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PRIME MINISTER

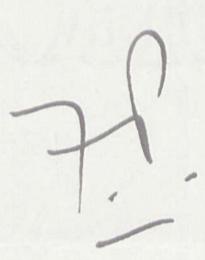
TANK POLICY

You expressed interest in my exchange of minutes with the Foreign and Commonwealth Secretary about the possibility that our future requirement for tanks might be met by a collaborative project; and you indicated that you would like to raise the subject when you visit Bonn next month. I welcome this; it will make a valuable contribution to preparing the ground for the careful negotiations needed if there is to be a real chance of achieving worthwhile tank collaboration within NATO. I am in no doubt about the importance of this goal.

- / 2. I attach a note which sets out the present position of our planning; the work that is now going on to define our future requirement; the programme needed to meet the requirement on time; the considerations political, military, financial and industrial relevant to a collaborative solution; the possible problems; and the ways in which we can best overcome them. The main conclusions which I draw are as follows:
 - a. Our decision not to proceed with MBT 80, but to introduce Challenger in the nearer term, means that we are in line with our principal allies in requiring a successor tank in about 1995 which is in any case the earliest that a collaborative new tank could be brought into service.
 - b. We must keep an open mind about the exact form of any future "tank" taking "tank" as the shorthand term for that part of our anti-armour capability which provides direct fire from positions adequately protected yet mobile, and at the same time provides the ability to counterattack. But it will be helpful to know even at this early stage how our three principal allies see the requirement. It is therefore not too soon to start exploratory military discussion.



- c. The Germans and French are for the time being locked into a bilateral arrangement to plan a future tank in collaboration with one another. This arrangement is showing signs of stress at the military and industrial levels but the political cement is still holding. We must be ready to take any opportunity that presents itself if wider rifts develop but we must be very careful not to incur the blame for causing them.
- d. In the meantime our best tactic is to demonstrate that we are deeply interested in collaboration, that our timescale is right, that we shall have plenty to offer in the way of tactical doctrine and technology and that we are keen to talk as soon as others are ready.
- 3. If you and the colleagues to whom I am copying this minute agree with the thrust of the note which I should be glad to discuss if you thought that useful it will be reflected in your brief for Bonn.
- 4. I am sending copies to the Foreign and Commonwealth Secretary, the other members of OD, the Secretary of State for Industry; and Sir Robert Armstrong.



Ministry of Defence

16th October 1980

TANK POLICY - THE WAY AHEAD

Introduction

CHIEFTAIN has been in service since 1966. Although its performance continues to be improved it will be increasingly outmatched by the new tanks which will be deployed by the Warsaw Pact in the 1980s. Following the failure of attempts in the mid-1970s to launch a collaborative tank development programme with the FRG (the FMBT project), a national development programme was started in 1978 to bring a successor to CHIEFTAIN (MBT-80) into service from the late 1980s. Earlier this year, however, it became clear that the MBT-80 development programme would take longer and cost more than had been expected. At the same time the cancellation of tank orders from Iran provided the opportunity to bring into service from the mid-1980s a new tank (CHALLENGER) which, although less advanced than MBT-80, nevertheless represents a substantial improvement in protection and mobility over CHIEFTAIN. Ministers decided to cancel MBT-80, to make an early purchase of CHALLENGER (planned as a half-fleet replacement) and to give further consideration to the means of meeting the longer-term requirement, including the replacement of the remaining CHIEFTAINS, from the mid-1990s.

The Requirement

- 2. Our studies have still to be completed but are likely to conclude that the threat posed by the Warsaw Pact in the Central Region in the 1990s will remain very much the same in its nature as today, in that their ground forces will rely for success on a continuing superiority in tanks and other armour with massive artillery and air support. The Soviet Union will undoubtedly continue to improve their armour and anti-armour capability including the quality of their tank fleet, and it is to meet this increasing threat that our own future anti-armour policy must be formulated.
- 3. Although it may be possible in the 1990s to destroy Soviet tanks with indirect artillery fire and air support, the ability to do so with direct fire will remain crucial. This can be achieved both by air and ground-launched

guided missiles and by very high velocity tank-gun fire. A mix of anti-armour systems will be required, in order to maintain tactical flexibility and to complicate the WP's tank design, but the exact proportions of the mix need more study; however the need to react to the enemy with initiative, to provide versatile and effective firepower with a high degree of survivability and to conduct offensive operations indicates that there will still be a need for the type of protected mobile weapon system currently provided by the tank. The exact form this future weapon system will take remains to be decided, but its primary target will be Warsaw Pact tanks; thus firepower will be its predominant though not exclusive characteristic.

4. In order to define the requirement more precisely studies are in hand to establish the main characteristics of our future anti-armour capability, whether there is a need for a totally new tank going beyond possible improvements to CHALLENGER, and if so what its role and capabilities would have to be. These studies are expected to be complete during next year.

National or Collaborative Development?

- National development of weapons systems can carry with it certain advantages, especially in terms of design control and freedom of decision on third country sales. But to an increasing extent we have sought collaboration within NATO for the development of major weapon systems. There are a number of reasons for this: to spread the high cost of developing advanced weapon systems to meet our own relatively small production requirement; to achieve the operational and logistic advantages of commonality, or at least interoperability, of equipment; and to demonstrate the willingness of the NATO nations to work together in a practical and effective way. Collaboration with European partners also serves the aim of maintaining - though at some cost to our national industry - a viable and broadly-based European defence equipment industry in the face of American competition and of preserving, both nationally and in Europe, the technological base necessary to enable advanced military projects to be developed.
- 6. It was against this background that we sought to make a success of the Anglo-German FMBT project. But the essential basis of a collaborative project agreement

on the characteristics of the weapon system, on the timescale for its introduction and on industrial and financial arrangements - was lacking, mainly because the Germans (with a much larger fleet than ours) decided to introduce LEOPARD 2 as a half-fleet replacement to take them into the 1990s. We could not rest content as long as that with CHIEFTAIN's performance, and given that our policy was one of whole-fleet replacement, we therefore felt bound to go ahead with the MBT-80 project with an in-service date of the late 1980s. However our decision to cancel MBT-80, and to purchase CHALLENGER up to a half-fleet, for the first time brings our replacement pattern into line with that of the Germans; moreover, both the French and the Americans will require improved tanks in much the same timescale. The possibility of a collaborative project within NATO for the mid 1990s is thus opened up.

- 7. Our experience with the MBT-80 programme showed the risks inherent in attempting a national tank development project which involved a total re-design. In order to obtain the required operational performance, MBT-80's armour, engine and transmission, gun, fire control system and electronics were all aimed at achieving a significant advance over CHIEFTAIN. It became clear that this programme could not be achieved in the timescale required. A collaborative project would bring wider design and development resources into play and enable each country to concentrate on those areas where it had a technological lead though each would lose some of its design expertise.
- 8. The financial effects of a collaborative programme are virtually impossible to estimate at this stage. There can be no automatic presumption that collaboration is cheaper overall. It is however generally reckoned, on a rule-of-thumb basis, that a two-nation collaborative project typically costs in total some 30% or so more to develop than a national project, and this premium tends to increase with the number of major collaborative partners. The production cost of a future collaborative tank would probably not be less than that of a nationally produced tank. These assessments are, however, tentative and additionally the net financial effect of a collaborative project will depend on such factors as work sharing arrangements and the impact of differing inflation and exchange rates.
- 9. A full collaborative project automatically gives a high degree of standardisation and provides the opportunity

for joint spares support and reserves. Moreover each participant benefits operationally from the technological advances made by others. There is, on the other hand, some advantage in presenting the Warsaw Pact with a variety of different tanks with differing performance characteristics and armour distribution to counter on the battlefield. And a useful degree of interoperability, such as use of common fuel and ammunition, can still be achieved through co-operation at a lower level.

- 10. On the <u>political</u> front a successful NATO collaborative tank project would be a powerful and visible symbol of the cohesiveness of the Alliance: a European tank would symbolise European co-operation.
- 11. Industrially, we would stand both to gain and to lose from a collaborative project. In the normal way production work, including final assembly, would probably be shared between the participants in proportion to their offtake. The British Army's total requirement is slightly less than that of the French; about one-third of the Germans'; and an even smaller proportion of the Americans'. Our share of the work would therefore be less than 50% even on a bilateral project with the French and well below 25% in any trilateral or quadrilateral arrangement. If the full benefits of collaboration are to be achieved, the participating nations will need to specialise in particular aspects of the vehicle. While therefore British industry as a whole would get broadly the same amount of production work from a collaborative tank as a national tank, it would be concentrated in a few areas and major sectors of UK industry currently involved in tank development and production would lose that work and probably also the related capability.
- 12. Finally, there is the sales aspect. Our present level of industrial capacity cannot be maintained by orders for the British Army alone. ROF Leeds has the capacity to turn out more than twice as many tanks a year as we can afford to buy ourselves, and there is additional capacity at Vickers. The long term cost-effectiveness of the ROF ammunition factories depends on obtaining export orders for tank gun ammunition. A successful European or NATO tank, provided it is not too expensive, should have a better marketing potential in other NATO countries than a UK national tank: in fact, since the Germans have captured most of the European market for tanks already, collaboration with them should produce increased business

in Europe for those British companies involved. On the other hand, the present restrictive export policies of the German Government could reduce the opportunities for sale of the collaborative tank elsewhere, particularly in the Middle East.

13. The possible collaborative options could involve two. three or four nations. Internationally and operationally four would be best though there are formidable obstacles. We could probably agree a common requirement most easily with the US, but genuine collaboration with the US is always difficult and the disparity in numerical requirements would leave us so much the junior partner that we might end up doing little more than produce an American design under licence. It would be premature to rule out the possibilitiy entirely, but it cannot be a preferred option. Collaboration within Europe depends principally on what happens to the Franco-German project, launched in 1979. The indications are that there is more political than military impetus and the problems are formidable. If it does go ahead, the current stated position of the two partners is that they do not wish to open matters more widely until they have finished the design concept stage next spring, and others joining thereafter would have to accept and not re-open work done. This might well not suit us militarily and industrially, but head-on challenge to the position now would be counter-productive. If the project collapses, the way would be more readily open for a new trilateral concept or a bilateral project with either country. The French would be numerically more equal, though also more difficult, partners; the German concept is more likely to resemble our own, although there would be problems of industrial work-sharing.

Timescale

14. As experience with MBT-80 showed, the development programme for a tank can be expected to take over ten years. The full timescale for a collaborative project is much longer, because of the need to reach agreement on essential points before development can begin. Previous experience has shown that there is a clear sequence which should be followed. First there should be military discussions aimed at establishing a common tactical concept. Common operational requirements can then be determined. These military contacts can be reinforced by contacts at the political level, and must be followed by an exploration of the procurement issues, in particular cost-sharing and work-sharing. Any industrial penalties would need governmental acceptance and political direction will be requried to drive the

project forward and to resolve the difficulties that will inevitably arise.

15. Given all these stages, it is not too soon to initiate the preliminary discussions if a new tank is to be in service by 1995.

Tactics

- 16. We must take care not to appear to be seeking to undermine the existing Franco-German project; and we must maintain meanwhile some national work, both to qualify as a collaborative partner and to provide a fall-back if collaboration cannot be achieved.
- 17. We need to condition our Allies to the idea of a collaborative project involving us. This can be done at the political and the military/official level by explaining that we are considering our tank requirements in the 1990s, that our replacement timescale now coincides with that of our Allies and that we are in principle receptive to the idea of a collaborative project. This is as far as it would be appropriate or necessary to go politically at this stage. We must then concentrate on making progress at the military level in harmonising tactical concepts. Military discussions with all three nations are therefore the first priority, and at a recent four-power meeting the Chief of Defence Procurement made clear our readiness for these. Some dialogue is already in progress with the US. It may not be possible to draw the French and Germans into similar talks before the Spring, but we should continue to emphasize our own readiness (and if this leads one or both of them to see merit in involving us sooner, so much the better). In the light of such discussions and of what becomes of the Franco-German project it will be possible to assess the prospects of collaboration and to determine the way ahead.



10 DOWNING STREET

From the Principal Private Secretary

Deline

20 October 1980

Den Brani

TANK POLICY

The Prime Minister has seen your Secretary of State's minute of 16 October 1980 about future tank policy.

She agrees generally with the note which Mr. Pym sent with his minute and with the conclusions which he has come to, as set out in paragraph 2 of his minute. She has asked me, however, to stress the importance she attaches to the need to do all we can to achieve a successful collaborative arrangement for our main battle tank for the 1990s.

The Prime Minister is accordingly content for her brief for her forthcoming meeting with Chancellor Schmidt to reflect the general thrust of the note attached to Mr. Pym's minute.

I am sending copies of this letter to the Private Secretaries to the other members of OD, to Ian Ellison (Department of Industry) and to David Wright (Cabinet Office).

Yours ever,

Mwi Whimes.

B.M. Norbury, Esq., Ministry of Defence. Ref: A03277

MR. ALEXANDER

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on this subject on 16th October to ask if she agreed with the general thrust of the note attached to his minute so that this might be reflected in the brief to be prepared for her use in the forthcoming session of bilateral talks in Bonn.

- I recommend that the Prime Minister should be advised to agree generally but that she should stress the importance she attaches to the achievement of a successful collaborative arrangement, for our main battle tank in the 1990's. Our policy for the interim, i.e. the half fleet replacement to which OD gave its agreement at their meeting on 8th July will cost an estimated £315 million. But CHALLENGER is obviously less sophisticated than its successor will have to be, and in any case it was partly developed at the expense of the Iranians. If in the absence of a collaborative arrangement we were to develop a national successor, it could hardly cost less than £1000 million. Our main use, indeed almost our only use of this weapon system would be on the central German plain in circumstances identical to those which would be encountered by the West German and French Armies. Thus there is no logical justification for the British Army to require a different tank. But in fact there is a strong undercurrent of feeling in this direction in the Ministry of Defence, both within the Army and among the professional civilians involved in the development and production of armoured vehicles. Both our fundamental tank philosophy and much of our technical thinking, e.g. our belief in rifled rather than smooth bore tank guns, has markedly diverged from that of our continental allies.
- 3. If the Ministry of Defence on the one hand and the French and Germans on the other merely continue to work out what respectively they want, it will in 1981 be found that the requirements are either incompatible or very expensive to reconcile. A firm push is therefore needed to ensure that the Ministry of Defence recognise this as a case where, for resource reasons, the best would be the enemy of the good.

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4. OD has already agreed that we cannot continue to produce a full spectrum of military equipment on a purely national basis and that in the longer term we ought to try and concentrate on our maritime capability. Against this background the next generation of main battle tank is an obvious collaborative candidate which would show us behaving like a good NATO ally and good Europeans. In the collaborative negotiations we might also be able to take some offsetting credit for our BAOR stationing costs.

KH

(Robert Armstrong)

17th October 1980