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PRIME MINISTER

CONFIDENTIAL

Report of the Ministerial Group on Research and Development Priorities Across Government (MISC 119) (E(A)(86)2)

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BACKGROUND

1. On 31 July 1985 E(A)(85)18th meeting considered a report by the Official Group on Defence R & D (MISC 110) which recommended there should be a gradual and progressive reduction in the volume of UK resources devoted to defence R & D. The then Secretary of State for Defence refused to accept this, but agreed to consider it provided other Departments' R & D programmes were subjected to comparable scrutiny. E(A) agreed that a small group of senior Ministers (MISC 119) should be established chaired by the Lord President to review the R & D programmes of Government Departments, to assess the relative priorities of the different programmes, to consider the scope for change in the size, content and objectives of those programmes which could contribute to improving the efficiency, competitiveness and innovative capacity of the UK economy, and to make recommendations to E(A). E(A)(86)2 is the Group's final report.

Proposals

- 2. The two most important recommendations of E(A)(86)2 are:-
 - (a) that a collective Government decision be taken to reduce the total volume of resources devoted to defence R & D (including any UK effort towards SDI) in accordance with the projections in the 1985 Defence Costings;

(b) the establishment of a new Ministerial Committee under the chairmanship of the Secretary of State for Trade and Industry charged with the development of policies to enhance the contribution of R & D expenditure, public and private, to the performance of the UK economy. The conclusions of E(A)(86)2 list a number of topics the Committee should be invited to pursue, including proposals by Sir Robin Nicholson for a reallocation of resources to generate "pull through" of Government funded R & D.

MAIN ISSUES

- 3. The main issues are:
 - (a) the need to reduce the total volume of resources devoted to defence R & D;
 - (b) the establishment of the new Ministerial Committee on R& D Priorities;
 - (c) the task of the new Committee.

Defence R & D

4. UK public expenditure on R & D as a proportion of GDP is similar to that of other major industrial countries (except Japan, where it is much lower), but it is strongly skewed towards defence. Defence R & D in 1985-86 (at £2,300 million) accounts for 52.7 per cent of total Government R & D expenditure. The defence industrial complex appears to be largely insulated from the ordinary pressures of the market economy, and pre-empts scarce scientific resources, especially in electronics and information technology, to the detriment of the rest of the economy. Sir Robin Nicholson's discussions with electronics companies last summer suggested that the available resources of civil UK scienti-

fic and technical manpower (notably in electronics) were insufficient to meet all the demands on them. Moreover, as Mr Levene has openly admitted to the PAC, the spin-off from defence R & D, whether through exports of defence equipment or from civil applications of defence technology, is disappointingly small (10 per cent of current defence procurement expenditure of about £8 billion a year). France has secured double the volume of exports on the basis of a defence R & D programme on average at least 10 per cent smaller than the UK's, while Germany and Italy have achieved exports of major defence equipment not much smaller than the UK's on the strength of defence R & D programmes a quarter or less of the size of the UK's. The distortions produced by the pre-emption of scarce resources by defence could become worse with the additional demands of participation in SDI.

- 5. The new Secretary of State for Defence has not yet expressed a view on the MISC 119 recommendation. This recommendation does not ask him to do anything which his predecessor was not planning to do; the 1985 Defence Costings show a progressive reduction in defence R & D expenditure over the 10 year period to 1995 (offset by a parallel increase in expenditure at the production stage). He is simply being asked to validate this.
- 6. Mr Heseltine resisted being bound by a collective decision to constrain defence R & D within the 1985 Costings figures on the grounds that:
 - (a) the bulk of the expenditure is $\underline{\text{development}}$ not research, and so different in kind from most other Government R & D expenditure;
 - (b) the resources used in defence R & D would not necessarily be absorbed immediately into more productive work elsewhere in the economy (and they might migrate abroad);

- (c) the requirements of national defence are such that arbitrary financial constraints should not be put on defence R & D expenditure;
- (d) the imposition of such constraints could prevent the armed forces from having access to the cheapest and most cost-effective equipment.

However, he continued to offer to have defence R & D subjected to some process of comparative evaluation alongside other Departmental programmes, although in practice the work programme he suggested could be made (and was perhaps so intended) to continue indefinitely without ever producing any conclusion.

- 7. These arguments were all dealt with in the MISC 110 Report: the fact is that it can never be <u>proved</u> exactly and scientifically that the economy would perform better if scarce scientific resources vere not so heavily pre-empted by defence development work. But:-
 - (a) outside the MOD and those companies relying heavily on defence contracts there is universal agreement that the present concentration of R & D resources on defence is detrimental to the overall performance of the economy;
 - (b) the opportunity cost is undeniable whether the defence work is research or development;
 - (c) the need for time for industry to adjust to less concentration on defence R & D is acknowledged in the MISC 110 Report;
 - (d) the general starting point of the armed forces and the UK defence industry that all defence equipment needed by the armed forces should be developed and constructed in this

expense and frequent serious waste. Nimrod appears to be an outstanding example of this, and more generally of failure to take wider considerations properly into account.

In practice the combination of real reductions in the defence budget, increased reliance on European or NATO collaborative development, and MOD's own plans to concentrate more on production than development expenditure seems bound to enforce a decline in MOD's R & D programme on the lines indicated in the costings, so that the new Secretary of State would have little to lose in accepting the majority of MISC 119's conclusion. The MISC 119 report also explicitly acknowledges that acceptance of this conclusion would not itself carry any implications for the size of the total defence budget. That would remain a matter for negotiation with the Treasury in the normal way.

New Ministerial Machinery

The central aim of MISC 119 was to improve the contribution of Government funded R & D to the performance of the UK economy. There is no overall Government R & D budget; and Government R & D expenditure reflects the priorities attached by individual spending Ministers to R & D relative to other parts of their own programmes. MISC 119 discussions have shown that most spending Ministers are willing to accept some form of collective discussion of their own R & D programmes, in the light of the overall Government interest in improving the performance of the UK economy. But this education of spending Ministers is bound to be a gradual process; and the discussion in MISC 119 showed that it could well prove counter-productive to rush fences for this MISC 119 recommended that a permanent Ministerial reason. Committee be set up under the chairmanship of the Secretary of State for Trade and Industry and including Ministers responsible for all the main Departmental R & D programmes, along with

representatives from the Treasury and Foreign and Commonwealth Office. The terms of reference of such a Committee might be (on the basis of paragraph 15 of E(A)(86)2):

"To develop policies to enhance the contribution of R & D expenditure, public and private, to improving the efficiency, competitiveness and innovative capacity of the UK economy; to evaluate the contribution of Government-funded R & D activities to the Government's economic objectives; to assess the impact of the Government procurement policies on the shape and content of UK R & D activity in both public and private sectors; and to make recommendations on R & D priorities".

I have confirmed that Mr Channon would be content with these terms of reference.

9. We suggest that this Committee be established as a Sub--Committee of E, ie in a parallel position to E(A). It would still be open to you, in the event of the new Committee having to handle very difficult issues, to have these reviewed by E(A) under your chairmanship, or for you to take the chair of the new Committee yourself. An appropriate membership of the new Committee would be:

Secretary of State for Trade and Industry (Chairman)
Secretary of State for Education and Science
Secretary of State for Energy
Secretary of State for Defence
Secretary of State for Social Services
Chancellor of the Duchy of Lancaster
Minister for Agriculture, Fisheries and Food
Secretary of State for Transport
Secretary of State for the Environment

Chief Secretary, Treasury
Minister of State, Foreign and Commonwealth Office
Minister of State, Department of Trade and Industry (Mr Pattie)

The Chief Scientific Adviser, Cabinet Office will be in attendance. The Payaster-General has also asked to be a member of the Committee; you will wish to consider this. He may claim some involvement from the standpoint of skilled manpower; and his Department now has wide economic responsibilities. But the proposed list is already long enough and it would be desirable to avoid further requests, eg from the territorial Ministers. The Committee will need appropriate official support; Mr Channon agrees that this should be provided by a Committee chaired by the Chief Scientific Adviser; the Departments concerned would be represented by officials with economic and financial responsibilities as well as by their Chief Scientists.

Task of the New Committee

- 10. We envisage that the new Committee would have three main tasks:
 - (i) the formulation of recommendations on priorities for Government $R\ \&\ D$ expenditure;
 - (ii) the evaluation of Departmental R & D programmes, and the formulation of policies to secure greater economic benefits from those programmes; and
 - (iii) the promotion of other measures, not involving direct Government expenditure, to encourage additional $\underline{\text{private sector}}$ R & D.

R & D Priorities

11. The task of the Committee would be to keep the overall balance of Government R & D programmes under review. The Committee would consider, on a regular basis, whether the wider interests of the economy would point to the desirability of increasing some programmes and reducing others. The broad judgement about desirable changes in the level of defence R & D expenditure over time is probably the most important decision; but the proposed work programme specifically focusses on future Government R & D expenditure on the science budget, on agriculture and on nuclear energy. The work programme also includes early consideration of Sir Robin Nicholson's proposal (at Annex 4 to E(A)(86)2)) for Government funding to "pull through" applied research projects into new products and service to be sold profitably by UK industry, and for the redeployment of existing expenditure programmes to generate the necessary funds.

Evaluation of R & D Programmes

12. We contemplate that this part of the new Committee's remit would be underpinned by a "R & D Evaluation Unit" located in the DTI. This Unit, which would desirably include officials seconded from MOD, DES, the Treasury and preferably also the private sector, would be charged with discussing each programme in detail with the responsible Department and reviewing all possible ways of extracting more economic benefit from it. The proposal for a Unit in this form came originally from Mr Heseltine: we see it as potentially very important in providing an opportunity for questioning continuously the size and direction of the defence R & D programme as a whole, and so enabling other Departments to relate defence procurement issues to each other and to the wider needs of the economy instead of having - as at present - to look at each one in isolation by reference only to defence requirements and the ambitions of the UK defence industry. The Unit should also be able

to contribute substantially to the development of international (particularly European) collaboration in both the civil and the defence fields. This area will, however, need to be considered carefully in relation to other R & D resources and priorities. There are, for example, likely to be great pressures for more European Community R & D spending, and there should be no question at this stage of unpicking the arrangements for handling them in relation to other public expenditure (the "Euro PES" arrangements) which were agreed (after protracted discussions with the Treasury) only some 18 months ago.

Measures to encourage private sector R & D

13. This is an area of unfinished business which could appropriately be tackled by the new Committee. Treasury and DTI officials have already done a considerable amount of work on topics like disclosure requirements relating to R & D in company reports. It is important to recognise the private sector dimension to the inadequate UK performance on R & D: it is not simply a question of throwing more Government money at the problem.

HANDL ING

- 14. You will wish to invite the <u>Lord President of the Council</u> to introduce the Report of the Ministerial Group on R & D Priorities (MISC 119). You may wish to ask <u>Sir Robin Nicholson</u> to comment also.
- 15. Thereafter, I suggest you divide discussion into two parts. First, I suggest you ask the Sub-Committee to consider the recommendation of the majority of MISC 119 that a collective decision be taken to reduce the total volume of resources devoted to defence R & D in accordance with the projections in the 1985 Defence Costings. The new Secretary of State for Defence will wish to state his position on this central recommendation. The

Secretry of State for Trade and Industry and the Chancellor of the Exchequer and other colleagues may wish to comment. If it is not possible to secure a collective decision on this point at this meeting, you will wish to refer this question for further consideration by the proposed new Ministerial Committee on R & D Priorities.

- 16. <u>Second</u>, the Sub-Committee should consider the recommendation that a Ministerial Committee by established with appropriate arrangements for official support, with the task set out in paragraph 16 of E(A)(86)2. The <u>Secretaries of State for Trade and Industry</u>, Education and Science, Energy, Health and Social <u>Services</u>, <u>Transport</u>, <u>Environment</u>, the <u>Minister for Agriculture</u>, <u>Fisheries and Food</u> and the <u>Chief Secretary</u>, <u>Treasury</u> will wish to express views on this.
- 17. In his minute to you of 17 January Sir Robin Nicholson argued that it was possible for E(A) to take decisions <u>now</u>, at least in principle, on his recommendations for a research pull-through programme and an improvement of the industrial benefits from Departments' R & D programmes dealing with their statutory and regulatory responsibilities, <u>without</u> awaiting the formation of the new Committee. You may wish to test the views of the meeting on this. My own view, however, which I understand the Lord President strongly endorses, is that it would be counter-productive to press this now, and indeed would risk endangering the progress already achieved. It would therefore be better to remit this to the new Committee and to concentrate at this meeting on the crucial defence issue. However, you will wish to invite Sir Robin to state his views.

CONCLUSIONS

18. You will wish the Sub-Committee to reach conclusions on:

- (i) whether or not a collective decision should be taken by E(A) to reduce the total volume of resources devoted to defence R & D (including any contribution towards SDI) in accordance with the projections in the 1985 Defence Costings; or whether this should be referred to the new Ministerial $^{\prime}$ Committee for further consideration;
- (ii) whether or not to establish a permanent Ministerial Committee as recommended in E(A)(86)2 (with the terms of reference and membership as suggested in paragraphs 8 and 9 above);
- (iii) whether or not the task of the new Committee should be as set out in E(A)(86)2, or whether a decision in principle can be taken now on any of the MISC 119 non-defence recommendations (as advocated by Sir Robin Nicholson in paragraph 17 above).

J B UNWIN

18 February 1986 Cabinet Office