle to that of the Chancellor of the Exchequer in overseeing the distribution and application of the nation's most critical and valuable resource - scientific manpower and equipment. No other resource (if properly employed) has the same self-reinforcing characteristic or long-term effects.



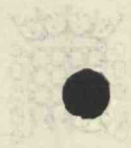
No other requires, at the esoteric level of what is termed "pure" science, as much general demonstration and support, especially in the funding area, whether public or private.

It is for this reason that some of us have responded to your predecessor's challenge to set up P.O.S.T. and we greatly welcome the indication that its contribution to the higher profile of science and its application to the nation's affairs enjoys your support.

Yours ever,

A handwritten signature in blue ink, appearing to be 'John Major', with a horizontal line underneath.

The Rt.Hon. John Major, MP.,
The Prime Minister,
10 Downing Street, SW.1.



COMMERCE

11

Prime Minister

Your meeting turns out to have been v. well timed. There was a meeting of the Lords Select Committee on S&T on which Flowers, Porter & Panton sat. Flowers reported favourably on the meeting. He has accepted that an active EA(ST) with you in the chair is a better way of coordinating science policy than the Ministry for Science. Lord Porter said he detected a feeling that the squeeze on science has been overdone. They are in much better heart, but expectations of the April review are high.

W0709

PRIME MINISTER

29 January 1991

AT 30/1

MEETING WITH SIR IAN LLOYD AND COLLEAGUES

Thank you,
Ree X

You asked for my reflections on the meeting. It was a successful one and Sir Ian Lloyd's group were very appreciative of the opportunity to speak directly with you. I checked their reactions today.

2. They are pleased that you are to chair EA(ST) and that there is to be a strategic overview of the future of the UK S&T base. It is essential that a good paper is generated. The S & T Secretariat is working on this and will produce a draft for you in late February. I will fix up a date for us to meet as you suggested. You may wish to set a date now for the EA(ST) meeting or wait until after you have the draft of the Secretariat paper.

*
Wait
please f.
I'd prefer
later f.

3. You said that you would chair ACOST on occasion and the May meeting would be ideal. If that is acceptable, the ACOST Secretariat will arrange the date with your diary secretary.

4. You did not comment on POST. This is a matter for the House of Commons Commission.

5. Protection of intellectual property. This is a genuine concern. You know that the S & T Secretariat is producing a paper on IPR and on patent protection. The paper will be available in June and we are working closely with the science base and industry on it. You should be aware that DTI has been urging Japanese companies to set up R & D bases in this country in the hope that they might spin off manufacturing industries. This is a two-edged sword.

6. LINK. Professor Cadogan criticised the DTI LINK scheme. It has to be remembered that he represents a very large company (BP) and most other companies (especially smaller ones) find it valuable. It is well regarded by the scientific community. It could be extended across all departments with an R & D base. DTI has been underspending on LINK. We have initiated a review of Technology Transfer.

7. The question of large versus small science. This is a matter for the Research Councils but there is a lack of flexibility when too much money is tied up in major international subscriptions and large facilities. We propose to discuss this in the EA(ST) paper.

8. I am convinced that the S&T community was not well treated last year and that the episodic funding of S & T has to be examined in the paper EA(ST) paper.

BACKGROUND

1. The meeting went well and the response from the scientists was most welcome. They are a well-intentioned group who are genuinely concerned about the episodic funding of the R & D base. They have a point.
2. Sir Ian Lloyd focused on the need for the public funding of POST (Parliamentary Office on Science and Technology), Sir Ian is Chairman of the Advisory Board of POST. POST provides briefing material on S & T issues to both Houses. At the annual Scientific and Parliamentary lunch later this month, the guest speaker is from the US Office of Science and Technology Assessment. You were non-committal about the public funding of POST. It is a non-issue within the S & T community generally.
3. Sir Michael Atiyah focused on the fact that the brightest ideas come from young people and that we should foster this. This is generally accepted by the Research Councils and the Universities. You should endorse this view.
4. Lord Flowers focused on the need for a Minister for S & T. You emphasised that science was all pervasive and that science would not be best served by having a separate Minister. There was general support for your view that the way forward was for you to chair EA(ST), for the CSA to prepare a strategic paper on S&T at the start of the PES round, for consideration by the spending Ministers at E(ST). You said that you would occasionally chair ACOST.
5. I shall provide an early draft of the EA(ST) paper which we should consider as you suggest. The draft will be available to you by 21 February.

6. Lord Dainton emphasised the interaction between science and technology.

7. Sir David Weatherall focused on the need to support clinical medical research. This is an area where the UK has particular expertise. He seemed to emphasise the necessary close collaboration between the research base present in the universities and funded by the MRC and the clinical research work funded by the Department of Health. This is a contrary view to that proposed by those who prefer a Minister for Science.

8. Lord Porter emphasised the need for small science to be funded.

9. Dr Bradfield was concerned about Japan being allowed to exploit the UK research base because of inadequate funding from within the UK.

10. Sir John Cadogan emphasised the need for a skilled flexible work force and was critical of the DTI - LINK scheme.

W.S.

PROFESSOR WILLIAM D P STEWART
Chief Scientific Adviser

MEETING RECORD
SUBJECT CC MASTER

10 DOWNING STREET

LONDON SW1A 2AA

From the Principal Private Secretary

28 January 1991

Dear Stephen.

PRIME MINISTER'S MEETING WITH SCIENTISTS

Sir Ian Lloyd, M.P., brought a delegation of scientists to see the Prime Minister. A list of those present is attached.

Sir Ian said he and his colleagues very much appreciated the opportunity to talk to the Prime Minister and set out their concerns. The scientific community wanted to raise the public profile of science in this country. If it was to secure greater resources, there needed to be a better understanding of what science was doing. He suggested two organisational changes. First, there should be public funding for the Parliamentary Office of Science and Technology; secondly, the Select Committee on Science and Technology which had been wound up in 1979 should be re-established (its abolition had been a mistake) or a Joint Committee should be formed with the House of Lords Committee on Science and Technology.

Lord Porter remarked that there was a new Prime Minister, a new Secretary of State for Education and Science, a new Chief Scientific Adviser, plus new Chairmen of a number of Research Councils. This provided the opportunity for some fresh thinking. As a member of ACOST, he had appreciated the occasions on which the Prime Minister had chaired the Committee. He hoped the new Prime Minister would maintain this practice. He also sought high level representation of science's case within Government.

The position on funding was worse than he had ever known it, and was now acute. The Science Board for Research Councils which was responsible for funding basic sciences now had available only £24 million compared with £44 million in the previous year to make small grants to researchers in universities. Their funding had suffered because these grants were the only thing which could be cut back at short notice. But science was a long-term business with projects taking many years. It could not be funded on an annual basis. He suggested setting the size of the science budget as a proportion of GDP.

Lord Dainton said there was a vicious circle. Basic science underpinned engineering which in turn underpinned technology, but developments in technology allowed better science to be conducted. He accepted that resources were finite, and that priorities had to be exercised. The difficult issue was to decide responsibilities for funding research. Where this met

Departmental needs, e.g., to enable it to carry out its regulatory functions, responsibility clearly fell to Government. The difficult area was where the pay-off was long and uncertain. He distinguished between the basic science where the researcher chose to venture into the unknown, and strategic science, where the scientist felt there would be a pay-off, but was not sure what form it would take. Basic science had an important role in training the scientists who would serve industry or provide the next generation of academic researchers.

Lord Dainton accepted that there was a genuine problem in the field of science. Scientific research had its own expansionist tendency. There came a point where a country could no longer continue research on its own, but should undertake international collaboration. It was difficult to decide the priorities, and in particular whether a country should cease its own national effort.

He pointed to the steady decline in Government spending as a share of GDP which was now far lower than our competitors. The development of contract research had many benefits, but it left universities in difficulties over the recovery of their overheads. British science was capable of winning work from Europe, but was constrained by the roles of additionality and attribution.

Finally, Lord Dainton argued that science needed a champion within Government to take an overview.

Lord Flowers said the Lords Select Committee on Science and Technology had recommended a Minister for Science in 1981 and had repeated that in 1986. Science and technology was part of the work of most Government Departments, and he was not suggesting any departure from the Rothschild principles that Departments should set their own priorities and then pay for them. But someone needed to speak for science and technology as a whole at Cabinet level in the way that the Treasury did on economic policy. He was not arguing for a Department of Science as this would represent a retreat from the Rothschild principles. He believed there should be a Cabinet Minister with responsibility for science who did not have other major Departmental responsibilities.

Sir Michael Atiyah argued that sharp discontinuities in funding were very damaging, and that anything done to alleviate the current squeeze could produce disproportionate benefits. He too pointed to the higher public funding of science as a proportion of GDP in our main European competitors. British scientists were increasingly seen as the poor relations. If they were better funded, they would be able to secure more benefits from European collaboration.

The question of how much should be spent on science was for Ministers to decide. He noted that the countries which had been successful economically had devoted large resources to civil research rather than to defence, e.g., Germany and Japan. At the other extreme was the Soviet Union which had deployed massive resources of money and manpower to military uses, with disastrous results. The UK lay between these two extremes.

Sir Michael argued that it was difficult to distinguish the research and teaching component of universities' work. They were complex organisations, and successful ones. While the shift of resources into Research Councils was administratively tidy, it would damage one of the UK's most valuable assets. He therefore urged caution in pursuing this shift.

Sir David Weatherall pointed to the exciting opportunities for medical research. Developments in basic science had opened up opportunities to tackle the major killers; there were major developments too in research in the health service which would have enormous impact in monitoring health care. Much of the funding for economic research came from Research Councils and charities, but it fell to the universities to integrate basic science and health service research. Universities devoted roughly a third of their time to treatment of patients, a third to teaching and a third to research. But they were very stretched in all these functions. He felt that responsibility for funding of clinical departments in universities rested uneasily between the Department of Health and the Department of Education and Science. A re-organisation was called for.

Your Secretary of State addressed the argument that there should be a Minister for Science. He did not believe a single person could encompass the entire gamut of science across the Departments. An earlier attempt at this in the 1960s had not been successful. A Ministerial Committee had been established to take the major policy decisions, the most important of which was a shift towards basic research and away from near market research. In addition, ACOST had been set up to advise the Government on priorities. He did not believe a Minister of Science would be able to coordinate expenditure which was the responsibility of other Ministers.

On funding, your Secretary of State conceded that next year would represent no more than a standstill in real terms, but this came after two years of substantial increases. Judged by outputs, however, science in this country compared very well with our competitors. He accepted that there was a danger that big science would deplete the resources available for small grants. He believed the shift of funding between the universities and Research Councils was desirable.

The Prime Minister said he had noted two concerns; first, there was the profile given to science as perceived by the scientists themselves; and secondly, there was the level of funding.

The Prime Minister said that ACOST would continue and that he would take the chair from time to time. He also intended to chair the Ministerial Committee, but he would make some changes in the way it had worked in order to reflect the concerns put to him. He recognised the argument for a Minister for Science, but felt that a extra Minister, with no more than a small Treasury Department, would find it difficult to influence other Departments' programmes. Such a Minister would be able to raise issues, but in practice would not have authority to change the direction of their spending.

The Prime Minister said that EA(ST) conducted an overview, but only in the sense of looking at all Departments' programmes. He wanted to go beyond this, and conduct a broader overview of priorities and objectives and how those objectives were met. He intended to conduct this at the beginning of the next financial year. This would provide a background to individual decisions in the PES Round.

Lords Flowers, Dainton and Porter said they were greatly encouraged by the Prime Minister's remarks. The latter commented that discussion in this area was constrained by the fact that the Cabinet Committee was confidential. The Prime Minister remarked that constitutionally this was correct, but that did not prevent either him or the Secretary of State speaking about its work.

The Prime Minister said he was not attracted to determining science spending by a formula such as a proportion of GDP or a growth in real terms. This did not take account of changes in needs or the possibility of alternative resources or funding. He accepted, however, that discontinuities in funding could be avoided.

The Prime Minister said he would welcome views on the extent to which British science had succeeded in exploiting its discoveries. Sir John Cadogan said that scientists working in industry like himself did not want to influence the direction of basic science. The best course was to make money available for the best people to pursue the avenues they thought most promising. Exploitation, however, should principally be the responsibility of industry.

He thought it would be possible to get better value for money from the existing budget. First, he suggested that LINK should be abolished, and the money made available to Research Councils to spend in what he called the responsive mode. Secondly, there should be a careful look at big international establishments. Thirdly, it was inevitable that the UK should relinquish some areas of science on a national basis. He did not favour re-organising the way science was handled within Government. This would absorb intellectual energy with little benefit.

Dr. Bradfield spoke along the lines of the attached note. The Prime Minister asked whether the Japanese companies funding research were demanding ownership of the resulting intellectual property. Dr. Bradfield promised to establish the position and send a note to Professor Stewart. Sir John Cadogan said BP was funding research in a number of countries so the process was not entirely one way. The usual practice was that the company would own the intellectual property but would enter an agreement for sharing any profits which resulted with the inventor and the institution. Professor Stewart said the Cabinet Office was reviewing the issue of intellectual property and would be producing a paper by June.

The atmosphere of the meeting was extremely cordial, and Sir Ian's delegation were heartened by the assurances given by the Prime Minister that he would operate the existing mechanisms

for collective consideration of science actively. In the face of this, they did not press their arguments for a Minister for Science.

I am sending copies of this letter to Sir Robin Butler and to Professor Stewart (Cabinet Office).

*Yours sincerely
Andrew Turnbull*

ANDREW TURNBULL

Stephen Crowne, Esq.,
Department of Education and Science.

PRIME MINISTER'S MEETING WITH SIR IAN LLOYD'S TEAM

28 JANUARY 1991 at 4.00pm.

1. Attending with Sir Ian Lloyd will be:

Lord Flowers FRS

Vice-Chancellor of University of London until Aug 90.
Leading figure in House of Lords Select Committee on
Science and Technology. Nuclear physicist.

Sir Michael Atiyah FRS

President of the Royal Society. Master of Trinity
College Cambridge. Mathematician.

Sir John Cadogan KBE FRS

Research Director BP and Chairman of the Defence
Scientific Advisory Committee. Chemist. Knighted in
New Year's Honours.

Lord Dainton FRS MA

Chancellor of Sheffield University. A chemist.

John Bradfield CBE

Senior bursar, Trinity College Cambridge (where Sir
Michael Atiyah is now Master). Former biologist.

Lord Porter FRS

Immediate past President of the Royal Society.
Professor of photo-chemistry, Imperial College London.

Sir David Wetherall FRCP FRS

Professor of Clinical Medicine, Oxford University.
Molecular Haematologist.

2. There is strong Royal Society representation. (Lord Porter is Past-President; Sir Michael Atiyah succeeded him on 30 November.) Their Lordships are all cross benchers and physical scientists.

3. The Secretary of State for Education and Science and the Chief Scientific Adviser will also be present.

ConfidentialScience Funding - Note for 28.1.91 discussion between the Prime Minister and Sir Ian Lloyd and others

1. More expenditure on Civil Science needed
 - 1.1 We must live by our brains. No longer have large empire to provide captive markets. So cultivation and application of scientific brain power is vital.
 - 1.2 Long term fall in Science Base funding from DES sources as % of GDP (from c.0.31% 1977/8 to 0.28% 1989/90 and 0.25% projected for 1992/3) should be reversed; and even more thought given to application of science, in order to strengthen economy (and facilitate all the things which that makes possible, including more blue sky research).
 - 1.3 1988 UK Government funding of civil R & D (i.e. Total minus Defence) as % of GDP (0.55%) lower than Germany (0.92%) France (0.86%) and Italy (0.73%). In addition Germany and Japan have massive Industry-financed R & D much higher than ours as % of Domestic Product of Industry: U.K 1.5%, W. Germany 2.2%, Japan 2.1% - all 1987).
 - 1.4 Historically true that industrial success was major factor creating university science - and not the other way round (Terence Kealey's "Science Fiction", CPS Policy Study 105). But (contrary to his arguments) reverse tends to be true today, provided science is applied successfully.
2. Cambridge examples of where the shoe pinches
 - 2.1 Dozens available. But I select 3 (2 specific, 1 general).
 - 2.2 Specific (confidential). University currently chasing 4 outstanding candidates for Professorships - Anatomy, Botany, Genetics, Transfusion Medicine. All in USA. First 3 British, 4th French. All agreed (very reluctantly) to accept c.50% cut in income (but only if they come to Cambridge; and low pay is a serious problem in universities). However none willing to accept the major cut in laboratory facilities involved. At least £½m needed in each case to remedy this and put the relevant laboratory in the First Division by world standards. A major US university would normally provide, say, £1m for each man and tell the administrators "to get him". In our case the University can provide (with a struggle and adverse effects elsewhere) c.£¼m in each case, but is stuck for the balance (except in Transfusion Medicine where NHS can help a little).
 - 2.3 Specific. In the vital field of Microelectronics, our great Physics lab (the Cavendish) is having to sell its soul to the Japanese (Hitachi, Toshiba) because of shortage of UK government and industrial research funds.

2.4 General. Research tends to become more sophisticated; so a given volume costs more (and requires a higher % of GDP) than, say, 20 years ago. At same time legislation (e.g. Health and Safety at work; and animal supervision) enormously increases costs of a given volume of research, so that Chemistry needs £1m for renewal of fume cupboards, etc. and Animal Houses need large extra expenditures - with the prospect of some units closing because the necessary funds are simply not available.

2.5 Quality of Cambridge. Recent French press review of opinion on quality of European universities ranks Oxford and Cambridge as the best European universities. Cambridge is known to have a small lead over Oxford in quality of intake, educational output, and research output. I do not make a major point of this because the science funding need applies to all leading UK universities. But the matter is worth mentioning to show that it is a premier university which experiences the difficulties described in 2.2 and 2.3. Cambridge (and other premier UK universities) are, however, living on their past reputation - established under financial conditions different from today's, and not maintainable under today's financial conditions.

3. Translation of Science into Business Success

- 3.1 Business Schools in universities - encourage growth (if necessary at expense of Economics, Social and Political studies, Philosophy, English, Archaeology and Anthropology, Architecture, etc. - all regrettable and not advocated, but tolerable as quid pro quo if unavoidable - must have prosperous UK before we can adequately support all aspects of academia).
- 3.2 Government support schemes for Business R & D, academic contact, etc. satisfactory in amount and variety, but may need more "travelling salesmen" to bring the possibilities home to hard-pressed small businesses which don't have time to investigate for themselves.
- 3.3 Tax allowances on Business R & D - satisfactory for R (100%) but not for D. Perhaps should be 120% for R in order to help the D usually associated with it (because R easier to define than D). Or perhaps 100% initial allowance could be extended into the D area if a Working Party could define D (pity that 100% initial allowances on plant and machinery were abolished - they help the manufacturer v. the retailer!).
- 3.4 Investment "short-termism" should be discouraged - but very difficult to know how! Commoner in UK than in Germany and Japan; and tends to hinder R & D because latter not generating quick returns (though vital for long term strength). Attributed to high bank equity - ownership in Germany v. high pension fund/insurance company equity ownership in UK. Perhaps susceptible only to jaw-jaw (e.g. long-running Committee which would frighten those concerned), or Solomon-like MMC rulings.

4. General Education position

- 4.1 Pay schoolteachers more, especially in Maths, Science, and Modern Languages. General quality of school output is tending to impede university work, quite apart from being bad for the nation generally (hurrah for the campaign about reading and spelling - folly to let standards slip).

- 4.2 Modern Languages important for all, including scientists and mathematicians, given our EC future.
5. Tax to pay for it
- 5.1 Please don't reduce my tax (unless judged desirable for the economy generally). I'm a dedicated and fairly dry Conservative. And I want to save money for my grandsons. But I also want them to have a first class Britain to grow up in. And that needs Government expenditure on things I can't provide - including science of World First Division quality and supporting services in schools (as well as hospitals, police, transport, etc.).
- 5.2 Against this background (in my very amateur judgement) tax reduction - admirable though it is - has gone far enough.
6. Interest Rate reductions needed to encourage Business-supported science
- 6.1 High interest rates are crucifying many small R & D Science-Park type businesses; and hence discouraging a small but important section of Business-supported science. Such firms often have high capital goods content and high export content in turnover, and seem exactly the kind of enterprise which should be encouraged.
- 6.2 I would tolerate modest personal top-rate tax increase if this would psychologically strengthen the £ in the ERM - and hence facilitate interest rate reduction (and incidentally help to pay for the Gulf) - quite apart from the arguments in 5.1 about not reducing tax. Once business flourished tax revenue would rise and tax rates could fall again.
- 6.3 And I would positively welcome still more discouragement of extended credit for consumer expenditure and still more encouragement of savings by simplifying PEPS and extending TESSAS (both admirable) - which might also facilitate interest rate reduction.

28th January 1991

John Bradfield



PRIME MINISTER

Andrew thought you might like to look at this
before your meeting with Sir Ian Lloyd
tomorrow.

Leney Bainsford

Duty Clerk

27 January 1991

1

CABINET OFFICE
Our Ref: NA 5675

PETER BEAN

INTERVIEW WITH SIR IAN LLOYD MP

Programme: SCIENCE NOW
Station: BBC RADIO 4
Date: 26/10/91
Time: 16:32
Duration: 6 minutes



THE BROADCAST MONITORING COMPANY

Register House, 4 Holford Yard, Cruikshank Street, London WC1X 9HD Tel: 071-833 1055 Fax: 071-278 9538

ALAN LEWIS: (Presenter)

On Monday, Sir Ian Lloyd, Conservative backbencher and President of the Parliamentary and Scientific Committee, will be meeting the Prime Minister. Sir Ian plans to tell John Major why he and his scientific colleagues think the Government needs to give British science a new deal.

I spoke to Sir Ian a few days ago before his visit to Number Ten:

SIR IAN LLOYD MP: (President of the Parliamentary and Scientific Committee)

Obviously, there's always room for improvement in any organisation which has, in total, a spend of ten billion, which is what this country is spending on research and development both in Government and in industry. But, of course, it would be quite wrong to convey the impression that I am dissatisfied with the quality of British science. It is, in fact, the reverse of that which is the basis of my opposition to some of the present system, and what I do believe is that the particular deficiency which we have is a deficiency for which we, in the Commons, particularly are responsible. In 1980 we abolished our Select Committee for Science and Technology and, at that time, the responsibility for, if you like, asking questions and looking into the whole organisation of science in this country, was put on to a committee whose prime responsibility - and they themselves have admitted this and said it, one of their Chairman said - is education. It is understandable, but I fear that however important the relationship between education and science may be - and it's very important, with a department that is responsible basically for a very large educational spend - science tends to get put to one side. And, of course, in the Commons, it has been put to one side.



ALAN LEWIS:

In fact, only recently Kenneth Clarke has, in a speech given at Birmingham to the British Association, he said that as Secretary of State for Education and Science, he is happy that this combination of education and science responsibilities allows him to take an overview of research which he feels is the right way to do it. Now, you're saying you shouldn't have one Minister in charge of education and science?

SIR IAN LLOYD MP:

Yes. I am saying precisely that. I believe that the relationship is very important and I don't disagree with Kenneth Clarke, at all, in emphasising that, but what I do believe is that the evidence - and the evidence is very compelling and this has been brought out in one series of major reports after the after - those produced, for example, by the Advisory Board Research Councils last year; that produced by the Lords' Select Committee on Science and Technology; that produced by the Save British Science Campaign - all of them have said: This is not a good situation, and I'm sorry that I agree with that judgment rather than Kenneth Clarke on this issue.

ALAN LEWIS:

So, what do you want?

SIR IAN LLOYD:

Well, I have argued for some time that we do need the major responsibility of science and technology under one particular Secretary of State who is present in Cabinet and can argue uniquely for the whole expenditure under that heading without, in a sense, having also to argue for education and to defend that particular side of



expenditure.

ALAN LEWIS:

Now, this is one of the arguments put against your idea of a single Minister for Science: that if that person was not a Cabinet Minister then this would devalue science and not further the cause of science at all. It would be just another Minister somewhere.

SIR IAN LLOYD MP:

Yes. I don't believe that science can really be dealt with effectively by someone, however dedicated and however important, who is not present at the Cabinet when major Budget decisions - resource allocation decisions - are being decided. And, although I can see the powerful logic for maintaining a close liaison between education and science - and I think many scientists would share that view - it does seem to me that the gap, the deficiency, is in this particular point. And, although one shouldn't necessarily argue from the experience of countries like Germany, France and others, they do have Ministers for Science and Research, and one of the areas where I think we are less effectively represented, for this very reason, that we might be, is in the European Community.

ALAN LEWIS:

So, there, you're saying that when we're in Europe, if we have a Minister for Science, he goes into Europe - he can concentrate on representing British science in Europe?

SIR IAN LLOYD MP:

Oh, absolutely. And, I mean, the total R&D spend of the European Community is now, I think, in the order of four point five billion. A lot of that comes back to Britain, but a lot of it is actually done in Europe. Its allocation,



5

its distribution, the subjects on which it is spent are very important, and we know from all the usual human experiences, as it were, if you are represented at a lower level you tend to have less clout.

ALAN LEWIS:

How would you make sure this is an important Ministry position and not something that a career politician would have to do if told?

SIR IAN LLOYD MP:

Well, I think the first thing, if I can put it this way, is that unless the House of Commons - unless Parliament - realises this importance and is prepared to assess it annually by having regular debates, which we haven't had, that won't take place. So, that's the first thing. The second thing, I think, is that the - you mentioned the word 'career politician' - I would, perhaps, take that as an advantage. It seems to me the first time you get a politician who says: I will make my name in this area - that is very important, and I don't think that has happened yet.

ALAN LEWIS:

You've certainly got Kenneth Clarke, at the moment, who opposes the idea - he's very happy with things as they are, but you are, very shortly, going to have an audience with the Prime Minister on this very subject...

SIR IAN LLOYD MP:

Indeed.

ALAN LEWIS:

...What, do you know, is John Major's view of a Science Minister?



SIR IAN LLOYD MP:

I don't know John Major's view on the question of a Science Minister, as such, but I think he is very open-minded and very fair-minded, and he welcomed the suggestion that I put to him that we should take a delegation to represent the views of the Science community, not merely on this issue, however important it is, but on the whole range of science policy, because it is my view that it is those subjects - the whole range - which come under the whole range of science policy - which tend to be neglected at the moment, particularly in the Commons, and in the country.

ALAN LEWIS:

Sir Ian Lloyd MP, arguing for the creation of a new Ministerial post.

* * *



THE BROADCAST MONITORING COMPANY

Register House, 4 Holford Yard, Cruikshank Street, London WC1X 9HD Tel: 071-833 1088 Fax: 071-278 9538

PRIME MINISTER

MEETING WITH SIR IAN LLOYD AND SCIENTISTS

You have agreed to see a delegation, led by Sir Ian Lloyd, of figures from the scientific community. You should be aware of where they stand in the scientific world. The group he has put together are grandees, eminent but no longer doing much scientific research themselves. In general you will get a more down beat message from them than from those closer to the laboratory. In the recent past, No.10 has had more contact with the current professors who are represented on ACOST rather than the emeritus ones. We have also organised two seminars at which younger scientists just below professor level have been able to present exciting developments in their fields.

Also attending the meeting will be Mr. Clarke, Mr. Howarth and Mr. Vereker, the Deputy Secretary responsible for science at DES. I attach at Flag A a brief from the science secretariat and some notes provided for Mr. Clarke on the question of science funding at Flag B.

You will want to ask Sir Ian and his colleagues to set out their concerns. You can also respond yourself or invite Mr. Clarke to do so.

The main issue is the funding of science. The truth is that science got a mediocre settlement in the last PES round, with the Science Budget (i.e. the Research Councils and the Royal Society) increasing by just under 2 per cent in cash terms next year, and the Science Base (i.e. the Science Budget plus the money going to science via the universities) got an increase of 3½ per cent. DES argue that these figures come up close to the projected rate of inflation, 6 per cent, if two special items of expenditure, a research ship and the move of the Research Councils to Swindon, are excluded from this year's figures. Those on the other side of the table may counter that they have to meet wage costs which are rising faster, and, if they are sharp, they may point out

that we were happy to take credit for the special items last year. DES recommend concentrating on the longer term position where there has been a rise in real terms of about a quarter since 1979-80.

Some of the Research Councils, particularly SERC, are in financial difficulties. You can ask Mr. Clarke to respond here.

Sir Ian may argue for the creation of a Minister for Science. While this would have the advantage of identifying someone to speak for science, it would signal to departments that science was something other people dealt with rather than a central part of their activities. We have attached more importance to the latter argument.

Professor Stewart has suggested that you offer a science seminar of the kind Mrs. Thatcher organised in 1983. This is a bad idea. First, it is unwise to enter into a commitment for such an event without a clear idea of how we would organise it and what we wanted from it. Secondly, the people we would invite would not be Sir Ian's delegation.

There has been some press interest in this meeting. We have told them that the purpose is to allow members of the scientific community to report their concerns to you. It is an informal meeting, not one for decisions.

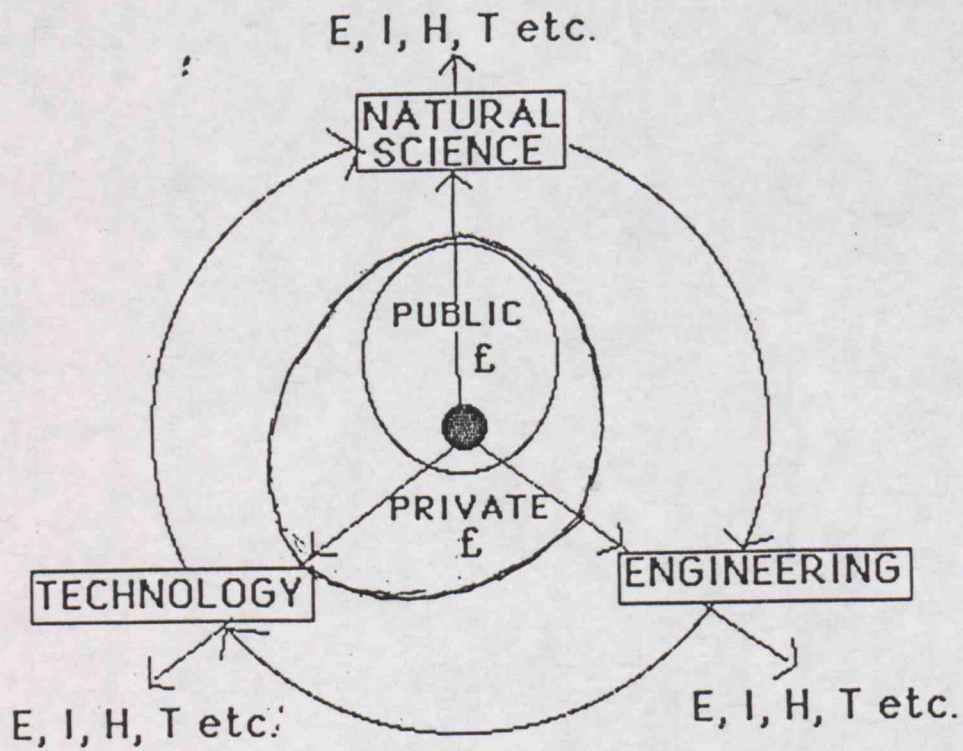
AT

ANDREW TURNBULL

25 January 1991

c:\wpdocs\pps\lloyd.dca

THE VIRTUOUS CIRCLE



KEY : E (energy), I (industry), H (health), T (transport).

Dain ten
27 Jan 91

CLASSIFICATION BY OBJECTIVES

OBJECTIVE	SHORTHAND	TIME SCALE TO SUCCESSFUL OUTCOME	WHO DECIDES	BENEFICIARY	WHO SHOULD OR DOES PAY	EXAMPLES
ADVANCE KNOWLEDGE	<i>Self chosen curiosity-oriented</i> BASIC	UNPREDICTABLE	<i>Facilitators & provide</i> SCIENTIST(S) <i>self-chosen, curiosity oriented</i>	PUBLIC + ?	<i>Research Councils</i> STATE + WISE CHARITY OR INDUSTRY	PENICILLIN X-RAYS
MEET IMMEDIATE NEED	TACTICAL <i>Improvement of process or product</i>	CONTROLLABLE	CUSTOMER	CUSTOMER	CUSTOMER	DOSEMETER BALLPOINT INK AIRCRAFT WINDOW
NEW KNOWLEDGE MAY BE APPLICABLE IN FUTURE	STRATEGIC	VERY DEPENDANT ON SUBJECT	FORUM OF PURE AND APPLIED	UNKNOWN AT INCEPTION MAY BE PUBLIC & PRIVATE	RESEARCH COUNCILS & SOME INDUSTRY	MOL. BIOLOGY POLYMERS <i>Winfield & terylene</i>
ADVICE TO LEGISLATURE	REGULATORY	VARIABLE	<i>independent</i> STATUTARY BODY	PUBLIC	STATE	HSE., NRPB., NCC., etc.

PROBLEMS : MANPOWER, EXPLOITATION, "PATIENT" MONEY etc.
OVERVIEW

*Dainton
27 Jan 61*

mps&t
30-Oct-90

SCIENCE & TECHNOLOGY

£ million

	1988-89	1989-90	1990-91	1991-92		1992-93		1993-94	
	Outturn	Outturn	Estimated outturn	Baseline	Agreed Bid	Baseline	Agreed Bid	Baseline	Agreed Bid
Ministry of Agriculture	134	135	141	138	5	138	6	142	8
Trade and Industry	410	404	425	366	-38	299	-4	306	-38
of which Launch Aid	98	91	82	-2	-11	-64	15	-66	-20
DTI excl. launch aid	312	312	343	368	-27	363	-18	372	-18
Energy	194	180	188	160	13	148	22	147	19
Environment	65	73	81	84	13	83	12	85	11
DES:Science Budget	717	828	913	912	17	934	47	957	56
Universities	803	829	872	885	35	910	45	933	50
Other DES	54	65	87	89	-2	89	0	92	0
Other departments	270	289	279	299	11	301	18	309	17
UK contribution to EC R&D	128	171	222	104	147	79	193	81	165
Civil Science and technology					200		339		287
CHANGES incl. launch aid					212		325		307
CHANGES excl. launch aid									
LEVELS incl. launch aid	2,773	2,975	3,206	3,036	3,236	2,981	3,321	3,051	3,338
LEVELS excl. launch aid	2,675	2,883	3,124	3,038	3,249	3,046	3,370	3,117	3,424
% change yr on yr		7.8%	8.4%		4.0%		3.7%		1.6%
Ministry of Defence	2,123	2,350	2,558	2,599	115	2,637	160	2,703	-30
Total Science and Technology					315		499		257
CHANGES incl. launch aid					327		485		277
CHANGES excl. launch aid									
LEVELS incl. launch aid	4,896	5,325	5,764	5,635	5,950	5,618	6,118	5,754	6,011
LEVELS excl. launch aid	4,798	5,233	5,682	5,637	5,963	5,682	6,167	5,820	6,096
% change yr on yr		9.1%	8.6%		4.9%		3.4%		-1.1%

brain drain or a fall in the output of suitable graduates are danger signals. Excellence makes itself conspicuous. Industrial performance is judged by results.

6.16 The most useful indicator of all is *international comparison*, even with its admitted imperfections. This is the key. Ultimately the goal is the United Kingdom's survival as a leading industrial nation in world competition. The United Kingdom must therefore spend sufficient to improve (or at least to maintain) its industrial and cultural base relative to those countries which are judged to be its natural competitors, making allowances for differences in size and resources. Neither Government nor industry is spending enough at present levels to restore our industrial position in world markets.

6.17 The point was made to the Committee by the Treasury (p 311) that the national source of science and technology is less important than the ability to assimilate and apply scientific and technological ideas whatever their origin. This proposition is correct but also incomplete. It is based in particular on the experience of Japan in earlier decades, but the international circumstances facing Britain in the eighties are much less benevolent than those which Japan encountered in the fifties and sixties, a point Japan itself has taken as evidenced by its present concern with basic research.

6.18 In addition to higher expenditure, it is of course necessary to target and manage that expenditure effectively. The wide range of public spending on R & D needs to be seen as a whole, as well as the sum of its parts. In two ways therefore past practice ought to be modified. First, Departmental spending on R & D must be looked at horizontally, that is across the whole of Government, in addition to the traditional vertical look by individual Departments. Aided by the Annual Review of Government funded R & D, which makes a horizontal look possible, this process has begun. It is strongly to be encouraged. Departmental sovereignty in R & D planning is a handicap. Both the interactive effects of Departmental programmes and the overall levels of R & D spending should be assessed. The Committee cannot agree with Lord Rothschild (Cmnd 4814 para 58) that "general oversight [of applied R & D] would serve no useful purpose"; they prefer his warning (para 57) that "there is a danger that R & D done by one Department may have an impact on that done elsewhere or by another Department"—a situation which he charged the Chief Scientific Adviser to prevent. Unless the overall level and effect of public spending are assessed, maximum effectiveness in that spending is not likely.

6.19 Secondly, in funding through the Science Budget a balance has to be struck between the rival virtues of academic freedom and selectivity. Both are important. Basic research flourishes when it is unfettered by external targets, because it relies on the imagination and motivation of the scientists in their search for new knowledge. At the same time there is a limit to the amount of money which the country can afford for research which has no conscious expectation of economic benefit. The Committee consider that it is right, in the United Kingdom's present economic circumstances, to devote part of the Science Budget to areas which can be identified as offering some prospect of economic benefit to the country. Recommendations below cover this point, and the Committee support the Government's moves in this direction. But the criterion of economic benefit must not be carried too far, since this would stifle basic research. No one can hope to predict accurately how basic research will contribute to national economic benefit. Therefore the Committee share the view of the Secretary of State for Trade and Industry (Q 1591): "I am concerned with improving the impact of publicly funded R & D on the British economy ... I support the science base very strongly".

B CENTRAL STRUCTURE

6.20 In *Science and Government*¹ the Committee recommended against a separate executive ministry for science and technology but in favour of designating a specific Cabinet Minister to speak for science and technology in conjunction with his or her other responsibilities. The Committee also recommended a strong central scientific adviser in the Cabinet Office and the establishment of a Council for Science and Technology which would have absorbed ACARD. How do these recommendations and the arguments underpinning them look five years on?

6.21 The evidence which the Committee have taken in 1986 leaves little doubt that the voice of science and technology is more muted in the highest counsels of government than it should be. It is easy to see too why some of those who believe British science to be underfunded argue for a

¹ 1st Report, Session 1981-82, HL 20

separate ministry of science and technology. However, far more is involved here than whether or not the science vote is at an adequate level. It is a matter above all of ensuring that the "science and technology dimension" is fully represented to ministers separately and the Cabinet collectively, and in respect of all relevant policy areas. Where a policy issue is wholly internal to a particular department then the "science and technology dimension" needs to be appropriately articulated at the departmental level itself. This is the strongest reason against the placement in a single department of all responsibility for science and technology. The capacity to give proper weight to the scientific and technological aspects of policy, as to the economic ones, should be regarded as fundamental to all departments in modern government. It follows that in spite of the practice in some other countries, the Committee can see no more call now than they did in 1981 for proposing the creation of a separate and all embracing Science and Technology Ministry.

6.22 The Committee also see little advantage in a less comprehensive ministry, covering only science. This in effect would be a department created mainly out of the science "side" of the Department of Education and Science. Such an arrangement might give science the political weight which many feel it now lacks as a result of its location in a department in which, necessarily, responsibility for education dominates. But it is important to be clear that education issues dominate in the DES not only because of their political importance, but also because science issues are handled by the DES only indirectly, that is through the ABRC, the Research Councils and the UGC. If a new science ministry were to be created this indirect responsibility would still have to be faced. There would also then be an institutional division between education and science and the Committee fear this would damage the position of science and technology in the education system as a whole whereas what is needed is its strengthening. The Committee's view is that it would be better to strengthen the science side of the DES rather than hive this off into a new ministry.

6.23 It is the arrangements for science and technology at Cabinet level which trouble the Committee. There the science and technology dimension ought to be strong. There is some parallel here with the voice which the Treasury provides on the economic and financial implications of policy, though this analogy should not be pressed too far.

6.24 To provide for the science and technology dimension at Cabinet level, the Committee still believe, as they did in 1981, that there is no uniquely suitable arrangement, appropriate for all time and for all those who would have to operate it. Instead, the Committee's preference is to identify a structure with the promise of definite improvement over existing arrangements and which could evolve.

6.25 Given the vital importance of science and technology to Britain's future, the Committee have now come to feel that only the close identification of the Prime Minister with the science and technology dimension will ensure that it receives due weight. In the Committee's opinion there would be both substantive and symbolic significance in such a provision. This is an opportunity to create the new climate of confidence, for which the Committee argue in Chapter 1. At the same time, it is obviously impossible for any Prime Minister to give more than limited attention to the science and technology aspects of policy questions. The proposals which follow are meant to take account of both these considerations.

6.26 Under the Prime Minister the Committee would like to see the designation of a specific minister to be responsible in Cabinet for the science and technology dimension of policy issues. Only if there is a definite individual charged with this duty does it seem possible to be reasonably confident that this dimension will always play its proper part in decisions which are typically the outcome of many conflicting departmental arguments.

6.27 The object in asking that a minister be designated to speak for science and technology in Cabinet is first to ensure that this dimension receives proper weight in all deliberations. But it is also desirable that ministers should be enabled to form a view of the Government's total spending on R & D, the state of the national R & D effort, its congruence in detail with the Government's overall strategy, and any significant gaps in this coverage, especially in regard to newly emerging areas. Such a view would necessarily involve an appraisal across departments, and ideally it would also include an appreciation of what the private sector was doing, or not doing.

6.28 As to which minister might be given the responsibility, the Committee can see several options. A departmental minister is one possibility, and in that event the Secretaries of State for Trade and Industry or Education and Science would have an especially strong claim. On the other hand, there would then tend to be some confusion between these ministers' departmental interests

and their comprehensive appreciation of the science and technology dimension, and for this reason the Committee do not favour this proposal, though they would still prefer it to having no designated minister at all.

6.29 A second possibility would be to associate the science and technology function with a non-departmental minister, such as the Lord President or Lord Privy Seal. This has been tried previously. An alternative provision might be to make the Paymaster General or the Chancellor of the Duchy of Lancaster the responsible minister, bearing in mind the Committee's hope that he would in this capacity be working closely to the Prime Minister (see below).

6.30 A third possibility would be to place the responsibility with a Treasury Minister. This could have an important advantage in its own right, that is, in its impact on the Treasury. Although it may be wrong to place too much emphasis on Treasury evidence about its dependence on other departments for science and technology expertise, it remains disturbing that a department as powerful as the British Treasury has, in effect, and as a consequence of its particular evolution, a definite blind spot in science and technology. Requiring a Treasury Minister to speak to the science and technology brief in Cabinet would eventually upgrade the Treasury's own understanding and appreciation of science and technology, a development which could only be to the general benefit.

6.31 In their report on *Science and Government* the Committee also commended the appointment of a strong scientific adviser in the Cabinet Office. They are therefore glad to note the development of this post. Results here turn ultimately on the relationship between the adviser and the Prime Minister, the Prime Minister needing to have high confidence in the adviser, the adviser ready and independent access to the Prime Minister.

6.32 In addition to a designated senior minister and a strong scientific adviser the Committee see a Council for Science and Technology as a third essential element in the central structure for science and technology. The Committee identified in 1981 what they called a "vacuum at the centre" which they believed could be filled by such a Council, and the evidence they have received in 1986 confirms that this vacuum still exists. Indeed, the Committee now attach more rather than less importance to the role to be performed by this Council. This is the reason for the one significant change the Committee would make to their 1981 recommendations about the body. The Committee now believe that the Council should be formally chaired by the Prime Minister who should preside from time to time. The deputy chairman should be the designated minister for science and technology.

6.33 As the Committee see it, it would be the task of the Council to take a balanced view of the whole of scientific and technological endeavour, international as well as British; to monitor the connection between science and technology and the evolution of government policy; to raise questions of strategic importance; and generally to promote the emergence of the most favourable conditions both for doing R & D and for getting the results usefully applied in Britain. The Council would promote interaction between the work of the Research Councils, universities and polytechnics, Government departments, private research institutions, industry and commerce. It should cover both civil and defence R & D, and seek to maximise the returns from all R & D. It would be concerned equally with publicly funded and private R & D and would stimulate industry to increase its R & D activity. In short, the Committee see the proposed Council as a highly visible sign of the new importance that Britain must attach to science and technology for its industrial regeneration and future economic prosperity.

6.34 Much of the work of the Council would necessarily be confidential. The Committee would want it to enjoy good access to government working papers relevant to its concerns, and to have much of the status and privileges appropriate to a part of the government machine.

6.35 The Council should also produce an annual statement to Parliament, assessing progress and priorities in the field of science and technology. Over time this might become a benchmark by which the nation's science and technology progress could be charted. There is an inspirational quality in science and technology which once infused British attitudes very generally but is now muted, not least by comparison with the more technologically successful countries such as Japan, the United States and West Germany. The Council for Science and Technology would be able to help create a new scientific and technological culture in the United Kingdom—or, more correctly, to revive an older one.

6.36 The Council's composition would need to reflect its remit, with members drawn approximately equally from the industrial, the academic and the governmental spheres. The aim should be

to keep the Council as compact a body as possible. In the Committee's view membership of the Council should be limited to 15-20. Provided that the Council elected to operate through working parties, there would be every opportunity for the involvement in those of the wider academic, industrial and governmental communities.

6.37 ACARD should be absorbed into the CST. ACARD has succeeded in bringing considerable external resources into government, especially from industry and technology, and its reports have illuminated important issues. Its work should continue within the CST. But there is no room for two such bodies, and ACARD has always been hampered by its remit which is focussed upon applied R & D. The cross-fertilisation of basic and applied research has to be encouraged; the opportunity for joint ABRC-ACARD reports, of which there has only been one so far, does not go far enough. ACARD has also lacked the means to convert its advice into action. The Council which the Committee propose might not fare any better, but in asking that it be formally chaired by the Prime Minister, and ordinarily chaired by a senior minister, the Committee expect this arrangement to improve the chances that its advice would be acted upon. Those of the CST's documents which the Council chose to publish—remembering that some and perhaps much of its advice would be private to government—might also receive more public attention than ACARD reports have done.

6.38 The Committee do not believe that anything of ACARD's important work would be lost if it gave way to a new CST. On the contrary, those studies mainly concerned with applied R & D would be handled through subcommittees of the CST, as they are handled now by subcommittees of ACARD. There is also no reason for there to be a less close relationship between the CST and ABRC than there is now between the ABRC and ACARD, and the CST would also no doubt wish to cement links with other departmental scientific advisory bodies.

6.39 The CST would need a full time, and highly professional, secretariat. It would have oversight of the Annual Review of Government Funded R & D, of the work of the new Science and Technology Assessment Office being established in the Cabinet Office, and of whatever machinery is eventually created to identify and support exploitable areas of science as recommended in the ACARD report of 1986. The Council's staff would be located in the Cabinet Office and, like the existing scientific staff and the personnel of the Science and Technology Assessment Office, would be administratively responsible to the Chief Scientific Adviser.

C A SINGLE RESEARCH COUNCIL?

6.40 The Committee received evidence both advocating the creation of a single National Research Council and in favour of the existing Research Council system. Of the various arguments in favour of a single organisation, two seem to the Committee to be of particular importance—the more comprehensive perspective and the potentially greater flexibility one would expect a single Council to enjoy. The existing Research Councils reflect the existence of more or less identifiably separate scientific areas as these were recognised at the time of each Council's creation. But science is dynamic and any static structure will inevitably have some difficulties in adjusting to this. Such difficulties are not insuperable—thus a given Research Council can fairly be expected from time to time to reorient its priorities within its own field, and new subjects emerging at the boundaries between Research Councils can be addressed through joint committees. Both these developments in fact regularly, if not quite routinely, occur. On the other hand, there is no reason to suppose that a unitary Council would be less effective in either of these respects, and it could additionally be looked to for a more complete sense of the direction in which science as a whole was evolving—a task now assigned to the ABRC.

6.41 The Committee do not favour a partial reallocation of the responsibilities of the Research Councils, such for instance as would lead to the creation of a Biological Resources Research Council. This would entail considerable disruption, would be somewhat arbitrary, and might even exacerbate uncertainty in the system as a whole. For similar reasons, and because of a reluctance to separate science from engineering, the Committee are also opposed to splitting the Science and Engineering Research Council in two. The Committee's Report on Marine Science and Technology¹ showed that marine science is poorly served by the division of responsibility between SERC and NERC, and said that this problem would be looked at again in the present enquiry. The Committee conclude that the problem will be overcome better by drawing the Councils closer together than by setting up different Councils, and by giving enough authority to the Coordinating Committee for Marine Science and Technology which the Government has announced.

¹ 2nd Report, Session 1985-86, HL 47



Fly *cc back-up*

Qd. 0710

File Ref: ST 102/4

FROM: MR R WALKER

DATE: 25 JANUARY 1991

MR A TURNBULL (No.10)

SIR IAN LLOYD MP's GROUP: SUPPLEMENTARY NOTES

I now attach the additional briefing we discussed.

2. The Science Budget covers the Research Councils and the Royal Society.
3. The Science Base is the Science Budget plus the proportion of University funding attributed to research.
4. I am sending a copy of this material to Professor Stewart.

C R WALKER



W0704

THE PRIME MINISTER

24 January 1991

MEETING WITH SIR IAN LLOYD - 28 JANUARY.

I enclose a brief for your meeting with Sir Ian Lloyd and colleagues on 28 January at 4.00pm.

2. I look forward to discussing the brief and other matters with you when we meet the same day at 12.00 noon.
3. I am copying this minute to Sir Robin Butler.

William Stewart

PROFESSOR WILLIAM D P STEWART
Chief Scientific Adviser

A
A

PRIME MINISTER'S MEETING WITH SIR IAN LLOYD'S TEAM

28 JANUARY 1991 at 4.00pm.

1. Attending with Sir Ian Lloyd will be:

Lord Flowers FRS

Vice-Chancellor of University of London until Aug 90.
Leading figure in House of Lords Select Committee on
Science and Technology. Nuclear physicist.

Sir Michael Atiyah FRS

President of the Royal Society. Master of Trinity
College Cambridge. Mathematician.

Sir John Cadogan KBE FRS

Research Director BP and Chairman of the Defence
Scientific Advisory Committee. Chemist. Knighted in
New Year's Honours.

Lord Dainton FRS MA

Chancellor of Sheffield University. A chemist.

John Bradfield CBE

Senior bursar, Trinity College Cambridge (where Sir
Michael Atiyah is now Master). Former biologist.

Lord Porter FRS

Immediate past President of the Royal Society.
Professor of photo-chemistry, Imperial College London.

Sir David Wetherall FRCP FRS

Professor of Clinical Medicine, Oxford University.
Molecular Haematologist.

2. There is strong Royal Society representation. (Lord Porter is Past-President; Sir Michael Atiyah succeeded him on 30 November.) Their Lordships are all cross benchers and physical scientists.

3. The Secretary of State for Education and Science and the Chief Scientific Adviser will also be present.

THE ISSUES

Specialist - is?
Concerned quality/quantity analysis of SFT
+ exploitation of new developments
Lister?

4. Three issues will certainly emerge:

Law Boyd asked - I agreed.

- A. The Funding of UK Science
- B. The Parliamentary Office of Science and Technology (POST)
- C. A Minister for Science

~~Minister~~ Dr W. Stewart
Crosby - what doing? why?
priorities?
£(ST). (before spending round)

The Prime Minister may wish to raise

- D. A Science Seminar in November

Prof.
Wm. Stewart
Ch. Scien. Advisor
Mr. Verker, Rep. Soc. Science
DES

K. Jacke, Pol.

Handling

p.v.S Alan Stewart, High Ed Science

5. The Prime Minister will wish to allow these distinguished scientists to express their views without committing himself to specific future action.

6. While a strong case can be made for very careful attention to the adequacy of the funding of science, there is much loose talk in this field which should be countered. The following brief provides some of the leading arguments and the Chief Scientific Adviser is ready to provide more detailed comments.

A. THE FUNDING OF UK SCIENCE

7. The issue is a claim that science, particularly the Research Councils, is dangerously underfunded.

8. Background. Government spend on S & T in 1991/92 will increase by 4.9% - less than the GDP deflator of 6% - to almost £6 billion. Civil science will increase by 4%; defence by 6%. The Science Budget (ie Research Councils and the Royal Society) will increase by 2%. - See Annex A

Source: H. of Research Councils.

9. Concern will be expressed by the scientists about the overall level of the PES settlement, the balance between civil and defence, the poor settlement for the Science Budget and the perceived inappropriateness of the general GDP deflator as an estimate of real inflation in the costs of S&T next year.

10. Comparisons will be made with other industrialised nations emphasising that the fraction of GDP spent by the UK on science has decreased over the period from 1981 to 1988.

Line to Take

1. After two good years, science has had fair treatment overall in a difficult year for public expenditure.
2. Next year, funding for the Science Budget should be 6% higher in real terms than in 1988/89. *Research Councils + Royal Society*
3. The underlying funding for the Science Base (Universities, Research Councils and the Royal Society) has been maintained at the 90/91 level, once allowance has been made for special capital items and a change in payment procedures. *the Science Budget + proportion of universities funding attributed to research.*
4. The DOE budget for environmental research will increase by over 20% next year.
5. Very large sums of money go to publicly funded science and technology. There is always room for greater efficiency in spending it. Current problems of the Science and Engineering Research Council (SERC) are largely of their own making. Sums of money were committed which exceeded the Council's budget.

B. THE PARLIAMENTARY OFFICE OF SCIENCE AND TECHNOLOGY (POST)

11. Since 1989 Sir Ian Lloyd has been lobbying for Parliamentary funding for POST. The previous Prime Minister declined to provide support from public funds. On the initiative of the Parliamentary and Scientific Committee private contributions were raised to get POST established. Sir Ian is now seeking public funds (about £80k a year) to keep it going.

Line to Take

ex people: info. or ST for MPs.

1 Financial support for POST is a matter for the House of Commons Commission chaired by the Speaker, not for Government.

2 As Sir Ian Lloyd knows because he took part in last week's debate, the Ibbs Report should help the House of Commons Commission better assess priorities in the demands made by MPs on the House's resources.

C. A MINISTER FOR SCIENCE

12. There has been debate in the scientific community for some time about whether or not the UK should have a Minister for Science. This has been revived in the light of what is seen as inadequate funding, worsening international comparisons and "the brain drain". Your predecessor did not favour the idea. There is no consensus within the scientific community.

13. The argument of those who favour the proposal is that a Cabinet Minister with his own budget would protect and advance the science base. This view is promoted by the Labour Party, and by Sir Ian Lloyd and some of his colleagues. They point, in particular, to the support for science in Germany and France. Both of these countries have Ministers for Research & Technology.

14. The key argument against a Minister for Science is that science is increasingly pervasive and plays a large part in the work of many government departments. The USA does not have an equivalent to a Minister for Science.

Line to Take

1. I have listened with great interest and will think very carefully about what you say. There are strong arguments on both sides. — see Annex B
2. Basic science deserves support as does effective technology transfer to wealth creating industries.
3. Ministers shall continue to meet under my chairmanship to consider science and technology issues [ie EA(ST)]. I shall also receive advice from ACOST and the Chief Scientific Adviser, Cabinet Office.
4. Mechanisms are less important than delivery.

D. A SCIENCE SEMINAR

Line to Take

I wonder what you think of the idea that in November of this year, I might have a Prime Minister's Seminar on Science, along the lines of the one held by Mrs Thatcher in 1983. The Chief Scientific Adviser would help to organise this.

Cabinet Office
S&T Secretariat
24 January 1991

STATISTICS

The table attached was sent by the Chief Secretary to the Prime Minister and colleagues on 6 November and remains the basic summary of the Autumn Statement. It has not been published. Treasury inform us that the material to be published in the coming weeks will not be significantly different.

2. The following main points emerge from this table.

	1	2	3
	£ billion, cash		
	1990/91	1991/92	% change (Col 1 - Col 2)
Total S&T	5.76	5.95	3.2
Total S&T excluding launch aid	5.68	5.96	4.9
Defence	2.56	2.71	6.1
Civil (exlaunch aid)	3.12	3.25	4
Science Base	1.79	1.85	3.6
Science Budget (ie Research Councils)	.91	.93	1.8

3. The very small increase for the Science Budget (the Research Councils plus the Royal Society) is the focus of concern. This can be countered with three arguments:

- i. After allowing for exceptional items (the Research Ship, James Clark Ross, and the cost of a move to Swindon) coupled with a once-for-all change in the pattern of annual payments to students, the "underlying funding" of real research is maintained if inflation average 6% in 1991/92.

ii. Money to be transferred from the Universities to the Research Councils will not add to the resources intended for science, but will ensure they are devoted to science and in a planned way.

iii. A detailed calculation by DES on a different basis from the rest of the attached table suggests that the Research Councils will get 3.5% and not less than 2%. But this is unlikely to carry conviction.

The longer view

4. The key to presentation by the Government has been to stress that the Science Budget has had two good years followed by the current admittedly tough but fair settlement for 1991/92.

5. Private sector R&D was increasing sharply until 1988 (the last year for which data is available).

MINISTER FOR SCIENCE

Main arguments

Pro A Minister for Science provides a focus within Government. He can be responsible for basic science in the Universities and Research Councils and can coordinate the more applied science in other departments.

2. The visiting team are likely to argue that a Minister of Science should indeed be responsible for much, if not all, of the money spent by DTI, Energy and MAFF on innovation and technology transfer. The French and German models are seen as successful.

3. Con On the other hand, it has long been recognised that the solution to such "horizontal" organisational problems is not the creation of an inevitably small and marginal department. The French and German models are seen as less successful domestically than British scientists claim. Science is pervasive, but once there is a Ministry, other departments can drop science down their list of priorities. Expert Committees of both Houses of Parliament have recommended against in recent years.

Sources

4. There is no major Government statement of the arguments. Cm 185 of July 1987, which sets out the present arrangements (EASTO, ACOST and CSA) simply agrees with the House of Lords report to which it is replying. That report said:

"6.22 The capacity to give proper weight to the scientific and technological aspects of policy, as to the economic ones, should be regarded as fundamental to all departments in modern government. It follows that in spite of the practice in some other countries the Committee can

see no more call now than they did in 1981 for proposing the creation of a separate and all embracing Science and Technology Ministry. (Longer extract annexed)

5. The House of Commons Education, Science and Arts Committee (which does not include Sir Ian Lloyd) reported in December 1990 that:

"43 The creation of a single Ministry of Science in the United Kingdom would strengthen this country's position in Brussels by bringing British scientists into the discussions directly and at an early stage, and by giving the British representative full member of the "club" of Community Research Ministers and Science Ministry; but these advantages are in our view outweighed by the disadvantages which such a step would bring to the organisation of domestic science policy."

"44 The Chairman of the ABRC pointed out that most Government departments need a strong scientific capability and that locating all scientific responsibility in one Ministry of Science would dilute this. On the other hand, if a Minister of Science were appointed with merely a coordinating function, and no budget, it is doubtful whether he would have sufficient influence over policy decisions, unless he were a senior member of the Cabinet without onerous departmental responsibilities. such a person, with spare time and interest in science, is not always available."

Mr Clarke's
briefing

DP
B

BULL POINTS ON SCIENCE BUDGET

- Since 1979-80 the Government has increased the Science Budget by nearly 23% in real terms
- The Science Budget was increased in real terms every year between 1982-83 and 1990-91
- These increases show the high priority the Government has given to basic and strategic science
- Under the last Labour Government the value of the Science Budget fell in real terms between 1974-75 and 1979-80
- In a difficult public expenditure round last year the Government maintained the underlying value of the Science Budget for 1991-92 in real terms
- The value of the Science Budget has also been maintained in real terms for the following two years
- The advice made to the Secretary of State for Education and Science by the Advisory Board for the Research Councils on the distribution of the 1991-92 Science Budget was accepted, but is not being published because it is being treated as confidential in line with the advice from the UFC and PCFC.
- International comparisons tell only half the story. They concern inputs, whereas the Government is more concerned with outputs. Here our scientists excel, in terms of the numbers of papers published in the main scientific journals
- The Government sees no particular logic or merit in linking the level of its support for civil R & D to a specific percentage of GDP
- References to providing additional resources for science from the peace dividend are obviously inappropriate in present circumstances

BACKGROUND NOTE ON THE SCIENCE BUDGET

1. There has been considerable media interest in the financial position of the Research Councils in the past month. This stems from two factors: first the announcement in the Autumn Statement of the Science Budget for 1991-92, which at £920.8m was only 3.3% higher in cash terms than the current year (although representing level funding of the underlying Science Budget if adjustments for one-off capital grants are made) and the announcements by the Agricultural and Food Research Council (AFRC), the Medical Research Council (MRC) and the Science and Engineering Research Council (SERC) of measures which they are taking to avoid financial difficulties.

2. During the 1980s the Science Budget increased in real terms in each year between 1982-83 and 1990-91, and in the current year (1990-91) it is 26% more in real terms than in 1979-80. This figure has fallen to 23% for 1991-92, as a result of the recent PES settlement which increased the Science Budget by less than the Treasury's forecast GDP deflator of 6%.

3. The Government's critics have for some years complained that the UK Government's funding of civil R & D as a proportion of GDP is significantly lower than that of its main international competitors, chiefly France and Germany. The criticism is based on the published figures which show that between 1982 and 1988 UK government funding of civil R & D fell from 0.70% to 0.55%. During the same period the comparable figures for France were 0.84% rising to 0.87% and for Germany 1.10 falling to 0.92%. The fall in the UK figure is mainly due to government departments' withdrawal from the funding of near-market research rather than as a result of a fall in the Science Budget. The Government's response to such criticisms has been to point out the output of UK scientists is higher than that of scientists in France or Germany.

4. Despite the recent publicity given to the financial problems of SERC, MRC and AFRC, the Department is not aware that either the Natural Environment Research Council and the Economic and

Social Research Council are suffering significant financial difficulties. The position at SERC, MRC, and AFRC is as follows:

SERC: Council has said it faces a deficit of £6.5m in the current year (1.5% of its grant in aid) and £40m in 1991-92, and has decided to introduce a moratorium on all new commitments pending a radical review (initiated by the new Chairman, Sir Mark Richmond) of the balance of the SERC programme. Sir Mark has indicated that he believes that the programme he has inherited is too heavily committed in advance on major facilities and long-term projects, both UK and international.

MRC: The press leaked a letter from the MRC Secretary, Dr Rees, to Unit directors warning of a £3.5m budget overspend this financial year (1.9% of the Council's grant in aid) if expenditure continued at present rates, and imposing a temporary freeze on staff appointments and capital equipment orders. In a recent Observer interview Dr Rees spoke of increasing financial difficulties in years ahead unless MRC received extra money from Government. Council is considering cost-cutting options.

AFRC: At the December Press launch of their Annual Report for 1989-90 the Council announced that they anticipated that some 380 posts might need to be cut in the current financial year. AFRC attributed this to three main factors: the third phase of MAFF cuts in near-market research; the higher than expected inflation rate this year; and the expectation that contract research from the private sector might not reach the level previously forecast.

From Sir Ian Lloyd, MP



HOUSE OF COMMONS
LONDON SW1A 0AA

cc Prof Stewart R1811
(Chair of Scientific
Admin for Cabinet Office)

Front Door
Mr Matterson
Mr Taylor

+ p/w papers Sp 107

16th January, 1991.

Dear Mrs. Phillips,

As my secretary promised when she spoke to you yesterday, hereunder is a list of the Scientists who will be accompanying me to see the Prime Minister at 4.00 p.m. on the 28th January. I confirm that we shall either be walking from the House or arriving at the corner of Downing Street by Taxi and no private cars will be involved.

I am most grateful to you for your co-operation in this matter.

Yours sincerely,

Mrs. Sandra Phillips,
Private Secretary to the Rt.Hon. John Major, MP
The Prime Minister,
10 Downing Street, SW.1.

Lord Flowers
Sir Michael Atiyah MA., PhD
Professor Sir John Cadogan CBE., PhD.DSc., FRS
Lord Dainton, FRS., MA., BSc., Ph.D
Sir John R.G. Bradfield PhD
Lord Porter FRS., BSc., MA., PhD
Sir David Weatherall MD., FRCP., FRCPE., FRS.



NOT
GR

10 DOWNING STREET

Call on PM by
Sir Ian Lloyd +
members of the
science community
had to be
postponed from 14
Jan.

It will now take
place on Monday
28 January at
1600 hrs.

Asc-p/w papers + Bu
for Box on 25 Jan.

S⁹/₁

Sent "Immediate"
By Hand.
D89 7/1/91



original sent to
Hauont Con. Assoc
with copy to House.

10 DOWNING STREET

LONDON SW1A 2AA

From the Private Secretary

7 January 1991

I fear I have bad news regarding the timing of the Prime Minister's meeting with senior members of the Science Community, which we had arranged for Monday 14 January at 1500 hours.

Unfortunately, an important international meeting, which the Prime Minister will have to attend, has now been arranged on that day, and will not end in time for him to receive Sir Ian and his colleagues. He is extremely sorry as he appreciates only too well that all concerned are also very busy.

Is there any possibility of rescheduling the meeting for either: Monday 28 January at 1600 hours or Tuesday 29 January at 1715 hours. Either of these times would, at the moment at least, be possible for both the Prime Minister and the Secretary of State for Education and Science. Perhaps we could discuss them on the telephone?

SANDRA PHILLIPS

The Secretary to
Sir Ian Lloyd, M.P.

D89

fm SP

To

The Secretary to Sir Ian Lloyd MP
House of Commons

I fear I have bad news regarding the timing of the Prime Minister's meeting with senior members of the Science Community, which we had arranged for Monday 14 January at 3.00 p.m.

Unfortunately, an important international meeting, ~~for~~ which the Prime Minister will have to attend, has now been arranged on that day, & will not end in time for him to receive

Sir Ian & his ~~guests~~ colleagues.

He is extremely sorry as he appreciates only too well that all concerned ^{are} also ~~very~~ very busy. ~~programmes~~

Is there any possibility of rescheduling the meeting for either:

Monday 28 January at 1600 hrs
or Tuesday 29 January at 1715 hrs.

/Eiter

Either of these times would, at the moment
or least, be possible for both the Prime
Minister + the Secretary of State for Education
+ Science. Perhaps we could discuss
them on the telephone?



JT

10 DOWNING STREET
LONDON SW1A 2AA

THE PRIME MINISTER

17 December 1990

Dear Sir,

Thank you for your letter of 28 November. I am very pleased that we have now set a date for me to meet the illustrious members of the science community listed in your letter, and look forward to seeing them here in Downing Street on Monday 14 January at 1500. I have asked Kenneth Clarke and the Government Chief Scientific Officer, Bill Stewart to join us.

In the meantime, my very best wishes for Christmas and the New Year.

Yours sincerely,
John
2

Sir Ian Lloyd, M.P.

E. R.

MISS SLOCOCK

I attach a letter from Sir Ian Lloyd, who is the President of PITCOM and who I had a telephone conversation with this morning. The Prime Minister (JM) apparently phoned him on Sunday to say that he thinks the science community is very important and wants to receive a delegation. He said that the Prime Minister would want to do this regardless of the outcome of Tuesday's elections.

Sir Ian has written another letter about it, but it has not been received by the Political Office.

In case you cannot read the names, they are:

Lord Porter

Sir Michael Atiyah

Lord Flowers

Sir David Weatherall

John Cadogan

He is waiting for a date and time to be given.

AL

ALICE

29 November 1990

L28/11

404



HOUSE OF COMMONS
LONDON SW1A 0AA

28.11.90

Dear John,

The full delegation from the
Science community which hopes to call on
you, following your invitation to me will
be as follows:-

Lord Porter, Past President Royal Society

Sir Michael Atter, President "

Lord Flowers, F.R.S.

Sir David Weatherall, ^{F.R.S.} Oxford

John Cadogan, Research Director
B.P.

and myself!

We await your instructions and
upon your convenience.

Yours ever,
K



Prime Minister
Science & Technology
18/2

CABINET OFFICE
Central Policy Review Staff

70 Whitehall, London SW1A 2AS Telephone 01-233 7089

W.0214

18 February 1982

Mr Willie Rickett
10 Downing Street.

Dear Rickett,

I have spoken with all the scientists coming to tomorrow's lunch and asked each of them to be prepared to speak informally for a couple of minutes on their research. Below I give the suggested order plus a brief summary of each research topic:

A. Medical/Genetics

Professor Peters (Royal Postgraduate Medical School, Hammersmith Hospital)

Working on the immunology of kidney disease (nephritis), its modification by therapeutic intervention, and the identification of the immune mechanism - results applicable to other diseases.

Professor Shaw* (University of Leicester)

Saw results of increasing microbial resistance to antibiotics while working as a doctor and decided to do research on the mechanisms of the resistance with the aim of reducing this problem in clinical practice.

Dr Bodmer (Director, Imperial Cancer Research Fund Laboratories)

Works in cancer research, use of monoclonal antibodies in identification of tumour cells and characterisation of the cell surface. Heads a large research laboratory.

B. Genetic Engineering/Biotechnology

Professor Holt* (Polytechnic of Central London)

Works on the mutation and genetics of industrial micro-organisms



with the aim of developing new biotechnology processes and products.

Dr Dart* (ICI Corporate Laboratory, Runcorn)

Working on recombinant DNA (genetic engineering) of bacteria used for making single cell protein ("Pruteen") and use of these bacteria to express mammalian proteins eg interferon.

Dr Rees* (Unilever Research Laboratory)

Working on the chemistry, biochemistry and structure of various food components - the results are important for food preservation. Heads major group at Unilever.

C. Plants/Agriculture

Dr Bennett (Warwick University)

Working on photosynthesis in plants, its optimisation and manipulation for improvements in agriculture.

Professor Stewart* (Dundee)

Working on photosynthesis in plants and its application in the study of nitrogen cycle with particular reference to conditions found in agriculture.

* Additional topics for these scientists:

- (a) Professor Shaw is American-born and was a practising doctor in the USA but decided to switch to research and to do it in the UK. Why?
- (b) Professor Shaw and Dr Dart run a joint industry/University Laboratory together. Has this been successful?
- (c) Professor Stewart was Chairman and Professor Holt a member of

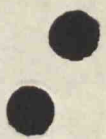


a Royal Society working group which has just published a report on Biotechnology and Education. What were the main conclusions?

- (d) Dr Rees is leaving Unilever in October to become Director of the Medical Research Council's National Institute of Medical Research at Millhill, a considerable coup for MRC. What attracted him to work at NIMR rather than a successful and profitable company?
- (e) Professor Holt was seconded to DG12 in the Commission in Brussels and worked on the EC programme on biomolecular engineering. How well do UK scientists interact with the Commission and do we get our fair share of the cash?

Yours sincerely,

ROBIN B NICHOLSON
Chief Scientist



18 FEB 1982
B 11 12 1
6 7 8 9
5 4 3 2
1 2 3 4 5 6 7 8 9

COMMUNICATIONS
UNIT



10 DOWNING STREET

Prime Minister

Lunch for Scientists

In this folder are

- (a) the guest list for this lunch
- (b) notes on the subjects each scientist is researching
- (c) notes on some topics of science which interest and might be raised if there is time
- (d) a leaflet on achievements in biology that our skeleton felt might interest you

LM

18/2

LIST OF GUESTS ATTENDING THE LUNCHEON TO BE GIVEN BY
THE PRIME MINISTER FOR SCIENTISTS ON FRIDAY, 19 FEBRUARY 1982
AT 1.00 PM FOR 1.15 PM

The Prime Minister

Mr. William Shelton, MP

Dr. J. Bennett

Department of Biological Sciences,
Warwick University

Dr. W.F. Bodmer

Director, Imperial Cancer Research
Fund Laboratories

Dr. E. Dart

Head of ICI Corporate Bioscience and
Colloids Laboratory, Runcorn

Professor G. Holt

Dean of Science and Engineering
Faculty, Polytechnic of Central London

Professor D.K. Peters

Professor of Medicine, Royal Postgraduate
Medical School

Dr. D.A. Rees

Principal Scientist and Executive for
the Science Programme, Colworth
Laboratory, Unilever; also Associate
Director, MRC Cell Biophysics Unit

Professor W.V. Shaw

Professor of Biochemistry, University
of Leicester

Professor W.D.P. Stewart

Boyd Baxter Professor of Biology and
Head of Department of Biological
Sciences, University of Dundee

Dr. R.B. Nicholson

Chief Scientist, CPRS

Mr. Willie Rickett

10 Downing Street.

DRAFT GUEST LIST FOR LUNCH FOR SCIENTISTS ON FRIDAY, 19 FEBRUARY

Dr. R.B. Nicholson

Dr. J. Bennett

Professor D.K. Peters

Professor W.D.P. Stewart

Professor G. Holt

PRIME MINISTER

Mr. William Shelton

Dr. D.A. Rees

Dr. W.F. Bodmer

*Don't see
enough of us
return.*

Professor W.V. Shaw

Dr. E. Dart

Mr. W.F.S. Rickett

ENTRANCE

MR. RICKETT

Prime Minister

I imagine you will want to devote most of this lunch to hearing about what these scientists are doing. But I will let

Lunch for Scientists
Friday, 19 February

You have a note on one or two topics of science p[ro]gram in case there is time at the end to discuss them.

I attach the list of guests attending the lunch on Friday together with a draft seating plan. (The four sitting either side of the Prime Minister and Mr. Shelton were suggested by the Department of Education and Science).

If you agree the seating plan, please could it go into the Prime Minister's box.

Meredith

Sue Goodchild

17 February 1982

Meredith

~~Handwritten scribbles~~

~~Handwritten scribbles~~

~~Handwritten scribbles~~

WH
17/2



DEPARTMENT OF EDUCATION AND SCIENCE
 ELIZABETH HOUSE, YORK ROAD, LONDON, SE1 7PH
 TELEPHONE 01-928 9222
 FROM THE PARLIAMENTARY UNDER-SECRETARY OF STATE

W Rickett Esq
 10 Downing Street
 LONDON SW1

17 February 1982

Dear Willie,

LUNCHEON WITH SCIENTISTS: 19 FEBRUARY

I am replying to your letter of 28 January to Nick Cornwell. As you will know our people have had some talk with Dr Nicholson and agreed that he will be alerting guests to be ready to give brief informal accounts of the state of scientific research in their particular fields.

If further topics are needed we suggest, and Dr Nicholson is content with this, that they might be:

- (i) biotechnology: growth points
 helping technology transfer
 convergence of disciplines (particularly biological sciences with chemical engineering)

"brain drain" - is it serious, how might it be countered?
- (ii) ways of improving technology transfer: state of present liaison between the fundamental research system and industry; value of science parks; role of BTG; factors affecting the motivation of researchers; does technology transfer pose particular problems in the agricultural, medical and biotechnological fields?
- (iii) the state of fundamental science and the need for selectivity. Both the UGC and the Research Councils are having to be more selective in their support, as indeed central government has to be in its backing for new technologies through the Department of Industry. What sort of principles should inform selectivity? They are rightly different for the UGC and the Research Councils but the two parts of the dual support system need to work together; how does this look in practice?

The Prime Minister will wish to know that one of her guests, Dr D A Rees, has now been selected as the next Director of MRC's National Institute of Medical Research. The appointment was announced this month; a copy of the press notice is enclosed.

Yours sincerely

G Alan Holley

G A HOLLEY
Private Secretary

press notice

Medical Research Council
20 Park Crescent
London W1N 4AL
Telephone 01-636 5422

NATIONAL INSTITUTE FOR MEDICAL RESEARCH (NIMR): DIRECTORSHIP

The Medical Research Council is pleased to announce that Dr D A Rees FRS has been appointed to succeed Sir Arnold Burgen FRS as Director of NIMR when Sir Arnold relinquishes the post at the end of September this year. The National Institute is the Council's largest non-clinical research establishment: it has a staff of about 600 and an annual budget of some £8m.

Dr David Allan Rees (age 45) is at present Principal Scientist and Scientific Member of the Executive Committee of the Colworth Laboratory, Unilever Research. Since 1980 he has also been Associate Director of the MRC Cell Biophysics Unit at King's College, London. He will relinquish both these posts when he takes up the directorship of NIMR. Before joining Unilever Research in 1970, Dr Rees was Lecturer in Chemistry at Edinburgh University; from 1972-77 he was Visiting Professor in the Biochemistry Department of University College, Cardiff. Dr Rees is well known for his work on the structure and biochemistry of polysaccharides. He was awarded the Colworth Medal of the Biochemical Society in 1970 and in the same year the first Carbohydrate Chemistry Award of the Chemical Society. Recently Dr Rees' research has been concentrated on the relationship between surface glycoproteins and the cytoskeleton in cell adhesion, shape and motility. At Unilever Research he has carried responsibility for the management of the overall direction of long-term research at the Colworth Laboratory and been Chairman of the Science Policy Group which plans and integrates strategies over all of Unilever's science and technology in Research Division. Dr Rees was elected a Fellow of the Royal Society in 1981.

The Council attaches great value to Dr Rees' academic and industrial experience and sees in his appointment opportunities for strengthening the Institute's links both with universities and with British industry.

1114 501 241001



198 FEB 1982



Grey Scale #13



A 1 2 3 4 5 6 **M** 8 9 10 11 12 13 14 15 **B** 17 18 19



Inches 1 2 3
Centimetres 1 2 3 4 5 6 7 8

Colour Chart #13

Blue Cyan Green Yellow

