



the department for Enterprise

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Our ref

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Date

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Dear Paul

SPACE

We are required to respond to the Second Report of the House of Lords Select Committee on Science and Technology on UK Space Policy, before the summer recess.

I attach a draft memorandum, which the Chancellor of the Duchy of Lancaster proposes to forward to the Chairman of the Select Committee as the Government's response. Departments have already been consulted at official level on the content of the memorandum, and I am now circulating the draft for Ministerial approval.

I should be grateful if you and copy addressees could consult Ministers quickly so that we can issue the memorandum before the summer recess. I should like any comments to be with me by close on 25 July.

I am sending copies of this letter to Private Secretaries to members of E(ST) as well as to Trevor Wooley and John Fairclough.

Yours
Rosalind Cole

ROSALIND COLE
PRIVATE SECRETARY

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GOVERNMENT RESPONSE TO THE SECOND REPORT OF THE HOUSE OF LORDS'
SELECT COMMITTEE ON SCIENCE AND TECHNOLOGY ON UNITED KINGDOM
SPACE POLICY: 1987-88 SESSION

1. The Government are grateful to the House of Lords' Select Committee on Science and Technology for their comprehensive and considered review of United Kingdom space policy and to the participants in the debate on the motion moved by the Chairman of the committee in the House of Lords on 30 March. Since returning to office last year, the Government have re-appraised United Kingdom's civil space activities. The Committee's report has been most helpful in this work.

2. The Select Committee's report called for a clear statement of Government policy on civil space. This is set out at paragraphs 3-12 below. Paragraphs 13-23 respond to those of the main recommendations not covered elsewhere.

UK Space Policy

(Recommendations/Conclusions:- 6.1,6.2,6.3,6.6,6.7,6.8,6.9,
6.10,6.11,6.12,6.16,6.23,6.27,6.28,6.30,6.31)

3. In its civil space activities the Government will seek to encourage industry and the scientific community to exploit

opportunities in space based on a realistic appraisal of costs and of scientific, technological, commercial and other benefits that may be secured. Space activities cannot occupy a privileged place in the Government's public expenditure plans. Space projects will be examined as rigorously as scientific research and R&D proposals from other industrial sectors. Subject to this appraisal and the quality of proposed projects that emerge, the Government expect to maintain expenditure on civil space at broadly the existing level which, since our entry in to the Columbus space station programme, has increased to approximately £130m per annum.

4. Space activities are well suited to international collaboration, by their nature as well as because of their cost. The Government will therefore continue to carry out a major part of its civil space activities on a collaborative basis, in particular through the European Space Agency (ESA). At the same time, international collaboration inevitably brings some additional administrative costs. We shall work with our European partners to ensure that, by good management, these costs are kept to a minimum.

5. At the same time, the Government recognise the importance of encouraging a national programme which will allow British companies to develop the technologies and expertise to enable them to exploit successfully UK investment in ESA programmes.

6. So long as ESA's science programmes maintain satisfactory standards of management, they should continue to provide the foundation of the United Kingdom's space science activities, complemented by a few targeted national or bilateral projects, within available resources.

7. The main focus of the United Kingdom's space activities over the last decade and more has been space communications. This concentration of effort has been well-judged in that a substantial market has developed in which British companies compete successfully. The Government have, however, concluded that the time has come when decisions can, and should, be made predominantly on a commercial basis by companies operating in the now largely established market, and that there should be a decisive switch of Government efforts and resources to other fields.

8. There is a large measure of agreement that the next area of space activity likely to yield substantial industrial and commercial benefits is earth observation.

9. The United Kingdom is already participating in ESA's ERS-1 satellite project. The Government have also decided to participate in ESA's Columbus programme, concentrating on the

polar platform element of that programme. This will give the United Kingdom a substantial role in developing the means of acquiring earth observation data.

10. In addition, the Government are setting up an Earth Observation Data Centre at the National Remote Sensing complex at the Royal Aerospace Establishment, Farnborough. This is intended to provide a catalyst for the progressive development of a new service industry, operating on a global scale, that uses data obtained from space as its raw material. To be successful, the Data Centre will need a strongly commercial orientation. The Government hope that industry will quickly assume operational and financial responsibility for the Data Centre, as a major element in the full commercialisation of earth observation.

11. The Government recognise that many of the benefits that will result from earth observation from space are dependent on applications development and demonstration. The BNSC will work with industry and users to maximise the benefits that will accrue from the investments made in data acquisition and processing. The UK will continue to support the acquisition from space of observations required for operational meteorology particularly through the European consortium Eumetsat.

12. The United Kingdom civil space programme will continue to be implemented through the British National Space Centre. The role of the Centre will be to carry through the programmes and projects on which the Government has embarked, and to advise Government on new programme proposals as they arise. The Centre will act as a focus for the civil space interests of the Department of Trade and Industry, the Ministry of Defence, the Foreign and Commonwealth Office and the Department of Education and Science (through the Science and Engineering Research Council and the Natural Environment Research Council). Responsibility for funding will remain with the constituent Departments according to their particular responsibilities, but the Centre will provide overall coherence and significant added value because of the links which can be developed between individual programmes on the one hand and advances in associated sectors of science and technology on the other. The BNSC partners have appointed a new Director General from within the Department of Trade and Industry. He will report to the Chancellor of the Duchy of Lancaster who has lead responsibility for Government space policy. The Chancellor of the Duchy has asked the Director-General to concentrate on co-ordinating UK civil space policy so as to secure both value for money and, by the cost effective use of resources, the maximum scientific, technological and commercial benefits to the UK. The Centre will develop a wide range of contacts with industry and commerce so that the interests of the business community, particularly

users, can be properly reflected in UK civil space activity. The Centre will be looking for ways to encourage greater private sector participation in relevant space programmes.

13. These decisions produce a coherent civil space programme. They provide a clear sense of direction for the United Kingdom's space activities for the medium term, and a sound and realistic basis for industry and the scientific community in the United Kingdom to respond to the challenges and opportunities of space.

OTHER RECOMMENDATIONS

RADARSAT

(Recommendations/Conclusions:- 6.4)

14. The Government will continue to pursue bilateral collaboration in space activities where justified. Having opted to seek a leading role in the Columbus polar platform, the Government decided not to join in RADARSAT development. While RADARSAT is a good project, it is essentially a one-instrument project on a smaller scale than the Columbus polar platform and would not have offered as good a base for commercial exploitation.

ESA/Non-ESA Expenditure

(Recommendations/Conclusions:- 6.3,6.15,6.19)

15. The Government recognise the need to strike a balance between expenditure on national space programmes and on ESA programmes. The Government's aim is to look for the optimum combination of ESA, national, and multilateral and bilateral programmes. For science, ESA's mandatory programme will take priority for the foreseeable future. In other areas the balance will change over time but the Government will consult industry and users closely about the right balance to secure the UK's industrial and commercial objectives. The achievement of the best value for the money spent will depend in large measure on successful partnership between industry and Government on R&D activities.

BNSC's Space Plan

(Recommendations/Conclusions:- 6.5)

16. The Space Plan formed part of the background to the Government's recent review of civil space policy. It was provided as confidential advice to Ministers and, as such, will not be published.

Man in Space, Hermes, Ariane 5

(Recommendations/Conclusions:- 6.9,6.10,6.13)

17. The Government agree with the Select Committee's view that the development of a European capability to put man in space would at present be "an expensive and hazardous diversion" and that the United Kingdom should not in consequence participate in Hermes. At the ESA Council Meeting at The Hague in November 1987 the Government accordingly announced their decision not to take part in Hermes. Subsequently the Government also decided not to join the ESA Ariane 5 development programme in view of the risks associated with man-rating and the inadequate commercial returns likely to be realised on the Government's investment at the level proposed.

Funding

(Recommendations/Conclusions:- 6.17,6.18,6.19)

18. The Government will continue to play its part in space exploration. This does not mean that the UK will be a leading participant in all aspects of space exploration. The Government will continue to pursue a selective policy, seeking to ensure that the UK gets good value for the money it spends. Planned Government expenditure now stands at approximately £130m per

annum. This reflects an increase of approximately £10m per annum compared to previous years, mainly as a result of our having entered in to the Columbus space station programme. The Government agree that there should be increased private sector expenditure on space, including R&D. Where there are good commercial prospects, but where the returns are distant, the Government are prepared to give a lead as for example with its recent initiatives in the earth observation field.

Economic analysis

(Recommendations/Conclusions:- 6.20)

19. The Government agree with the Select Committee that economic analysis of space programmes should be normal practice in BNSC and ESA.

Launchers

(Recommendations/Conclusions:- 6.21)

20. The Government agree with the Select Committee that the United Kingdom should have access to a reliable, low-cost launch system. As an ESA member and a participant in earlier Ariane variants, the UK will continue to have access to Ariane

launchers which promise to be competitive throughout the 1990s. The prospects for HOTOL are being explored, following the Government's 50% funding of proof of concept studies that were completed earlier this year. The scale of funding required to develop HOTOL or any similar concept would be far too great for the UK to contemplate on a national basis, particularly since only a relatively small number of such launch vehicles are likely to be required. The Government has therefore concluded that any further development must take place on the basis of international collaboration. The Government will support efforts by UK companies to find suitable collaborators but will not be providing any further financial support for the foreseeable future.

Communications

(Recommendations/Conclusions:- 6.2,6.24)

21. The Government welcome the Committee's endorsement of policy in the field of military communications satellites. The Ministry of Defence has made a substantial investment in the three satellites in the Skynet 4 Stage 1 programme and is now looking forward to their launch at intervals over the next two years. MOD was able to promote successfully the sale of two Skynet 4 type satellites to meet the requirements of NATO in the 1990s.

22. The Government take note of the Select Committee's recommendation that the role of British Telecom as the United Kingdom's representative or signatory to international satellite organisations should be reconsidered in favour of the BNSC. The Government will in due course review the position in consultation with all relevant interests, taking account of the comments in paragraph 8 above regarding the predominantly commercial emphasis today of the space communications market.

Industry

(Recommendations/Conclusions:- 6.25)

23. The Government do not share the Select Committee's view that UK industry will necessarily be disadvantaged if the United Kingdom does not match support for wide-ranging space programmes provided by other ESA countries. The Government will continue to be selective about their participation in ESA so as to secure economic, scientific and commercial benefits for the United Kingdom. In some sectors, for example in most of the communications field, UK industry is in a position to exploit opportunities without further Government financial help.

Science

(Recommendations/Conclusions:- 6.26)

24. The Government accept the Select Committee's view and recognise the need to ensure that infrastructure costs do not escalate. The Government will keep this constantly under review as projects develop. In particular, through the BNSC, infrastructure costs will be reduced by better co-ordination of the space technology activities carried out by Government departments and industry.

User Interests

(Recommendations/Conclusions:- 6.29)

25. The Government agree that the user communities should play a major part in future remote sensing programmes. User interests are represented on the British National Space Centre's programme boards and users will be involved in transforming the Earth Observation Data Centre into a commercial operation.

Weather Satellites

(Recommendations/Conclusions:- 6.32)

26. The Government accept the Select Committee's recommendation that the transfer of weather satellites to the private sector should be resisted. However this will be kept under review especially in the light of the Next Steps report and the possible implications for the Meteorological Office which is a candidate for agency status.

Microgravity

(Recommendations/Conclusions:- 6.33)

27. The Government note the Select Committee's recommendation but it is not yet clear what the benefits or commercial implications of microgravity research are likely to be, nor whether these can be achieved on a realistic timescale. The BNSC will maintain a watching brief on the situation.