

Ref. A06060

PRIME MINISTER

The United Kingdom Strategic Deterrent

MISC 7(81) 1

BACKGROUND

MISC 7 Ministers decided in December 1979 to replace Polaris with the American Trident I(C4) missile in a new British submarine based on the United States 640 class boat. Last month President Reagan announced that the Americans would develop the larger and more accurate Trident II(D5) missile for deployment in 1989 and would scrap the C4 in 1998, much earlier than expected. He has also offered privately to make the D5 missile available to the United Kingdom. His announcement has increased public speculation about our own intentions and about the additional cost burden which the American decision is likely to impose. The D5 is more expensive and requires a much larger submarine hull. A decision is needed now, since commitments relating to the purchase of C4 are already being made, and small amounts of expenditure are already being incurred. Meanwhile it has been found necessary to re-motor our Polaris missiles.

The Defence Secretary's Paper

2. The Secretary of State for Defence proposes that we should purchase Trident D5; build a force of four submarines with a mid-section (ie missile compartment) based on the large American Ohio class hull but with 16 missile tubes (instead of 24); and that we should plan to bring the first boat into service in 1994.
3. The Secretary of State for Defence argues as follows:
 - (a) Trident is the only credible strategic deterrent.
 - (b) The D5 system, compared with C4, will be cheaper up to 1987-88 and will probably be cheaper over its entire life.
 - (c) The principal argument for moving to D5 now is to retain commonality with the United States and thus avoid the financial and other penalties of uniqueness (cf Chevaline). (See Appendix 2 to MISC 7(81) 1).
 - (d) The Conservative Party is strongly in favour of retaining an independent national deterrent.

4. The sterling cost has, however, substantially increased (in large measure because previous estimates were based on a much lighter sterling/dollar exchange rate). The position is set out in paragraphs 10 to 14 of Annex C to the paper. The capital cost of the D5 force is now estimated at £5,978 million at September 1980 prices and \$2.36 to £1, or £7,520 million at September 1981 prices and \$1.78 to £1. These figures compare with the estimate of £4,500 million to £5,000 million for C4 at July 1980 prices publicly announced in Mr Pym's open Government document of July 1980. The extra "real" cost (ie excluding the increase attributable to the changed exchange rate assumption) of D5 comprises four main elements:

- (a) Ohio missile compartment £220 million.
- (b) D5 missile system (offset by fewer missiles) £391 million.
- (c) Improved propulsion system £165 million.
- (d) Improved defensive equipment ("tactical weapons fit") £100 million.

All these except (b) would be wanted for C4 if we decided to stay with that for the present but keep open the option of converting to D5 later. On that basis the extra "real" cost of the switch to D5 is, on present estimates, £391 million.

5. The costings assume that only 12 of the 16 missile tubes will be filled and that each missile will carry 10 MIRVed warheads.

6. Annex C to the paper sets out, in paragraphs 17 to 19, three possible areas of cost saving. These are:

- (a) Processing and storing the missiles in the United States instead of expanding the existing facility at Coulport in Scotland.
- (b) Reducing the maintenance margin of missiles and warheads.
- (c) Negotiating a reduction in United States Government charges.

7. The paper also briefly considers a number of alternatives:

- (a) A three-boat force (Appendix 4).
- (b) Running on the Polaris boats until the later 1990s but converting them to take C4 missiles (Appendix 5).
- (c) Solutions other than a submarine-launched ballistic missile system, ie land-based missiles or submarine-launched cruise missiles (Appendix 6).

8. Finally, the paper looks at (paragraphs 23 to 25) the implications for the rest of the defence programme. In the years after 1985-86 Trident D5 will absorb over 15 per cent of the new equipment money in the defence budget.

Comment

9. Trident D5 represents a very large increase in capability over Polaris. Each boat will have 120 MIR Ved warheads compared with Polaris-Chevaline's 32 non-MIR Ved warheads. (Trident C4 would have 16 missiles per boat each with 8 warheads.) If all 16 missile tubes were filled with the maximum number of warheads possible, 14, each boat would have 224 warheads.

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10. The central issue is put by Mr Nott in paragraph 4 of his cover note. The choice is between continuing to have an effective independent capability or getting out of the business of nuclear deterrence altogether. Provided that the Russians do not develop an ability to track submarines, D5 gives us greater assurance than any other system of retaining a credible deterrent over the next 35 years, the assumed life of the Trident system.

11. But do we need to have the best, ie D5? Would C4 be good enough, over the next 35 years? We do not really know. If we build a submarine capable of being converted later to take D5 (and it would not be sensible to do less), the short-term cost will be higher and the overall cost uncertain, because until conversion we shall lack the advantages of commonality with the Americans. Our experiences with Chevaline show how expensive it can be to go it alone; and Polaris has demonstrated how low and reliable cost estimates can be when commonality is involved. Mr Nott is probably right in his judgment that D5 will be cheaper overall: he is almost certainly right in his belief that D5 will cost less than C4 in the short-term, because if we stay with C4 we should have to commit large sums early before the United States production line closes. With D5, relatively little metal will be cut, and money spent, during the life of this Parliament.

12. However, the paper glosses over the very great uncertainties in the costing of a D5 force. These uncertainties arise in two areas, the submarine and the missile system. The submarines will, at 14,000-15,000 tons, be more than twice as large as Polaris. The D5 missile system is still under development in the United States, so that its ultimate cost is unknown. The Americans' own estimates of the cost of the Ohio class submarine have risen by 60 per cent in three years, and the D5 missile is less developed than the Polaris A3 missile was at the time when we decided to buy it.

13. The paper does not contain a breakdown of costs as between expenditure in United Kingdom industry and purchases from the United States. Ministers are on record as saying that the equipment element of the original Trident C4 programme would at its peak absorb 5 per cent of the equipment component of the defence budget and that 70 per cent of the cost of Trident would be spent in the United Kingdom. Industry has feared the effect of Trident on orders for "conventional" defence equipment and has criticised the Government's failure to obtain offset from the United States. These criticisms will be magnified as a result of the dual effects of the increased cost of Trident and the higher proportion of the Trident programme which presumably will be spent in the United States (particularly if missile processing is done there).

14. The Secretary of State for Defence does not ask for a decision now on whether missile processing should be done in the United States or in an expanded facility at Coulport (paragraph 6 on above). But the issue is not simply one of cost. There would be some saving from having more processing done and missiles stored in the United States. But we should still need some expansion of the facilities at Coulport. There is a major question of the effect of increased use of United States facilities on our actual and our perceived independence. Given that we are already dependent on the United States for some facilities, more use of such facilities might well not affect the length of time for which our deterrent would be effective after a withdrawal of American support. But public perception of our independence would be changed if our boats were seen to be operating out of United States rather than British bases.



15. Relevant to both the cost and the independence aspect is the reference in paragraph 6 of Mr Nott's covering note to the assumption made in the costings that we shall procure special nuclear materials in the most economic way, ie by increasing our purchases from the United States. The Secretary of State for Defence is due to submit a paper on this to MISC 7 next month, and it is important that next week's meeting of MISC 7 does not prejudge that consideration. The sum at stake is around £100 million.

Alternatives

16. The Chancellor of the Exchequer and the Foreign and Commonwealth Secretary may press for further consideration of a three-boat force before any public commitment is made to a four-boat force. The difference in capital cost between three boats and four is around £600 million - much larger than the difference of around £60 million between 12 missile tubes per boat and 16. You may wish to ask the Secretary of State for Defence whether there are likely to be any cost penalties if we go for a four-boat force now but cancel one later when more is known about costs and reliability (my understanding is that there would not be any such penalties for several years).

17. The increased cost of Trident, and the recent American decision to develop a submarine-launched cruise missile, will resist public interest in the cruise missile alternative. The Secretary of State for Defence is probably right to dismiss it; so many cruise-missile submarines would be required to meet the deterrent criterion that the overall cost would be higher (and the command and control problems would be severe). But Ministers will need to consider the point, if only to enable them to deal with it publicly (and with our allies).

HANDLING

18. You should invite the Secretary of State for Defence to introduce his paper and then invite general comments. The points to establish in subsequent discussion are:

- (a) Despite the rise in cost of £2½ billion in cash terms the eventual cost of whichever version of Trident is chosen, should the 1979 decision to go for Trident be endorsed?



- (b) If so, should we:
- i. go straight to D5?
 - ii. stay with C4 but build submarines large enough (ie with the Ohio hull section) to convert later to D5 if we wish?
 - iii. stay with the original decision on C4 and forego the option to convert later to D5?
 - iv. run on the existing Polaris boats until the late 1990s but convert them to the Trident C4 missile?
- (c) If we go straight to D5, should we build four boats or consider whether three would do (the option to build five is not considered in the paper, though the Government is on record as intending to keep it open and take a final decision in 1982 or 1983)? Can this decision be deferred?
- (d) Is it, in any event, agreed that we should fit sixteen missile tubes, while only filling twelve for the time being; that improved tactical weapons and propulsion system should be included; and that the planned in-service date should be 1994?
- (e) When should the decision be announced? What are the domestic political factors? In negotiating terms, should we not weaken our hand if we go public before agreeing the basic terms with the Americans?
- (f) Should formal Cabinet endorsement be sought at this stage? The Cabinet were not consulted when the December 1979 decision was made by MISC 7, and were only informed just before the public announcement was made in July 1980. This caused some resentment.

CONCLUSION

19. Subject to the discussion, you may wish to guide the meeting to agree to go straight to a four-boat D5 force, as proposed by the Secretary of State for Defence, with 16 missile tubes, improved tactical weapons and propulsion system, to enter service in 1994. But it would be better to defer a public announcement until agreement has been reached with the Americans on the basic terms on which the missiles would be purchased.



20. Subject to MISC 7 reaching agreement on the basic issues, you may wish to direct that action should now proceed as follows:

- (a) The Secretary of State for Defence should circulate a short paper to Cabinet, for consideration on 3 December; if we are worried about security, such a paper could be handed round at the meeting and taken back at the end of it.
- (b) Immediately after Cabinet, you should send a message to President Reagan to accept his offer of D5 and to seek his decision about how we should now proceed (this could be a delicate matter, given the present disarray in the Administration in Washington).
- (c) A small high-level official team should then visit Washington to negotiate on the broad basic terms of our switch to D5, including the question of United States Government levies; of our purchase of the missile, and on the text of an Exchange of Letters and of an announcement; and on presentation to the allies and to the public (this would follow the procedure of the negotiation of the Trident C4 agreement with the Carter Administration).
- (d) Thereafter, a public announcement should be made.
- (e) Technical-level discussions with the Americans would follow.

REA

ROBERT ARMSTRONG

23 November 1981



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