



PS/ Secretary of State for Trade and Industry

DEPARTMENT OF TRADE AND INDUSTRY
1-19 VICTORIA STREET
LONDON SW1H 0ET

Telephone (Direct dialling) 01-215) 5422
GTN 215) 5422
(Switchboard) 01-215 7877

CONFIDENTIAL

17 March 1987

David Norgrove Esq
Private Secretary to the
Prime Minister
10 Downing Street
London SW1A 2AA

1. NFA

2. pa.

Dear David,

SPACE

WITH DN?

Further to my letter of yesterday, I attach additional defensive material on R&D policy more generally and on European collaboration.

I am copying this letter to Robert Smith (DES), Jill Rutter (Treasury) and Brian Unwin (Cabinet Office).

Yours ever,
Michael

MICHAEL GILBERTSON
Private Secretary

JG2AZM

CONFIDENTIAL

GENERAL QUESTIONS AND ANSWERS ON R&D

- Q1. Is the current delay in reaching a decision not just another example of the Government's unwillingness to provide adequate support for R&D?
- A. The Government already spends £4.3 bn per year on R&D in the UK. There are many competing demands for increased R&D expenditure but the answer is not simply increasing Government support indiscriminantly. Care is needed in selecting the best investment options. The Space Plan is being considered against this background.
- Q2. By not supporting the Space Plan is the Government not again failing to match the support of our major international competitors?
- A. Direct comparisons of public support measures in different countries are not easy because of differing macroeconomic regimes. However, total Government funded civil R&D in the UK is comparable to other technologically advanced countries [when measured on a % of GDP basis]. Within this total level of support there is no a priori reason why the UK should match the support of other countries in specific sectors of technologies. But in anycase it is in the performance of the private sector that UK expenditure on R&D compares poorly with our competitors.
- Q3. Is the Government's approach to the Space Plan not just the same as that towards the EC R&D Framework Programme and EUREKA, i.e. preaching the virtues of European collaboration but unwilling to provide financial support?
- A. It is wrong to conclude that the Government is unwilling to see public funds provided for European collaboration. But again it is a matter of priorities. Within the proposed new Framework Programme the Government has consistently argued for a substantial increase (up to 80%) in programmes directed towards industrial competitiveness. EUREKA is a market-led initiative and projects should be able to secure their support primarily from commercial sources; nonetheless the Government does provide financial support to UK participants in appropriate cases.

CONFIDENTIAL

- Q4. If the Government is not prepared to support the Space Plan, or any increase in space spending, does this mean that the Government anticipates significant support for space being channelled through EUREKA or the EC R&D Framework Programme?
- A. No. The Government is firmly of the view that ESA should be the primary focus for European collaboration on space matters.
- Q5. Is the Government's attitude to the Space Plan being influenced by the [imminent] decision on Launch Aid?
- A. Launch Aid and the Space Plan are only two of a range of competing demands for limited resources. However the Government also gives careful consideration to the merits of each case and there is no simple trade-off between the various options.
- Q6. Would not the recent House of Lords Select Committee report on civil R&D suggest that in areas such as Space the Government should be providing more public support?
- A. In the report the Select Committee recognised the need to select priorities. There are many competing demands for increased R&D expenditure but the answer is not simply increasing Government support indiscriminately. Care is needed in selecting the best investment options. The Government is currently considering its response to the report.

Option 1 Chosen

Q21. If you won't support old industries, and you won't support new industries, who will you support?

- A. The Government does provide financial support to all sectors of industry to help stimulate more private sector R&D where otherwise this would not occur because of high risks, diffused benefits, etc. The DTI currently spends £440M p.a.. Industry also benefits a great deal from the support of other Departments, in particular the MoD, in pursuit of their procurement/policy requirements. The MoD spends about £1,400M p.a. on R&D with UK industry.

CONFIDENTIAL

Option 3 Chosen

- Q8. At a time when traditional manufacturing industries are contracting, why has the Government not taken the opportunity to give support to an industry of the future?
- A. The Government has decided to almost double the current level of spending on space. This is a very significant increase and, against the background of many other competing demands for increased R&D support, demonstrates the Government's commitment to the future importance of space.

CCBGA



DEPARTMENT OF TRADE AND INDUSTRY
1-19 VICTORIA STREET
LONDON SW1H 0ET

Telephone (Direct dialling) 01-215) 5422
GTN 215)
(Switchboard) 01-215 7877

PS/ Secretary of State for Trade and Industry

CONFIDENTIAL

16 March 1987

David Norgrove Esq
Private Secretary to the
Prime Minister
10 Downing Street
London SW1A 2AA

Dear David,

SPACE

Thank you for your letter of 13 March.

I attach defensive material to be used before a decision is taken, if Option 1 is chosen, and if Option 3 is chosen. This has not yet been cleared with my Secretary of State or with other Departments. You also asked for briefing on Government support for R&D more generally. I will send you as soon as possible tomorrow briefing on DTI support for R&D: no doubt Cabinet Office have in hand briefing on Government support in general.

I am copying this letter to Robert Smith (DES), Jill Rutter (Treasury), and Brian Unwin (Cabinet Office).

*Yours ever,
Michael*

MICHAEL GILBERTSON
Private Secretary

JGLAVI



BACKGROUND

1 The Government established the BNSC in November 1985 and gave it the task of preparing a strong, coherent, coordinated, long term space strategy, which took into account the needs of Government departments, industry, scientific establishments and other civil users.

2 The major part of the UK's civil space research and development programme (currently some £80m) administered by BNSC, is carried out by the European Space Agency (ESA). The balance of the current spend on civil space R&D (about £30m) supports a national programme.

3 BNSC's proposals (the National Space Plan) seek something approaching a threefold increase in government expenditure in order to maintain its share of the expanding ESA programme and to enlarge our complementary national programme to exploit our activities in ESA more effectively.

DW1CUJ



NO DECISION YET

Line to Take

"The proposals put forward by the British National Space Centre are being closely studied by the Government along with other competing calls on scarce resources. In that situation time and care is needed in selecting those investment options which have the best chance of offering good returns."

Questions and Answers

1. Q. Will the Government support the Space Plan?

A. The Government is carefully considering the Space Plan along with demands for increased R&D expenditure in other sectors. The degree of support will depend on its assessment of likely returns compared with those of competing priorities.

2. Q. Is it true that the Government has rejected the Space Plan?

A. No. The Government is carefully considering the Plan against the claims of other competing priorities.

DW1CUJ



3. Q. When will the Government reach a decision?

A. Time and care is needed to evaluate such a far-reaching plan and to assess its potential returns against those of competing proposals in other sectors, but the Government hopes to reach a decision soon.

4. Q. Why has the Government not yet decided? Plan was written months ago, and time is running out.

A. The Government needs to give such far-reaching proposals careful consideration and to weigh their merits against proposals in other sectors competing for scarce resources. Better to take time and make the right decision.

5. Q. When do we need to come to a decision?

A. Soon. ESA is currently finalising proposals, within Ministerial guidelines laid down in 1985, for European space development over the next decade.

DW1CUJ



6. Q. Surely a Government decision is already too late to influence ESA programmes?

A. No. We have managed to keep options for greater UK participation in ESA programmes open, but an early decision is necessary if we are to take advantage of these.

7. Q. Will the Government bring its support for Space up to the level of France and Germany?

A. No. The Space Plan does not propose this. It does, however, recommend increased support for an expanded and better balanced UK space programme.

8. Q. These projects are too long term for the private sector to fund. Surely Government should provide the money?

A. British industry is already putting substantial investment into space (£26m in 1986). However, the projects are high risk and long term, limiting the scope for up-front investment by the private sector. Some Government help will be required if all the major opportunities are to be pursued.

DW1CUJ



OPTION 1 CHOSEN

Line to Take

"Against a background of priorities in several sectors competing for limited resources, the Government has decided to maintain its support for the UK Space programme at about the present level. With our limited resources, we have decided to concentrate on maintaining our existing strengths in communications satellites, in space science, and otherwise on becoming good users of data from space rather than providing the data ourselves".

Questions and Answers

1. Q. Why no increase in expenditure?
 - A. With many demands from other sectors on limited resources, the Government has to be selective in directing public expenditure to areas, which promise to yield the highest returns. Space development is expensive and, while the rewards could be great, commercial benefits are in the main high risk and long term. The Government has decided to confine expenditure to programmes offering less uncertain gains.

DW1CUJ



2. Q. Why has the Government rejected the Space Plan?

A. Government policy is to keep tight control on public expenditure. With priorities in other sectors competing for limited resources, the aim is to focus public expenditure on areas with the best promise of high returns. Within that framework, the Government has decided to maintain its present level of support for UK space development, but it is not convinced that increased expenditure on space would be justified.

3. Q. What did the Space Plan recommend?

A. Broadly the Space Plan recommended that the UK maintained its contribution to an expanding ESA budget at its present level of about 14%, and significantly extended its complementary national programme. By so doing, it aimed to give the UK a good opportunity of securing benefits from new programmes planned by ESA such as mobile communications, Earth observation, replacement launchers and involvement in the international Space Station.

4. Q. Did it call for a trebling of expenditure?

A. The Plan envisaged a progressive build up of expenditure, which would have been about 2 1/2 times the current estimate for the year 1989/90.

DW1CUJ



5. Q. Will you honour your commitment to publish the Plan?

Since the Plan is not being implemented there would be little purpose in publishing it. No such commitment has been made.

6. Q. If no increase in expenditure why did you set up the BNSC in the first place?

A. BNSC was set up to coordinate the various different elements of Governmental support for the UK space effort, as well as to produce a space plan for consideration by Ministers.

7. Q. Will the BNSC be disbanded?

A. No. It will continue to coordinate the Government's support for UK's space programme.

8. Q. Will Roy Gibson resign?

A. That is a matter for Mr Gibson.

9. Q. Will Britain stay in ESA?

A. Yes, Britain will continue to contribute to participate in ESA programmes for communications and space science.

10. Q. What percentage contribution will the UK be making to the ESA budget?

A. About 7%.

DW1CUJ



11. Q. Why did the Government vote for the increase in ESA expenditure if it will not pay its share?

A. The Government backed the ESA strategy formulated at the 1985 Rome Ministerial meeting. This did not commit Britain to any particular level of expenditure. As usual under ESA rules, it is up to individual government's to determine what contribution to make to the various optional ESA programmes.

12. Q. Will our National programme allow us to exploit ESA membership?

A. The National programme will still be necessary for our participation in space science, and we will be funding certain ground facilities to collect available data from earth observation satellites and make it available to UK users.

13. Q. Who will take our share of the increased programmes?

A. Other ESA members, with the bulk probably being taken up by the French, Germans and Italians.

DW1CUJ



14. Q. Will British Industry still have a chance to participate in ESA projects?

A. Yes - in one or two areas like communications satellites where Britain already has an established position. However, its chances of participation in projects associated with new ESA programmes, such as Earth observation, the international space station and replacement launchers, are slim.

15. Q. Will the UK do anything in ESA except for science and administrative programme?

A. Apart from our mandatory contributions, we shall participate in communications programmes.

16. Q. Does this mean we will be way behind France and Germany?

A. France and Germany have in the past made proportionately higher contributions to ESA than Britain. As Britain's percentage contribution to ESA's expanded budget will decline further, we shall remain some way behind France, Germany (and Italy) in European space developments.

17. Q. Will the UK programme really be smaller than of India?

A. Yes, it is a question of perceived priorities.

DW1CUJ



18. Q. Will the UK participate in the Space Station?

A. We will not be joining the Space Station development programme but this does not necessarily exclude us from paying to use the Space Station in due course.

19. Q. Didn't the Prime Minister tell President Reagan that we would?

A. The present arrangements for participation in the studies do not bind us to take part in building the Station.

20. Q. How can you criticise the City for being short term if you won't back long-term projects such as Space?

A. The Government is already backing the UK space effort to the tune of £100m p.a. Space development covers a wide spectrum, which is too expensive for any Western European country to finance; - hence the existence of ESA. If the City would match the Government's contribution, we should be well on the way to full backing for BNSC's Space Plan.

DW1CUJ



21. Q. Won't this mean a brain drain?

A. We are not reducing expenditure on our space programme. It is possible that some people will be disappointed in our decision and may move overseas to find work concerned directly to space, but others may choose to stay in the UK to work on alternative topics.

DW1CUJ



OPTION 3 CHOSEN

Line to Take

"Against a background of priorities in other sectors competing for limited resources, the Government has decided to increase its support for the UK space programme to almost double the current level. This will enable Britain to build upon its existing strengths such as in communication satellites and to participate in new ESA programmes such as Earth Observation and the international Space Station which promise to yield significant, long-term commercial benefits."

Questions and Answers

1. Q. Why have you not approved the whole Space Plan?

A. In a situation where there are competing priorities for limited resources, the Government has to be selective in providing additional public funding. It has aimed to concentrate increased expenditure on those areas which promise to yield the highest returns.

2. Q. Will this be enough to sustain a British presence in Space at the current level?

A. The increased expenditure authorised by the Government should enable Britain to sustain an effective presence in ESA and to exploit opportunities in a number of fields.

DW1CUJ



3 Q. Doesn't this mean that UK will lose ground in Space?

A. No. If we use the additional funds effectively, we should be able to keep pace with space developments and secure commensurate rewards.

4. Q. Why not scrap our ESA membership and go it alone?

A. Space is prohibitively expensive, and going it alone is not a realistic option for us or any other Western European country. Our combined ESA and national expenditure projected for 1989/90 would represent less than 10% of the planned ESA budget for that year.

5. Q. Why not scrap our National programme and rely on ESA?

A. ESA is essentially an R&D organisation. If we are to exploit opportunities we must have a back-up national programme to follow through. For instance ESA development of the ERS1 Remote Sensing satellite will only be useful to us if we develop the ground facilities to receive and interpret the data for commercial and scientific use.

DW1CUJ



6. Q. Why are you spending much less than the French and Germans?

A. The French and Germans have different priorities and are pursuing different objectives. Our more selective investment over the past 10 years has given us very good value for money, notably in communication satellites.

7. Q. Are we not too late to influence the shape of the ESA programmes?

A. No. We have been involved in the shaping of the current ESA plans and final decisions will not be taken until the next Ministerial meeting probably in June.

DWLCUJ



Q. Why are you spending much less than the French and

German?

A. I think the French and the Germans are spending more on space because they have a more developed space program. We are still in the early stages of our space program. We are not yet ready to spend as much as they are.

Q. Are we not too late to influence the shape of the

ESA program?

A. I think we are still in time to influence the shape of the ESA program. We are still in the early stages of our space program. We are not yet ready to spend as much as they are.