

PRIME MINISTER

3 February 1988

SPACE

The case for Space was very badly presented last year. The argument was based on exhortation by special interest groups which, when reduced to its elements, was a national plea for keeping up with the Joneses. The arguments failed to achieve any hike in the base expenditure level because they neither persuaded Ministers to redeploy their departmental funds, nor the Treasury to release extra from the reserve.

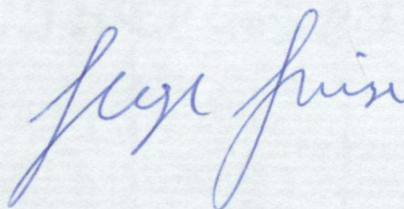
The lobbyists and the vested interest groups, both in the UK and Europe, have now accepted the government's position with varying degrees of grace - Annex A gives a summary of the recent HOL report. We have a new team at the DTI who are more robust about unproductive expenditure and it would send confusing signals for HMG to indicate any short term reversal in the stance which it has so recently taken. Government would provide funding at the presently agreed level with any further amounts to come from the private sector driven by commercial considerations. This has hit some of the grander 'man in space' schemes so beloved of the French!

Nevertheless there is a basic argument to which we will have to return. The presently agreed funding represents falling value for money and does not justify the long term maintenance of the BNSC outside the DTI. As more of the subscription is used on overheads and the basic programme, only an ever diminishing amount is available for specific programmes involving high degrees of national participation. John Fairclough identifies this problem quantitatively in his fourth paragraph. Annex B is a letter from BAe to Kenneth Clarke which ends by arguing that it would be better

to withdraw completely from the space programme than to leave long term funding at its presently agreed level. This argument does need proper airing in due course, particularly if the vested interest groups are so scornful of taxpayers' present contribution.

The issue could be addressed from the standpoint that space investment should not be part of the science budget at all! The technology for establishing equipment in space is well understood and it is essentially a question of technological effort driven by commercial rationale. Whereas it is true that certain science such as microgravity may only be done in space, that is not the same argument as categorising the whole of space expenditure within the science budget.

I therefore support the arguments of John Fairclough and agree that Kenneth Clarke's immediate proposals should proceed.



GEORGE GUISE

PART 6 SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

The case for space

6.1 The case for space is not only one of science and technology. It is political, cultural, economic and military as well. The Committee recommend that the United Kingdom play a visible and effective part in the exploration and exploitation of space (5.9).

National and international programmes

6.2 The United Kingdom should remain within ESA and work for more effective and less costly ESA programmes (5.19).

6.3 The United Kingdom spends too little on national space programmes, compared with expenditure through ESA. This balance must be adjusted to get better value for money. Satellite programmes with commercial potential should be moved outside the ESA framework (5.12-13).

6.4 Bilateral collaboration in space should be developed, including defence cooperation with the US and collaboration with the Canadians on RADARSAT (5.21).

United Kingdom Space Policy and a national space plan

6.5 The Government's silence over BNSC's space plan was misleading and contributed to the atmosphere of damaging uncertainty during 1987 (5.25).

6.6 The United Kingdom needs a clear policy for space which is adhered to firmly and consistently. The Government should formulate a positive space policy and make a full statement of that policy. This should be supported by a national space plan which should be published and updated regularly (5.110).

*became
some members of
Govt were giving
false signals!*

6.7 Objectives for United Kingdom space policy are set out (5.111).

BNSC

6.8 BNSC should be made stronger, preferably by becoming free-standing within Whitehall, with its own Vote. BNSC should answer to a Minister in the Department of Trade and Industry. Industrial partners should be brought into BNSC. The next director general might come from industry. ACOST should advise on whether space science should be funded by BNSC rather than the research councils (5.29-32).

ESA's long-term plan

6.9 The United Kingdom should play a more constructive role in ESA in the future and be prepared to take part in some ESA projects about which it has reservations, in the interests of full collaboration (5.36, 5.113).

Man in space

6.10 For the foreseeable future space offers enough opportunity to telecontrolled craft for the involvement of man in space to be an expensive and hazardous diversion. It is not necessary to put a European in space independently of the Americans. The Government should argue for the modification of ESA's declared pursuit of European autonomy in space (5.44, 5.113).

Space station and Columbus

6.11 Given that the Americans are going to build a space station, Europe is right to participate. British participation should be confined to the Advanced Pressurised Module and, subject to certain qualifications, the polar platform. If the Americans, for whatever reason, see advantage in delaying their space station programme, the United Kingdom should urge them to do so (5.44-51).

6.12 Appropriate steps must be taken in the ground sector to prepare for the data generated by the polar platform or by an alternative system of interacting smaller satellites (5.52).

Hermes

6.13 The United Kingdom should play no part in Hermes (5.55).

Ariane

6.14 The Committee oppose the man-rating of Ariane 5. Nevertheless, the United Kingdom should keep a foothold in launcher development by supporting Ariane 5, even if man-rated, at the same level of funding as Ariane 4 (5.56).

Funding

6.15 United Kingdom spending on space outside ESA should not fall below half of spending through ESA. Within a decade the target for spending should be equal funding through ESA and outside ESA (5.58).

6.16 The allocation of resources to space should take account of the fact that the United Kingdom's space policy depends on political and other non-scientific reasons as well as scientific considerations. There is no fixed percentage of the national budget which ought to be spent on R & D (5.59).

6.17 If the United Kingdom aspires to remain a leading participant in space exploration, the resources devoted to space science and engineering will have to rise (5.60).

Yes - from private sector!

6.18 The present level of total national spending on space is wrong. It gets the worst of all worlds. While the Committee cannot give precise figures, they believe the optimum level in present circumstances to be of the order of £200 million after five years (5.61-63).

may be true.

6.19 Increased private sector expenditure on space should be encouraged. This will grow provided the Government gives a lead. British industry should spend more on R & D. But it is not reasonable to suggest that, in an area where commercial returns are distant, British industry should step in where the Government itself has declined to act (5.64-65).

Here is giving a lead!

Economic analysis

6.20 Provided that its limitations are recognised, economic analysis of space programmes should be normal practice in BNSC and ESA (5.67).

Launchers

6.21 The United Kingdom must have access to a reliable low-cost launch system for satellites. International competition should supply this market. In the longer-term the prospects of HOTOL should be explored, as an international venture. If at the end of the proof of concept stage of HOTOL the future looks promising, the Committee favour pressing ahead, subject to certain conditions (5.69-75).

Communications

6.22 Current British policy in military communications satellites is welcomed (5.78).

6.23 The public sector should support R & D in the communications field, particularly in the ground segment (5.79).

6.24 The role of British Telecom as the United Kingdom's representative or signatory to international satellite organisations should be reconsidered in favour of BNSC (5.80).

Industry

6.25 British industry will be disadvantaged if a gap develops between the United Kingdom and other ESA countries in their commitment to space (5.83).

Science

6.26 Exciting scientific discoveries in space and from space can be expected. Care is needed to ensure that the infrastructure costs of space research do not eat into the funds for research using that infrastructure (5.89).

only these should be part of the science budget

Remote sensing

6.27 The development of remote sensing should form a central plank of United Kingdom space policy. This requires a settled policy for development, to assist satellite procurement, education

and training of manpower, and provision of ground segment facilities. Remote sensing will depend on public funding for the foreseeable future (5.92-94).

6.28 The Government should make an immediate statement of their continuing interest in Earth observation, whether by means of the polar platform or a number of smaller satellites. Decisions about future satellites should take the need for continuity and the prospects of commercialisation into account (5.51, 5.95). ?

6.29 Future remote sensing programmes should be defined by the public and private user communities rather than by space equipment suppliers (5.98).

6.30 The main technique for emphasis in British remote sensing effort should be radar, though not to the exclusion of other techniques where appropriate (5.99).

6.31 The Government should examine the options for an independent remote sensing satellite programme. The emphasis should be on civil satellites with resolution good enough for military purposes. The programme could involve one or more partners (5.101).

6.32 Any transfer of weather satellites to the private sector should be resisted (5.96). ?

Microgravity

6.33 Microgravity research in the United Kingdom should have a small increase in funding in order to establish a healthy research community alert to world developments (5.106).



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29 January 1988

The Rt. Hon Kenneth Clarke, QC, MP,
Chancellor of the Duchy of Lancaster &
Minister of Trade & Industry,
Department of Trade & Industry,
1 Victoria Street,
London SW1H 0ET

Dear Chancellor of the Duchy of Lancaster,

UK Space Programme

Thank you, on behalf of Sir Raymond who is abroad, for meeting with BAe on 19th January and for the opportunity to brief you on our perceptions of the way-ahead for the UK. You will recall that in essence we were advocating a 'lean' programme, which would nevertheless preserve what we regard as essential long-term science and technology goals, whilst at the same time enabling industry to seek and develop effective means of exploring the world market for communications and earth observation systems, and also permitting the UK to gain value for money from HMG's subscription to the ESA programme.

With the deadline date of 10th February for closure of the UK options on key European programmes now approaching, I thought it advisable to try and summarise what we regard as the key issues. February 10th is effectively the "drop dead" date for further participation in Ariane V and Columbus, after this date the packages of work allocated to the UK will be irrevocably redistributed amongst the European partners.

First, to leave the UK level of funding as it is means that the UK does not get fair value for its money: it is in effect, acting as a subsidy to reduce the contribution of other European countries, whilst being too little to give the UK enough flexibility to affect choice of programmes and objectives. Moreover as time passes there will be fewer programmes on which the UK can effectively spend its money because all the practical programmes will have been funded and allocated. It will be fruitless to spend the money which would otherwise be spent on ESA programmes on alternative National programmes which would only be in direct competition with European programmes. We can only conclude therefore that the UK would be forced to progressively reduce our space programmes to an ineffective level. There may be better ways of spending this money.

Second, whilst the level of funding proposed in the BNSC programme, or the lower level recently advocated in the House of Lords select committee, would be welcomed by the space community in the UK (and in Europe) we