



the department for Enterprise

CYBS
CONFIDENTIAL

TO:

PRIME MINISTER

FROM:

KENNETH CLARKE

11 April 1988

SPACE

at flap
I wrote to you on 1 February setting out the conclusions I had reached on a number of major new projects. These included Ariane V and HOTOL where you and colleagues agreed that we should not participate. I made clear that I wanted to consider further the options on a number of Earth Observation projects and the Aramis communications project.

2. I have now carried out a further review of these programmes. The conclusions will largely determine our space policy over the next four to five years. This minute sets out my conclusions and recommendations. ESA timetables require us to notify them of certain decisions by 18 April. The Canadian Government requires an urgent decision on Radarsat.

IS6AAN

Earth Observation Programmes

3. As explained in my 1 February minute, there are three main projects on which decisions are required: the Columbus Polar Platform and ERS-2 under ESA; and Radarsat. The British National Space Centre has been urgently reviewing the options under these three projects with industry - the users as well as suppliers of technology - and other Departments. The key difference between the position now and when I last reported is that industry has reached a firm view on which of these projects they regard as most important - the Columbus Polar Platform. The target configuration of the Platform has also been significantly modified following discussions between ESA and NASA. I think our earlier reservations have played a part in the welcome agreement on a configuration that is both less expensive and more functional. The Platform will mark a logical progression from the decisions we have already taken to support the ERS-1 project and to proceed with a new Earth Observation Data Centre. It also represents the most promising and economic route towards possible commercialisation of earth observation activity.

4. The Platform is the most ambitious of the three projects. Columbus will be a major part of ESA's activities for the next ten years. If our membership of ESA is to mean anything then, particularly since we have decided not to enter into either of the other two major programmes - Ariane V and Hermes - we should in my view take a significant share in the Polar Platform in order to put ourselves in the lead role on the project.

5. I do not find the arguments for UK participation in the other earth observation projects persuasive. Radarsat is a one-off project outside ESA and if we were to consider participation in this as well it would be not only costly but would undermine our other priorities. ERS-2 is essentially a repeat of ERS-1, in which we are already participating, and is the least commercially orientated of the three. The Canadians require a decision on Radarsat now. On the other hand no statement is necessary on ERS-2, which increasingly looks unlikely to materialise.

Communications

6. It is now also questionable whether Aramis will go ahead as an INMARSAT/ESA venture. However, on the evidence so far

presented, my predisposition is to recommend against support. As I explained in my 1 February minute, the UK has been successful in communications in the past but the technology is now mature and industry itself should be prepared to bear the cost of any further funding.

Level of Participation in Polar Platform

7. I have considered carefully the level of participation in Columbus. The maximum share I have looked at over the next ten years is 7.5%. This is industry's basic recommendation and would cost some £330M. I could justify this level of participation although I believe we can achieve the main benefits by joining at a lower level.

8. I am concerned to ensure that we maximise the commercial potential for the results of the Polar Platform project. We have made a good start in getting ESA projects directed away from pure research towards what can be exploited commercially. I am keen to maintain this momentum. The minimum level of participation in Columbus at which this can be achieved is 5.5%, which should just be sufficient to give us the lead in the Platform.

9. Industry is now, at last, unanimous that, if difficult choices have to be made, they regard this project, even at a 5.5% level of participation, as their first choice. The total cost of a 5.5% share over the next ten years is

approximately £276M. As a single amount this is clearly significant, although spread over ten years its impact may not appear as great.

Funding Requirement

10. The approximate funding profile for the Platform over the next five years starting 1988/89 is £9M, £10M, £21M, £26M and £30M. This can largely be accommodated within the existing planned provision for BNSC except for the first two years when there is an estimated additional funding requirement of £9M and £6M respectively. I am pleased to report that industry is prepared to fund £5M on the assumption that HMG funds the remainder. This clearly indicates their support for the Polar Platform and provides a further valuable indication of the project's likely industrial relevance. Although my Department's budget is tightly stretched, I am prepared to find the resources needed in 1988/89 from elsewhere on my cash limited programmes. Funding for the later years will fall to be considered in the context of the forthcoming PES round.

11. It is important to see this project in the light of the other proposals for space expenditure that have been put forward. When I came in to my present post, there were proposals for the UK to enter in to all of the following:

<u>Project</u>	<u>Total Funding (£m)</u>
Ariane V	81
Hermes	195
Columbus	330
Radarsat	112
Aramis	20
ERS-2	35
HOTOL	No firm estimate but at <u>least</u> 1000
TOTAL	1773

I have turned down every one of these with the single exception of Columbus and even here I am proposing a level of participation which will save £54M.

Conclusions

12. The positive role in Columbus that I am proposing will enable us to present a vigorous and coherent Government policy for civil space over the next 4-5 years. The central action thereafter that I foresee is for the BNSC, in concert with its sponsor Departments, to provide clear direction to this policy so that industry, and particularly the users of earth observation data, can take forceful advantage of these new opportunities.

13. I invite colleagues to agree that:

i) we agree on 18 April to participate in the Polar Platform at 5.5%;

ii) we should not enter the Radarsat project, or the ERS-2 or Aramis projects if they go ahead;

iii) I should announce the decisions on the Polar Platform and Radarsat between now and 18 April and the decisions on ERS-2 and Aramis as and when I judge expedient.

14. I am copying this minute to Geoffrey Howe,
George Younger, Kenneth Baker and John Major and to
John Fairclough and Sir Robin Butler.

Li

KC

AEROSPACE: Space
Policy Pt 3

