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Sub



10 DOWNING STREET

*From the Private Secretary*

SIR ROBERT ARMSTRONG

EAST/WEST ECONOMIC RELATIONS: ACTIVITY IN COCOM

The Prime Minister has seen your minute of 28 February forwarding a report by the Chairman of the Sub-Committee on Strategic Exports.

Subject to the views of OD colleagues and the Secretary of State for Industry, the Prime Minister is content to note the progress made so far on the current List Review; to authorise the United Kingdom representative on COCOM to agree to the priority proposals relating to spacecraft, silicon, vanadium, aero-engines and floating dry-docks (the last two on the conditions set out in paragraph 11(b) of the report); and to endorse the United Kingdom position on those priority items on which no agreement has yet been reached. Further, Mrs. Thatcher endorses the guidance to the United Kingdom negotiators contained in paragraph 10 of the report.

The Prime Minister does not think that a meeting of OD will be necessary.

A. J. COLES

1 March 1983

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R.M.

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Prime Minister:

Ref. A083/0676

PRIME MINISTER

*Yes not*

*The Committee's recommendations are flagged. Sw Robert does not think a meeting of OD necessary. Agree? 17 Feb/83*

East/West Economic Relations: Activity in COCOM following the Ending of the Pipeline Dispute

The Official Sub-Committee on Strategic Exports (ODO(SE)) has been examining the various issues that have arisen in COCOM following the ending of the dispute with the United States over the Siberian pipeline. The Chairman's report is attached.

2. It would be helpful to our negotiators in the COCOM discussions, above all in dealing with the Americans, if Ministers could note the present position, endorse certain specific results that have been achieved so far and approve the recommended United Kingdom approach to the next stage of the negotiations. The recommendations are set out in detail in paragraph 11 of the report.

3. In view of the intensive interdepartmental consultations that have gone into the report, it seems unlikely that OD will need to meet to discuss it. But a meeting can of course be arranged if you wish.

4. I am copying this minute to members of OD and to the Secretary of State for Industry.

*RA*

ROBERT ARMSTRONG

28 February 1983

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EAST/WEST ECONOMIC RELATIONS: ACTIVITY IN COCOM  
FOLLOWING THE ENDING OF THE PIPELINE DISPUTE

Note by the Chairman of the Sub-Committee  
on Strategic Exports (ODO(SE))

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INTRODUCTION

1. Under the terms of the 'Shultz non-paper' whose negotiation led to the ending of the Siberian pipeline dispute with the United States, the United Kingdom is committed to playing a full part in follow-up work on various aspects of East/West economic relations. Two of these relate to the transfer of technology from West to East and are to be undertaken in COCOM.
  
2. The two issues are -
  - a. "steps to enhance the effectiveness of our existing system for preventing the transfer of military-related technology to the East" which are under consideration in COCOM: the most important of these is the COCOM List Review. The Americans are seeking early progress on a number of priority items;
  
  - b. a study of "other high technology (OHT), including oil and gas equipment, the transfer of which could be inimical to our security", work on which has been slow to begin.
  
3. This report brings Ministers up to date on the work that is taking place within COCOM; and invites them to endorse the objectives which the United Kingdom negotiators are seeking to achieve.

GENERAL APPROACH

4. It is in our broad interest, following the pipeline dispute, for the Shultz proposals to make progress and for the United Kingdom to be seen to contribute constructively to this end. Similarly, we need to ensure, not only that the COCOM system is preserved, but also that the Americans do not come

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to feel so frustrated by the system's limitations that they seek to impose controls of their own. The pipeline sanctions were one example; and their apparent intention to maintain the extraterritorial jurisdiction of the United States Export Administration Act is another. This is the general background against which the specific COCOM related issues need to be considered.

#### COCOM LIST REVIEW

5. COCOM operates on the basis of unanimous decisions, taken in relation to agreed strategic criteria (see Annex A). The participating countries (ie NATO member states, less Iceland and Spain, but including Japan) implement the agreed controls through their own national legislation. List Reviews take place regularly at intervals of three to four years and usually last around ten months.

6. The present Review, like the earlier ones, is intended by all partners to up-date and make more effective controls on Warsaw Pact access to sensitive technology: it began in late 1982 and will last well into 1984 because of the number and scope of the mostly American proposals. Effective progress was an early objective of the Reagan Administration which first raised the subject at Ottawa in June 1981. They then sought a High Level Meeting (HLM) in January 1982 at which, inter alia, they attempted to extend the scope of COCOM controls by amending the strategic criteria to cover equipment and technology less directly relevant to the military balance. This proposal was overwhelmingly rejected. The HLM nevertheless agreed to up-date the embargo lists in the current List Review, to give priority attention to those items of greatest concern to the Americans (originally called "critical technologies" but now known as "priority items"), to streamline COCOM procedures, harmonise national control policies and improve enforcement.

7. Current positions on priority items are set out at Annex B. The Americans are exerting pressure for these proposals to be agreed and brought into effect as soon as possible; in practical terms this means they seek final, rather than conditional, agreement where this is possible before the end of the first round of the List Review and in advance of the next HLM, now likely in April 1983. Many of these proposals are broadly-worded and if adopted,

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would in some cases deliberately embargo non-strategic items. Discussions have therefore generally aimed at refining the American proposals in order to subject to control only those items directly relevant to the military potential of the Warsaw Pact. In this there has been considerable progress although problems have arisen which will be difficult to overcome (eg how to handle emerging technologies).

#### COCOM STUDY OF OTHER HIGH TECHNOLOGY (OHT)

8. As noted above, the present American Administration has persistently sought to extend the scope of COCOM controls to cover equipment and technology less directly relevant to the strategic balance. The priority proposal concerning marine and industrial gas turbines is an example (paragraph 11 of Annex B). Their call for a study of other high technology is undoubtedly aimed at bringing this equipment under control if, as they expect, the Europeans argue that it is not caught by the strategic criteria. They can be expected to maintain, or even increase, this pressure. The question, therefore, is how best to resist this, in the light of our undertaking to participate constructively in the OHT study (an undertaking that is without commitment on the outcome) without rekindling the passions evoked by the pipeline crisis and thereby putting at risk important British interests in the defence, nuclear, intelligence and technological fields where we are net beneficiaries in our exchanges with the United States.

9. In these circumstances, it seems essential that we should maintain a clear distinction between the on-going follow-up to the 1982 HLM, work which is directly related to the military balance and is central to COCOM's objectives, and the study of "other high technology" which is bound to be both contentious and divisive. In the latter case, we are concerned with a damage limitation exercise; and we should judge our approach accordingly. It is clear, for example, that we should aim, in discussion of OHT, to educate the Americans as well as listen to what they have to say. At the end of the day, the Americans may come to recognise that OHT transfers should be placed under some kind of oversight, rather than embargo.

#### NEGOTIATING MODALITIES

10. With these considerations in mind, the following guidance might be given to our negotiators in dealing with the Americans over both priority items and the OHT study -

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- i. We should resist the idea that, in the OHT study, discussion of detailed proposals for the control of specific technologies should take place in advance of discussion of whether they should be controlled at all. And, while it would be useful to address the question of emerging technologies, this should be done by reference to the existing strategic criteria.
- ii. As a general rule, we should undertake to examine United States proposals on their merits, relating them to our own independent analysis of the risks, costs and benefits of permitting the technology in question to be transferred from West to East. Steps are being taken to strengthen our intelligence gathering and analytical capacity in this regard. Both are essential if we are to develop a capacity for independent judgement and are to be seen by the United States to be addressing the problem seriously.
- iii. Where we judge that the Americans have a good case, we should support them vigorously and not, as hitherto, adopt a stance that is merely passive. We should also be as helpful as possible over procedural matters where these cost us nothing in terms of substance.
- iv. We should avoid becoming detached from our European Community partners. On all the main issues, France and Federal Republic of Germany can be expected to be negative and we should exploit this fact to avoid exposing or isolating ourselves.
- v. We should remain alert to the danger that the Americans might threaten our (and others') interests in other areas if they thought we or other COCOM partners were being insufficiently forthcoming; and Ministers should be alerted if and when any such retaliation seems likely.

RECOMMENDATIONS

11. Bearing in mind that work on COCOM is important in its own right and that (together with OHT) it is one of the main elements in the so-called Shultz package, Ministers are invited to -

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a. note the progress made so far on the current List Review; and that officials will seek further guidance as necessary;

b. authorise the United Kingdom representative to agree to the priority proposals in Annex B relating to spacecraft, silicon, vanadium, aero-engines (if United Kingdom provisions for existing contracts are accepted) and floating dry-docks (if a consensus develops), to be implemented by amendments to the Export of Goods (Controls) Order 1981;

c. endorse the United Kingdom position on those priority items on which no agreement has yet been reached and note that further guidance from Ministers will be sought as the situation develops;

d. endorse the guidance to United Kingdom negotiators in paragraph 10 above.

Signed A D S GOODALL

Cabinet Office  
24 February 1983

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STRATEGIC CRITERIA (Dated 11 April 1978)

The purpose of the embargo is to restrict the export of only those goods and technologies conforming with the three strategic criteria, provided they are such as to make a significant contribution to the military potential of proscribed destinations and thus have an adverse effect on the security of the member states.

a. Materials, equipment and technologies which are designed specially or in peacetime used principally for the development, production or utilisation of modern arms, ammunition or implements of war.

b. Materials and equipment incorporating unique technological know-how, the acquisition of which by proscribed destinations may reasonably be expected to give significant direct assistance to the development and production in peacetime of modern arms, ammunition or implements of war, of their means of utilisation or delivery, or of counter-measures to them.

c. Materials, equipment and technologies, of which proscribed destinations have a deficiency which may reasonably be expected to be critical in relation to the production in peacetime of modern arms, ammunition or implements of war, of their means of utilisation or delivery, or of counter-measures to them, and which they could not overcome within a reasonable period.



COCOM LIST REVIEW: CURRENT POSITIONS ON PRIORITY ITEMS

1. Computers and software (including switching)

The most important item on which there is wide disagreement between the United States and the rest. Other members consider that the United States is seeking to impose an embargo going well beyond what is necessary for security reasons. Compromise proposals to be formulated and considered in the spring; agreement unlikely before the autumn.

2. Robotics

No agreement in sight, even on defining robots. The United States have proposed an interim overall ban on the export of robotics know-how. With the exception of robotics for direct military use, the United Kingdom is strongly opposed because robotics is one of a series of important new growth industries which Her Majesty's Government is actively encouraging and Eastern Europe is considered an important market by the industry.

3. Floating dry-docks

Widespread opposition on the grounds that dry-docks fall outside the strategic criteria. There is no technological gap between East and West, and large floating dry-docks can be obtained from countries outside COCOM. However, such dry-docks are used to support Soviet fleet operations in areas which they would otherwise have difficulty in covering. No United Kingdom commercial interest and we could support it if there is a general consensus. The key questions are whether the integrity of the strategic criteria can be protected and whether there is any prospect of United States or COCOM pressure persuading third countries not to sell such dry-docks to the Soviets.

4. Spacecraft and launch vehicles

The original United States proposal covered every type of satellite and rocket. (United States strategic concerns include surveillance and military command/communications uses, relevance to ballistic missile programmes and ability, through acquisition, to determine the West's capabilities and

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limitations). While there is little United Kingdom commercial involvement with proscribed countries at the moment in spacecraft and launchers, we and other delegations have sought a definition limited to strategically important items. Some progress has been made in this direction and the United Kingdom can agree to the modified proposal.

5. Ceramics

Ceramics and their composites have a wide range of military and civil uses. This is a new item and considerable difficulty has been encountered in defining an acceptable boundary between civil and military uses. We await a Dutch redraft of the United States proposal.

6. Electronic grade silicon

Silicon is used in solar energy devices and nuclear radiation detectors and can be used for making sophisticated micro-circuits with many military applications. United Kingdom commercial interest lies chiefly in the equipment for "pulling" silicon crystals, and we accept that there are strategic reasons for controlling exports. The original United States proposal covered lower grades of silicon on which we felt controls would be unjustified. Having obtained a dispensation on these, we can agree to the United States proposal.

7. Gas turbine aircraft engines

The strategic use of these engines is self-evident, but the United Kingdom has a major commercial interest in exports for civil airline use. The current United States proposal is that engines and technology shall only ever be freely exportable for civil purposes and that for military purposes they shall be controlled permanently (because even small sub-sonic aero-engines can have strategic uses, eg for cruise missiles). Officials consider that the United States proposal, which has already undergone some alteration at the table, can be accepted subject to an exclusion for Rolls Royce Viper engines for military use which are the subject of existing contractual obligations with Romania (jointly with Yugoslavia). This position was suggested to our COCOM partners during discussions last October without any obvious opposition at the table, and it has since been accepted by Rolls Royce. A form of words has been proposed in discussions and accepted ad referendum by ourselves, the United States and our other COCOM partners.

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8. Advanced composites

A revised United States proposal is awaited on these materials which are increasingly used in modern armours and aircraft structures.

9. Metallurgical processes

This encompasses a range of proposals dealing with metalworking technology and a range of sensitive metals and the technologies for producing them. Constructive discussions have clarified thoughts on metal-working technology, aluminides, titanium, clad steel and refractory coatings, for which revised United States proposals are awaited. There is disagreement over "pressure pipes and tubes" (used, for example, in submarine snorkel exhaust and ballast blow piping systems) where our intelligence advice is that Soviet capabilities are greater than the United States thinks they are. On vanadium, however, the United States proposal as clarified and revised at the table can be accepted by the United Kingdom. Vanadium is being used in the development of a super-conducting multi-filament wire to be used in ship propulsion systems, aircraft power systems and certain types of thermonuclear reactors. Those United Kingdom companies who were likely to be interested said they would not be affected by the proposal which would control vanadium for the first time.

10. Printed Circuit Boards (PCBs) and related technology

Certain PCBs with electrical/mechanical characteristics for the mounting of very high speed and microwave devices and multi-layered boards could well have military applications. However, a PCB is the basic building block of the electronics industry. All equipment from simple domestic items, eg washing machines and cameras through to the most sophisticated computers use PCBs. There is therefore considerable United Kingdom commercial interest. A number of United Kingdom firms, who have specialised in exporting simple PCB manufactured systems to Eastern Europe would be hard hit by the United States proposal, which for the first time would embargo some machinery and equipment specially designed for the manufacture of PCBs and also extend existing controls on such equipment and on PCBs themselves. The United States proposal is too widely drawn and the United Kingdom has two specific problems. The first concerns what is meant by "memory" when associated

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with punched paper tape controllers. There is a danger that the simple punched paper tape control systems could become embargoed and the United States has been asked for clarification. The second problem relates to the design concept/logic structure of computers. The United Kingdom would have difficulty in agreeing to the PCB proposal before the relevant section in the computers item is agreed.

11. Marine and industrial gas turbine engines

Because these items depend on the outcome of the aero-engines proposal (which envisages controls on engines derived from aero-engine technology), only preliminary discussion has been possible in the List Review. We could have a major problem with the United States. Marine and industrial engines may also feature as a separate item (under OHT) in the Shultz studies. Rolls Royce and General Electric Company have substantial future potential in this field (for pipeline applications and power generation), particularly in the USSR: Ministers have been informed separately of Rolls Royce's interest in securing a contract for gas turbines for the Chelyabinsk gas pipeline. We propose to support any moves to make limits on export of marine gas turbine technology more specific. Since civil aero-engines are freely exportable to genuine civil end-users it would be illogical to adopt a more restrictive approach for industrial gas turbines. It appears that other COCOM members are likely to be sympathetic to our line, particularly our resistance to control of the export of industrial gas turbines themselves. We should therefore continue to oppose controls on exports of the turbines but support an embargo on exports of the sensitive technology involved in their manufacture.

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