

Report on  
A POLICY FOR PROMOTING DEFENCE  
AND TECHNOLOGICAL CO-OPERATION  
AMONG WEST EUROPEAN COUNTRIES  
for  
The Commission of the European  
Communities

by  
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## A POLICY FOR PROMOTING DEFENCE AND TECHNOLOGICAL CO-OPERATION AMONG WEST EUROPEAN COUNTRIES

### INTRODUCTION

For several years different institutions concerned with the security and the economic well-being of Western Europe have been exploring possibilities for promoting greater intra-European co-operation in arms procurement and production, with both defence and industrial benefits in mind. Among them are organs of the North Atlantic Treaty Organisation (NATO) including its informal EUROGROUP, the Independent European Programme Group (IEPG), Western European Union (WEU) and the Assembly of Western European Union (AWEU). Each of these has been animated mainly by a felt need to make more efficient use of the resources committed to military purposes, in the interest of sustaining or enhancing the effectiveness of the Atlantic Alliance's apparatus for deterrence and defence generally and that of its European members' contribution particularly. The Commission of the European Communities has also paid attention to the subject, in a more circumspect fashion, principally in the context of its examination of ways and means of safeguarding the competence and competitiveness of high technology industries within the European Economic Community (EEC).

More recently attempts have been made to synthesise the 'defence' and 'industrial' impulses. Perhaps the most notable instance is the Report submitted to the European Parliament in 1978 by its Political Affairs Committee (drafted by Mr. Egon Klepsch and commonly identified as The Klepsch Report). Together with an Opinion of the Parliament's Committee on Economic and Monetary Affairs (drafted by Mr. Tom Normanton), this Report formed the basis of the Parliament's Résolution of 14 June 1978 which called on the Commission to prepare an 'action programme for the development and production of conventional armaments within the framework of the common industrial policy.'<sup>1</sup>

The logic of the defence-industrial synthesis is indisputable. Evolving common military requirements will not be advantageous unless accompanied by more effective use of production capabilities. Evolving a sounder industrial base in defence-related sectors will not be possible unless co-ordinated and consolidated equipment orders are forthcoming. Co-operation in procurement and production go hand in hand, the one requiring rationalisation of acquisition agencies' purchasing policies and practices (the demand side of the market), the other requiring rationalisation of research, development and manufacturing capacity (the supply side of the market).

The value of the Klepsch Report was its recognition of this connection. But its ideas could not be translated directly into an agenda for immediate action. They posited a relationship between the Commission and the IEPG - the former fulfilling a supply side role complementing the latter's demand side functions - which neither institution was in a position to establish. The IEPG had not emerged as an effective instrument for the comprehensive co-ordination of procurement. The Commission needed to inform itself more fully about the defence market as a whole and to consider more fully the implications of involvement in this market for the attainment of its overall industrial policy goals (and vice versa). More fundamentally, it was not clear that there existed the political support for what Mr. Klepsch envisaged.

What is the position now that two years have elapsed since the Resolution of 14 June 1978?

- In the first place the IEPG has not become, and is unlikely to become an effective instrument for settling common military requirements across-the-board. It has made only limited headway, both in its intra-European business and in the conduct of its 'transatlantic dialogue' with the United States. This is symptomatic of a more widespread reaction against the rhetoric of the mid-1970s and

and the expectations engendered thereby. Recent debate in defence circles has indicated the emergence of a consensus for encouragement of more collaboration on a case-by-case basis. But there is negligible support for vesting authority in supranational or intergovernmental agencies to manage the demand side of the armaments market.

- In the second place, the Commission has received and reviewed a study embodying statistical and institutional analyses of defence procurement and production in the EEC which it solicited from the Centre for Defence Studies at Aberdeen University in Scotland (and which is cited hereafter as the Aberdeen Study).<sup>2</sup> It has also monitored the continuing debate on the matters at issue, for example in the AWEU Symposium on 'A European Armaments Policy' held in Brussels, 15-17 October 1979, and in the same Assembly's Session held in Paris in December 1979.<sup>3</sup> In addition, it has articulated - and sought acceptance for - some elements in that long-term technology programme for the Community which was alluded to in its Report on structural aspects of growth (which, like the Klepsch Report, appeared in June 1978).<sup>4</sup> But the Commission has not discerned enthusiasm for the assumption, by itself or any other agency, of a formal role in the management of the supply side of the military equipment market.

In sum, circumstances appear no more propitious than they were in 1978 for definition of the kind of comprehensive 'action programme' envisaged by the Klepsch study.

What, then, should be the next step? In the light of the developments outlined, what feasible measures for promoting defence and technological co-operation in the EEC do commend themselves? What guidelines can be suggested for useful action by the Commission or by Member Governments in the EEC (acting in concert with the other European members of NATO and having regard to both the special position of Ireland and the imminent enlargement of the Community)?

These are the questions to be addressed in this Report. The answers which emerge may be summarised as follows.

- Rather than striving to devise elaborately integrated arrangements for the demand and supply sides of the European defence market, the policy emphasis should be on formally separate but concerted effort to gain the military and industrial benefits sought.
- The key institutional innovations required are relatively modest: creation of a European Defence Analysis Bureau and establishment of a European Public Procurement Task Force, to help nations choose sensible purchasing and production policies for themselves (given that they are not prepared to have supranational or intergovernmental agencies make their choices for them).

If comparison or contrast is sought between the concepts underlying this exercise and Mr. Klepsch's undertaking, the simplest formulation is that the ends are more or less the same but the advocated means are significantly different.

The Report consists of two main Parts and a short statement of Conclusions. Part I is a summary statement of the essential desirability of some effort to rationalise defence procurement and production in Western Europe, and comment on its feasibility (in principle). Incorporated in the argument are selected data on the demand and supply sides of the defence equipment market and observations based on the Aberdeen Study to which reference has already been made. Part II is a presentation of the case for 'separate but concerted effort' in response to the defence and industrial imperatives and incentives to co-operation (rather than more ambitious organisational experiment). Underlying this argument is an interpretation of the unfolding debate of the late 1970s, including inferences from it about what governments will and will not do in the interests of defence and technological co-operation on their own account and about what they will and will not countenance from the Commission.

## I - INCENTIVES AND IMPERATIVES

Most of the reasons for interest in promoting defence and technological co-operation in Western Europe have been well rehearsed over the years. No detailed restatement of them is necessary here. Put briefly, there are incentives to co-operation, in the sense of benefits which would accrue to the member nations of the EEC (and the other European members of NATO) from harmonisation of requirements and adoption of common systems; and imperatives to co-operation, in the sense of costs that may be incurred if states insist on preserving if not self-sufficiency at least a high degree of self-reliance.

The benefits and costs are military and industrial in nature. Commonality of equipment would facilitate interoperability and standardisation, to the direct advantage of the combat effectiveness of front-line forces. Collaborative acquisition arrangements would permit more effective use of research, development and production capacities - based on exploitation of comparative advantage and of scale and learning economies - to the benefit of the continuing competence and competitiveness of business enterprises. Conversely, operational and economic penalties are associated with persistence in independent national stances. Bridging the military and industrial domains is the budgetary argument: co-operative arrangements would mean a more efficient use of resources, getting a given front-line and technological spillovers at lower cost or getting greater military effectiveness and technological pay-offs for a given expense.

The case for rationalising defence procurement and production can be made exclusively in European terms, for European reasons. There would be military and industrial incentives and imperatives even if the nations of Western Europe were not part of an Atlantic Alliance. But it is in the NATO framework that eight of the nine present members of the EEC make their current security dispositions (and plan to continue to do so); and there are NATO-wide pressures for rationalisation,

including the encouragement of greater reciprocity in transatlantic trade - the 'two way street' notion - founded on a still ill-defined concept of a transatlantic division of labour. Thus there are Atlanticist arguments for intra-European co-operation: to facilitate operation of the European end of the 'two way street' (to put the case positively), or to prevent measures adopted to promote Alliance-wide rationalisation, standardisation and interoperability from redounding largely - if not exclusively - to the benefit of the United States (to put it negatively).

These themes were identified - and, in fact, elucidated at greater length - in the Aberdeen Study, conducted for the Commission in 1978-79. The main effort in that investigation, however, was devoted to the presentation of material (a) to facilitate assessment of the validity of arguments about the desirability of co-operation and rationalisation and (b) to illuminate aspects of their feasibility. To these ends the exercise generated statistical and institutional analyses of defence procurement and production arrangements in EEC countries. It is convenient at this juncture to review some features of them.

#### European Demand and Supply

Among the points and conclusions arising from the Aberdeen Study were the following

- The expenditures of the Nine on major items of defence equipment amounted to some 11 billion EUAs in 1978. A wider interpretation of what constitutes procurement spending - based on such common ground as there is among countries' individual budget classifications - yielded an estimate for aggregate EEC demand of 18-19 billion EUAs. This last amount is equivalent to 24-26 billion US dollars.

(1) Regarding national contributions to the total, France, the Federal Republic of Germany

and the United Kingdom accounted for 80-85 per cent (whichever way the sums are done).

(2) The main characteristic of the geographical distribution of this expenditure is that what EEC members buy within the Community amounts to over 90 per cent of aggregate demand, principally because countries channel most - in some cases virtually all - military business to their own producers.

(3) The composition of the demand in terms of equipment categories extends across virtually the full spectrum of military materiel.

These observations about procurement - or the demand side of the market - are summarised in Table 1 (on p.8).\*

- The estimated value of the Nine's aggregate defence-related sales in 1978 was c. 22 billion EUAs (say, 30 billion US dollars).

(1) The 'big Three' accounted for two-thirds of this business.

(2) Production for 'own forces' is the principal preoccupation of each state's armaments sector; but, to keep capacity fully employed and to obtain scale and learning economies, nations exploit extra-Community market opportunities, notably among less developed countries.

(3) The commodity composition of the EEC's production is comprehensive: the Community of Nine has the competence and capacity to produce more or less all that its own members' armed forces need (and that means just about all types of armaments, with the exception of large missile systems and equipment embodying those more exotic technologies which only the United States has begun to explore).

These observations are based on the data on production - or the supply side of the market - in Table 2 (on p.9).\*

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\* Tables 1-3 are reproduced from the Aberdeen Study.



Table 1

ESTIMATED AGGREGATE DEFENCE PROCUREMENT DEMAND  
OF THE NINE, 1978 (in European Units of Account)

8.1 Basic Series

Country*	Major Equipment (NATO Definition) EUAs bn	All Procurement (See text p. 7.5) EUAs bn
Belgium	0.3	0.3
Denmark	0.2	0.2
France	4.1	5.3-5.8
FRG	2.4	4.4-4.8
Italy	0.8	1.2
Netherlands	0.6	1.2
United Kingdom	2.8	4.9-5.2
Total	11.1	18-19

\* Luxembourg and the Republic of Ireland not included

8.2 Geographical Distribution (All Procurement)

Area	Amount (EUAs bn)	Percentage
EEC Countries	16.7	90
Elsewhere	1.8	10

8.3 Equipment Categories (All Procurement)

Category	Amount (EUAs bn)	Percentage
Land systems	5.1	28
Sea systems	4.1	22
Air systems	5.2	28
Electronics	2.2	12
Munitions and other	1.9	10
Total	18.5	100

Source Earlier text and tables: project worksheets

Notes (1) The figures here are estimates, constructed from fragments of earlier material. They are subject to all the limitations of the original data; in addition consolidation has probably involved aggregation which, strictly speaking, is improper. Therefore the figures must be regarded as indications of orders of magnitude, no more than that.

(ii) Values may differ from those quoted, for nominally similar items, elsewhere; coverage differences and aggregation are the reasons.

**Table 2**

**ESTIMATED AGGREGATE DEFENCE-RELATED FINAL SALES  
OF THE NINE, 1978 (in European Units of Account (EUAs))**

**9.1 Basic Series**

Country*	Sales (EUAs bn)	Percentage
Belgium	0.4	1.8
Denmark	0.2	0.9
France	7.7	34.7
FRG	4.7	21.2
Italy	2.6	11.7
Netherlands	1.0	4.5
United Kingdom	5.6	25.2
<b>Total</b>	<b>22.2</b>	<b>100.0</b>

\* Luxembourg and the Republic of Ireland not included

**9.2 Geographical Distribution**

Area	Amount (EUAs bn)	Percentage
EEC Countries	16.7	75
Elsewhere	5.5	25

**9.3 Commodity Composition**

Product groups	Amount (EUAs bn)	Percentage
Land systems	4.4	20
Sea systems	4.4	20
Air systems	7.8	35
Electronics ) Munitions and other)	5.6	25
<b>Total</b>	<b>22.2</b>	<b>100</b>

Source Earlier text and tables: project worksheets

Notes (i) The figures here are estimates, constructed from fragments of earlier material. They are subject to all the limitations of the original data; in addition consolidation has probably involved aggregation which, strictly speaking, is improper. Therefore the figures must be regarded as indications of orders of magnitude, no more than that.

(ii) Values may differ from those quoted, for nominally similar items, elsewhere; coverage differences and aggregation are the reasons.

Table 3

THE SYNOPSIS TRANSACTIONS TABLEAU 1978  
(in billions of European Units of Account (EUA's))

	Sales by										(Imports from)					TOTAL	Row
	BE- LGIUM	DEN- MARK	EIRE	F.R.G.	FRANCE	ITALY	LUXEM- BOURG	NETHER- LANDS	U.K.	EUR 9	U.S. & CANADA	OTHER NATO	OTHER EUROPE	ELSE- WHERE			
BE- LGIUM	0.2			0.1	(0.03)				(0.01)	0.3	(0.01)				0.3	1	
DEN- MARK	↑	0.1		(0.03)					↑	0.2	(0.01)		(0.01)		0.2	2	
EIRE										-					-	3	
F.R.G.				4.2						4.5	0.3			(0.04)	4.8	4	
FRANCE					4.9				0.6	5.0	←	0.2	0.2	→	5.2	5	
ITALY						0.8				0.9	0.1	←	0.2	→	1.2	6	
LUXEM- BOURG										-						7	
NETHER- LANDS							0.8			0.9	0.1	←	0.2	→	1.2	8	
U.K.									4.4	4.7	0.1	←	0.1	→	4.9	9	
EUR 9	0.2	0.15	-	4.5	5.3	0.8	-	0.9	5.0	16-17	0.6	←	0.7	→	18-19		
U.S. & CANADA	(0.01)			?		↑		↑	?	0.1						10	
OTHER NATO				↑	↑	↑		↑	↑	↑						11	
OTHER EUROPE	↑			0.1	0.2	1.8		0.1	0.2	2.4						12	
ELSEWHERE	0.2			↓	↓	↓		↓	0.4	3.0						13	
TOTAL	0.4	0.15	-	4.7	7.7	2.6	-	1.0	5.6	c.22							

Source: Earlier text and tables: project worksheets.

Note: All values are estimates. Blank cells denote either small values or values not known. ( ) denotes estimated values below 0.1 bn EUAs, for which there is some basis.

Consolidation of information on individual nations' purchases and sales, as in the synoptic transactions tableau at Table 3 (opposite), highlights the self-reliance of the EEC (viz. the dominance of the 'diagonal' in the core 9 x 9 matrix), the significance of the United States among external sources of supply (viz. the 'north east' quadrant of the tableau) and of so-called Third World countries as markets (viz. the 'south west' quadrant).<sup>5</sup>

It is estimated that in 1979 the broad pattern of the EEC's defence-industrial activity was more or less as portrayed in these tables. On present plans, it will remain so into the early 1980s. The scale of effort will be higher, of course, when expressed at current prices and exchange rates (partly because of inflation and partly because of the real growth to which eight of the Nine are committed to meet NATO targets).<sup>6</sup> Procurement demand was perhaps c. \$30 billion in 1979 and may reach \$35-40 billion in 1980 and 1981.

On the basis of these facts, the Aberdeen Study concluded that 'there is reasonably close "fit" between the sum total of the purchases of the Nine and their output or sales' implying that "if the aggregate demand were co-ordinated....and the research, development and manufacturing capacities which constitute the EEC's production potential could be similarly co-ordinated, military needs might be satisfied more efficiently and more effectively (or both).'<sup>7</sup>

#### Comparison with the United States

Comparison with facts about American procurement is instructive. The United States' budgetary provisions under the headings 'Procurement' and 'Research, Development, Test and Evaluation' for the three fiscal years 1979, 1980 and 1981 amount to \$44 billion, \$49 billion and

\$57 billion respectively. Details are shown in the composite Table 4 (opposite) (in which, incidentally, the figures relate to the total obligational authority sought by the Department of Defense rather than expected budget outlays and must be interpreted with this in mind).<sup>8</sup>

The significance of the juxtaposition of European and American data is self-evident. The European demand is of the same order of magnitude as the American (if due allowance is made for the United States' heavy current commitments to strategic programmes). The presumption is, therefore, that if the European market really were a market the Nine could enjoy the benefits which are customarily held to accrue to the Americans through operation of a single market of this size. However, European demand and supply are not co-ordinated. One consequence of this is that Western Europe is vulnerable to an overbearing commercial and technological superiority.

Transatlantic arms trade figures - the record of traffic on the 'two way street' - underscore the latter point. The data in Table 5 (opposite) show overall balances in the United States' favour for the years covered (although, as American officials and Congressmen are quick to point out, if overall defence-related payments were examined, the statistics would tell a different story).<sup>9</sup>

Whether this imbalance itself is inimical to the military interests of the Atlantic Alliance is debatable. If it simply expressed an inherent comparative advantage in arms manufacture in the United States' favour it would be unexceptionable (on any grounds). The reality is more complex. Because the European defence effort is fragmented the Americans probably gain market advantage even where their cost conditions are not fundamentally favourable, simply because they get further down the cost and learning curves. In

Table 4

DEFENCE PROCUREMENT DEMAND OF THE  
UNITED STATES, 1979-81 (in billions of US dollars)

Functional Classification	Fiscal Years		
	1979	1980	1981
<u>Procurement</u>			
Aircraft	12.2	13.5	14.4
Missiles	3.8	4.7	6.6
Ships	5.1	6.7	6.1
Combat Vehicles, Weapons and Torpedoes	2.0	2.3	3.1
Ordnance, Vehicles and Related Equipment	2.2	2.0	2.6
Electronics and Communications	2.7	2.8	3.3
Other Procurement	3.4	3.7	4.4
Sub-total	31.4	35.8	40.5
<u>R.D.T. &amp; E.</u>			
Technology Base	2.5	2.9	3.3
Strategic Programmes	2.1	2.2	3.4
Tactical Programmes	5.1	5.2	5.8
Intelligence and Communications	0.8	1.2	1.6
Management/Support	1.9	2.0	2.4
Sub-total	12.4	13.5	16.5
Total	43.8	49.3	57.0

Source: Department of Defense, Annual Report, Fiscal Year 1981

Table 5

THE UNITED STATES' ARMS TRADE  
WITH EUROPE (in millions of US dollars)

	1975	1976	1977
Sales (Governmental & Commercial)	873	1026	1183
Purchases (DoD Procurement)	94	47	125

Source: Department of Defense

this respect there are military penalties compared with the notionally feasible division of labour.

But it is, of course, the industrial price which Western Europe may be paying that really matters. Even the larger West European nations cannot reach the minimum efficient scale of operations in many if not most areas of high military technology, so that the field is easily dominated by the Americans.<sup>10</sup> Yet - and this is where the argument comes full circle - since the scale of the (theoretical) European internal market is comparable with the United States' domestic market, this would not be the case if Western Europe's potential could be realised through rationalisation.

There is every indication that this industrial 'price' is getting higher and higher as time goes by. Trends in military technology are running in directions favouring the large-scale operation in either R & D or production (or both) and/or manufacture of long runs. Where the technological frontier is being pushed outward - as, for example, in next-generation communications, command, control and intelligence (C<sup>3</sup>I) systems, in miniaturisation for munitions, in experiment with new materials - the size of the R & D effort required precludes the smaller-scale undertaking. Where there is reaction against alleged over-sophistication - as in battlefield combat aircraft (for instance) - the argument is about cost/numbers trade-offs. The less complex system commends itself because one can have more of them, thus similarly favouring the larger-scale, longer-run manufacturing operation.

#### The Defence-Industrial Nexus....

It is in this respect that 'defence' incentives and imperatives merge with wider 'industrial' considerations. There is a general appreciation that the vulnerability of Western Europe to being

overborne by a technological superior United States which is apparent in the military-industrial domain obtains across the whole spectrum of high technology activities. The theme has recurred in EEC industrial policy statements.

- In the seminal Colonna Memorandum (1970) one of the three reasons given for evolving a common industrial policy was 'to achieve a reasonable degree of economic and technological independence from the Community's trading partners'.<sup>11</sup>
- In one of his early speeches to the European Parliament (February 1977), Commission President Jenkins stressed the EEC's potentially important role in the area of advanced technology and stated that a 'Community strategy for these sectors is urgently required'.<sup>12</sup>
- The Commission's report on structural aspects of growth (June 1978) stated bluntly that 'the competitiveness of European industry will depend on its ability to mobilize new technologies....'<sup>13</sup>

Nor is the connection here simply one of defence vulnerability as a particular instance of a wider apprehension. The high technology sectors in which it is perceived are, to a large extent, precisely those which are significant in the military context: e.g., aerospace, computer systems, telecommunications, electronic circuit technology.

#### ....and the Klepsch Proposals

As noted, synthesis of (a) the 'defence' and related 'military-industrial' motivations for co-operation and (b) the 'technological' and particularly 'advanced technology industry' motivations was the essence of the Klepsch Report of 1978. In the Foreword to a commercially-published version of its text, a leading European Parliamentarian, Geoffrey Rippon, commended

'....the clear way in which it demonstrates that there is a direct link between Community industrial policy



and effective co-operation in European armaments procurement. Thus the Community cannot achieve a meaningful common industrial policy unless this includes military as well as civil products. Bodies such as NATO and the IEPG...cannot succeed unless they use the unique potential of the European Community to organise and structure the industrial aspects of armaments production.<sup>14</sup>

Hence the call - in the Resolution of 14 June 1978 - for an 'action programme' to delineate how the EEC's institutions (notably the Commission itself) might contribute, in association with Alliance organs and the IEPG, to fulfilment of Mr. Klepsch's design.

What was not recognised at this juncture was, first, that participating governments might show no inclination to transform the IEPG into an authoritative body for co-ordinating European equipment demands across-the-board; secondly, that when the question of a role for Community institutions was raised so explicitly the merits and demerits of their involvement would come under unprecedentedly searching scrutiny; and, thirdly, that the wisdom of an 'integrationist' approach to resolution of the problems of the defence-industrial nexus and the desirability of grand institutional innovation would be called into question. Yet this is what might have been foreseen, and this is what has transpired. As a result, progress towards more efficient use of the resources which the Nine allot to defence and towards an effective policy for European technological collaboration is more likely to be achieved - at least in the short-to-medium run - by somewhat different means.

## II - ISSUES, INITIATIVES AND INSTITUTIONS

The need for policy initiatives in both the defence procurement (demand side) and production (supply side) domains is not in dispute. However it does not follow that the best prescription is

institutionalised co-ordination, on both sides of the market and with respect to their interaction.

In fact, reflection on the Klepsch Report itself - and on the debate which it prompted - suggests that it would be preferable

- to emphasise separate but concerted policy initiatives in furtherance of (1) the defence and related military-industrial objectives and (2) the technological and related high technology promotion objectives, rather than pursuing a formally integrated approach;

and

- to attempt modest institutional innovation which is evolutionary rather than radical in concept.

This is emphatically not to denigrate the diagnosis incorporated in the Klepsch Report. It is simply to suggest that headway towards the relevant goals is more likely to be achieved by an oblique approach.

Specifically, debate in the defence community within Western Europe in the two years since June 1978 has brought about clarification of both nations' perceptions of the problem and their attitudes to possible solutions. The upshot is that the best immediate policy objective is creation of the conditions in which EEC countries (and the other European members of NATO) may be induced voluntarily to engage in more collaborative efforts. On the industrial policy side, the experience of the Commission in exploring methods for harnessing the purchasing power of all public agencies - military and civil - to the pursuit of technology policy goals suggests that this approach offers greater promise than one in which the Commission might appear to be seeking a distinctive and direct role with respect to defence arrangements.

The Defence Debate 1978-79

Prominent in the recent debate on co-operation policy possibilities within the defence fraternity has been recognition of the virtue of arrangements which recognise two things. The first is that diverse values and interests enter the reckoning in decision-making about defence procurement and production, and legitimately so. The second is that, although nations acknowledge interdependence, they are unwilling to ascribe to any supranational or intergovernmental agency effective authority in relation to either formulation of their military requirements or management of their defence industrial capacities. Together, these conditions mean that there is no commitment to institutionalising interdependence. Accordingly progress depends on maximising collaboration on a case-by-case basis.<sup>15</sup>

More than anything else this calls for fresh effort (a) to make nations better informed about the potential intra-European market (and related Atlantic trade possibilities) and (b) to generate specific knowledge on the full costs and benefits of alternative modes of co-operation in particular instances. The latter is the critical requirement at this juncture: to enable the explicit incorporation in policy calculations of the wider economic and social aspects of procurement choices. That does not happen at present; and one reason why states approach bold schemes for promoting collaboration with evident caution is their fear that the efficiency gains which protagonists promise may be bought at too high a price in terms of other values.

To develop this argument. The case for encouraging greater defence co-operation among NATO's European members has been made almost exclusively on efficiency grounds. States' lukewarm responses to many initiatives have been attributed to unwarranted attention to self-interest, sheer self-indulgence or straight obstructiveness.

Yet technical efficiency is not the purpose of the procurement exercise. It is not, therefore, a satisfactory criterion for policy choice. Furthermore, it is not mere obstinacy that makes nations wary of grand designs but an understandable and legitimate determination to take other interests into account; these should accordingly be construed as constraints on choice rather than obstacles to goal attainment.

A simple efficiency criterion, although intuitively appealing, is inadequate because West Europeans' sense of security depends on more than acquiring defence capabilities as cheaply as possible. Political cohesion and the political self-confidence of every member state are also significant. So too are the economic well-being and social stability of each country. The most efficient use of resources - in the technical sense - is a desirable objective, but not the only one. Security would not be enhanced by its uncritical pursuit. Schemes for promoting more efficient procurement which led to divisive dispute (arising, say, from inequity in the treatment accorded different countries) might do more harm than good, because they would damage political cohesion. Similarly 'rationalisation' which entailed rapid and radical structural adjustment for particular countries, and therefore possible economic and social hardship, might affect security adversely. Certainly it is likely to be worth forgoing some efficiency for the sake of avoiding dissension and distress.

The question is: how much? Are there significant trade-offs between efficiency and other policy objectives and how might these be exposed? Can the efficiency claims for co-operation policy options be accepted uncritically? Just how significant are the wider economic and social aspects of defence-related activity which account for nations' insistence that 'other values and interests' are given due weight in policy-making?

Putting a complicated argument briefly, the recent debate has made two things very clear.

- The potential gains from collaborative procurement have been grossly overstated in many quarters. To be sure, there are military advantages to interoperability. However, since NATO's concept of operations for the defence of north-west Europe is based on ground formations (with air support) fighting in 'layer-cake' dispositions on the Central Front, the scope for flexible use of forces is strictly limited. Claims concerning the benefits of standardised systems also require qualification. There is merit in diversity, operationally speaking; and logistic arrangements cannot be simplified substantially unless commonality obtains across-the-board. The scale of budgetary savings from co-operative acquisition has been over-rated too. Savings are attainable through exploitation of scale and learning economies. But cost reduction opportunities depend on the mode of joint procurement adopted, and the co-development and co-production arrangements most likely to find favour are precisely the ones least likely to yield budgetary benefits.<sup>16</sup>
- It is erroneous to dismiss states' reservations about grand designs for rationalised procurement and production as symptomatic of inexcusable short-sightedness and unenlightened self-interest. Resistance to the idea that there should be a pooling of research resources to eliminate 'waste' is not just chauvinistic sentiment but a reminder that one man's waste is another's essential investment in the pursuit of knowledge. Reluctance to envisage joint ventures which do not involve participation in development stems from understandable desires to secure access to technology (or retain existing competence). When it comes to production, revealed preferences for licensing, formally-negotiated reciprocity or elaborate co-production formulae reflect no more than prudent regard for employment and other economic considerations (including technology transfer opportunities). Moreover there is good reason why such considerations loom large in decision-makers' calculations currently. Nations are wrestling with problems of structural

adjustment which threaten to get worse before they get better. To risk precipitating economic hardship is to risk exacerbating fissiparous tendencies in domestic politics. And it is well understood that social discontent may be as damaging to a country's sense of security as inadequate military preparations.

All in all, therefore, it is hardly surprising that caution characterises governments' approaches to co-operation. There are practically significant trade-offs to be considered between 'efficiency' and 'other values'.

#### Priority for Information and Analysis

Guidelines for policy initiatives and institutional innovation responsive to defence and military-industrial motivations for co-operation arise naturally from this appraisal.

There is no general support in Western Europe for fully-integrated arrangements based on (a) settling identical military requirements and (b) instituting highly centralised management of armaments production capacities. However, nations continue to be disposed to explore collaborative opportunities case-by-case. It is practicable therefore to try to facilitate more co-operation along such lines, the aim being to improve efficiency subject to the constraints that have been discussed. (And the meaning of this last qualification is that institutional innovation should be broadly acceptable to all and unacceptable to none, and should not imply change that would complicate the problems of structural adjustment or otherwise weaken the economy of any country).

Fundamentally it is a matter of enabling states to make better-informed choices, in the light of the several values and interests which they have to take into account. There is a need for fuller

information, about requirements on the one hand, available products (or productive capacities) on the other; and for objective analysis, to display alternative solutions to choice problems and in so doing illuminate the possible trade-offs among objectives.

Information. This means comprehensive data, systematically assembled and presented, on the demand and supply sides of the West European military equipment market (with counterpart facts on American needs and resources).

- The demand side information consists of details of nations' envisaged equipment purchases, specifying role and mission, essential performance requirements, estimated numbers required, proposed in-service dates and the financial commitment foreshadowed in medium- or longer-term budgetary planning. (The IEPG's equipment replacement schedules go some way towards meeting this specification.)
- The supply side information consists of full facts and figures - including cost and workload data - about the research, development and production capabilities of West European economies. (The studies set in hand by the IEPG and the Standing Armaments Committee (SAC) of Western European Union may provide a foundation for the comprehensive material required under this heading.)

Raw data of this sort could be used (a) to enable every case of synchronous demand to be identified, together with some indication of expected time-scales and of the expenditures which nations foresee on present plans; and (b) to enable 'matching' development/production capacity to be identified with reasonable precision: that is to say, to define the set of collaborative procurement possibilities. These might involve a major demand met from several sources of supply, a set of compatible demands met from several sources of supply, a 'family of weapons' (equipment) produced by a formal or ad hoc, permanent or temporary, consortium of manufacturing enterprises (in effect, a 'family of firms'), several compatible or a single unique demand met from a sole source of supply. There are numerous permutations and, therefore, many different collaborative procurement programme options.

Analysis. This means the authoritative examination of options, to illuminate 'the full costs and benefits of alternative modes of co-operation in particular instances' (against, ideally, a benchmark of independent national acquisitions). This would yield thorough elucidation of specific schemes, including implied trade-offs between efficiency (or cost-effectiveness) and associated economic and social

repercussions. In other words it would reveal - in a way that intuition and judgement as at present applied do not - just what price in forgone efficiency is implied by arrangements for wide participation or equitable work-sharing or employment maintenance (or, put the other way, what burdens might be implied by adoption of the least cost solution). With the aid of such analysis, nations would be better able to select their preferred course of action. They would know the 'price' of self-sufficiency as compared with collaborative opportunities. The potential significance of this should not be underestimated. In the absence of explicitly-calculated 'prices' states probably act conservatively. They assume the inefficiency premium to be lower than it is in fact, or the economic costs of adjustment to be higher than they really are. This alone could account for the widespread disposition to view co-operation as a strategy of last resort, to be espoused only when independent national effort is prohibitively expensive (in the exact sense).

The analysis element in this prescription is the critical one, of course. Establishment of a capability for performing the relevant cost-benefit calculations is the crucial initiative required.

In all but one respect it is an innovation which it should not be difficult to make. The basic information for the necessary work can be collected and collated. The analytical tools required are familiar. In fact some specific work has been done to define the type of options analysis that is proposed.<sup>17</sup> The problematical issue is that of institutional affiliation. The IEPG is one candidate. But governments have rejected - or ignored - suggestions that the Group be established on a more formal footing, with a full-time Secretariat and its own offices; and for so long as it is not permanently organised it is hard to see how it could effectively supervise an authoritative 'information and analysis' agency. A case could be made for setting-up an office under the aegis of WEU. There are difficulties with this notion too, however, given WEU's limited membership and the low profile it has assumed.

On balance, therefore, it would seem preferable to establish an independent entity, constituted as (say) a European Defence Analysis Bureau and managed as such, but having close links with the IEPG,



with WEU and (for certain limited purposes) with the Commission of the European Communities.<sup>18</sup>

The Commission's Industrial Policy Initiatives 1978-80

In parallel with the debate on co-operation that has taken place in the defence fraternity since mid-1978 there have been developments in the evolution of thought about a common industrial policy for the EEC. Of these, several are relevant to the question: should the Commission accept and affirm that concept of its role vis-a-vis management of Western Europe's defence industrial capacities which the Klepsch Report envisaged?

A careful reading of the developments in question highlights the following considerations and discloses an inherent dilemma.

- The unwillingness of EEC members to contemplate ascribing authority to any supranational or inter-governmental body with respect to organisation of the demand side of the West European military equipment market has its counterpart on the supply side. No enthusiasm has been shown by the governments of the Nine for making creation of a 'structured' arms market a key element in the Community's industrial policy for the 1980s and beyond. (Indeed, although the opposition in the European Parliament to any initiative in this sense was insufficient to block the broad Resolution of 14 June 1978, the reasonable expectation must be that it would not be possible to muster the required support in the Council of Ministers for definite proposals.)
- At the same time there does appear to be support in principle for the generalised industrial policy aspirations which the Commission and others have voiced. It is recognised that the Community should pay at least as much attention to the well-being of European industry as it does to that of European agriculture; that industrial policy

should amount to more than eliminating obstacles to competition and easing the difficulties of sectors in distress; and that priority in 'positive' policy-making for particular sectors should go to programmes designed to safeguard and enhance the competence and competitiveness of Western Europe in areas of high technology. (The latter was a dominant theme in the 1978 Report on structural aspects of growth.)<sup>19</sup>

The dilemma arises because the high technology sectors for which a Community strategy is 'urgently required' are precisely those in which defence demand is important (and, indeed, in which drawing a line between civil and military business is difficult).<sup>20</sup> How can the Commission define a 'strategy' for these yet avoid appearing to over-ride member governments' insistence that policy for military-industrial capacities is a national prerogative?

The answer is: 'only with difficulty, but it should be possible, with ingenuity'. What is important is that the emphasis be on the primacy of industrial objectives, with special reference to advanced technology promotion, so far as Community institutions are concerned. The latter's intrusion in the defence domain is acceptable to member nations only - and even then not assuredly - to the extent that it is an incidental effect, or inescapable concomitant, of measures necessary to strengthen the West European manufacturing base.

It is in this spirit, and with circumspection, that the Commission has proceeded in the recent past. Simplifying a complicated story, it has moved along two axes of advance and, most recently, along one particular path which is potentially very promising.

- Under the rubric of 'competition policy' and the opening-up of the EEC's internal market, attention has been paid to public procurement: and there exists a Directive of 21 December 1976 which represents a first stage in liberalising government purchasing practices. (Exclusions and escape clauses limit the effectiveness of this instrument, but it is a basis for future action.)

- Under the rubric of 'sectoral policy' for advanced technology promotion, programmes have been defined for encouraging telematique technology, based on combinations of computers, microelectronics and telecommunications (to cite the most important instance); and more modest initiatives have been taken with respect to other sectors (e.g. aerospace).<sup>21</sup>

These are the two basic 'axes of advance'. Defence equipment purchases, and indeed many civil acquisitions of high technology goods, lie outside the scope of the public procurement Directive as at present observed and enforced. However, consideration could - and should - be given to bringing more of them within its ambit. Measures of military significance certainly will be taken within the framework of the telematique programme, for there are important defence applications of the relevant technologies. The significant thing is that the Commission's interest is in the technologies first and in their defence applications only incidentally. This too is the emphasis in the steps that have been taken along the 'particular path which is potentially very promising'.

- Intra-European co-ordination of public procurement demands for the products of high technology industry is a notion which, after being under consideration for some time, attracted particular effort during 1979-80 (culminating in an informal meeting of industry Ministers from the Nine, held at Venice in June 1980).<sup>22</sup> The rationale is straightforward. Governments are the major customers of those advanced industrial sectors in which it is important to develop Western Europe's technical expertise and commercial stature in the 1980s and beyond. It is sensible, therefore, to explore the scope for using public authorities' purchasing power to best effect, viz. avoiding needless duplication of R & D effort, devising co-operative production arrangements where appropriate, sharing knowledge gained from operational experience. This applies to governments' expenditures on all relevant goods and services, civil and military. However,

to echo an earlier point, the prime interest of Community institutions is in that strengthening of the industrial base that should eventuate and not in how nations' manage their public sectors.

It is too soon to judge how far and how fast governments will be prepared to go along this route. Suffice it to say that there are hopeful auguries: not least because no-one is being asked to cede authority to Community institutions, only to consider co-ordinating policy under their auspices.

#### Priority for Informal Co-ordination

In the light of this experience, what is the logical next step for policy initiatives and institutional innovation responsive to technological - and, specifically, 'advanced technology promotion' - motivations for greater intra-European co-operation?

Fundamentally it is a matter of mobilising the potential which the masse de manoeuvre of governments' purchasing power represents in furtherance of industrial policy objectives. That means building on foundations already laid. More important, it means continuing to do business as it has been conducted to date, i.e. on the basis of agreement among participating states.

The most practical initial measure which could be taken is the collection and collation of authoritative and up-to-date information on the scale and pattern of public procurement outlays (civil and military) in the EEC, with special reference to expenditure with designated high technology industries. During the exploratory phase of any policy evolution it is possible and it is excusable -

though not necessarily desirable - to proceed without precise knowledge of relevant magnitudes. It is impracticable - and certainly unwise - to remain in the statistical shadows beyond this stage.

It should be possible for the Commission - in consultation with the Statistical Office of the Communities - in the first instance to produce, or have produced for it, a basic reference document on (a) the size and character of all public purchasing in the EEC, (b) the agencies responsible for disbursing funds and (c) the sectors of industry receiving them (with the most detailed analyses confined to the 'designated high technology industries'). Thereafter it would be useful to establish routine reporting on the market in which governments-as-purchasers-deal with advanced-technology-industries-as-suppliers. The model for such regular scrutiny might be what the Commission does vis-a-vis aerospace, procedures which yield an invaluable annual statistical bulletin (and, doubtless, much more besides).

To be better informed about the anatomy and physiology of West European public markets is one thing. To develop policies for their management with the maintenance and sustenance of a sound 'high technology' industrial base in mind is another, especially when the sine qua non of effective action is existence of a durable consensus for it. In these circumstances the most practical step towards definition of a feasible programme of action for EEC members might be the establishment of an intergovernmental body expressly tasked to draw up such a programme.

One of the most successful examples in recent years of concerted action to deal with perceived 'vulnerability' is NATO's Long Term Defence Programme (LTDP). It was in 1977 - and at 'Heads

of Government' level - that this initiative was launched, in the sense that the Alliance nations registered agreement that something should be done to address a series of problems. The job of identifying the specific actions necessary to overcome (or alleviate) the problems and capable of commanding support among the Organisation's members was entrusted to several Task Forces, composed of officials from individual national bureaucracies (aided by international staffs). These met from time to time during 1977-78 and discussed appropriate and feasible measures in a pragmatic way, helped by the fact that their work was performed outside the political limelight. They reported to Ministers in 1978. Almost without exception the teams' recommendations were endorsed. In effect, governments became committed to the now substantive LTDP.

It is this kind of institutional arrangement which might now be considered in the EEC, to give a new impetus to both development of a general strategy for the promotion of technological co-operation and definition of particular techniques for the use of public procurement monies as one instrument of such a strategy. Specifically, the Council of Ministers could convene a European Public Procurement Task Force which, emulating such features of the method of working of its precursors in the NATO exercise as might be appropriate, would seek to identify that policy to which all Community states could subscribe for the more effective use of governments' purchasing power in the furtherance of industrial policy objectives. (This is not the place to attempt exact definition of such a body's terms of reference or to express views as to its possible composition. On the latter point, however, it is clear that to be effective the Task Force would have to comprise senior officials from member states, supported by officers of the Commission (and, if practicable, the Economic and Social Committee) and by outside experts.)

## CONCLUSIONS

There is a strong case for facilitating further co-operation in defence procurement and production among the members of the EEC and, specifically, for devising new institutional arrangements to this end. The Klepsch Report to the European Parliament in 1978 represented a particularly persuasive statement of it; and that is why the Parliament passed an important Resolution, based on the Report, on 14 June 1978. However, during the period which has elapsed since that Resolution - which called on the Commission to prepare 'an action programme for the development and production of conventional armaments within the framework of the common industrial policy' - two things have become clear.

First, the IEPG is unlikely to evolve into an effective instrument for settling common military requirements across-the-board. Indeed, the recent debate within the defence fraternity has indicated the existence of a consensus for effort to encourage more collaboration on a case-by-case basis, but little support for vesting real authority in a supranational or intergovernmental agency to manage the demand side of the armaments market.

Secondly, the Commission is making some headway towards its goal of strengthening the position of those European high technology industries whose competence and competitiveness must be safeguarded: for example, by effort to ensure the more effective use of public contracts - military and civil - to this end. But there is little enthusiasm for the Commission, or any other agency, assuming a formal role in the management of the supply side of the military equipment market.

The time is not propitious, therefore, for definition by the Commission of the kind of comprehensive 'action programme' envisaged by the Klepsch study. It would be well-advised to pursue a less spectacular approach, based on separate but concerted effort in pursuit of security and industrial policy objectives and on modest institutional innovation.

The most useful actions which could be taken in the next few years would be based on (a) greater and more systematic encouragement of case-by-case collaboration in defence procurement and production; and (b) more energetic exploitation of the potential for use of public contracts to ensure the establishment of a sound and balanced structure of high technology industries in the EEC.

So far as institutional innovation is concerned, the prime requirements are for

A European Defence Analysis Bureau, to serve as a clearing house for information on defence needs and military productive capacities, and hence for the identification of collaborative procurement possibilities; and to conduct independent analyses of collaborative procurement programme options, displaying the full range of social and economic costs and benefits.

A European Public Procurement Task Force to devise that policy to which all Community states could subscribe, for the more effective use of governments' purchasing power - for civil and military products - to maintain and sustain a 'high technology' industrial base.

The purpose of the former would be to ensure that, in the defence domain, no opportunity for co-operative procurement goes unidentified and no collaborative programme option is rejected on the basis of merely intuitive or impressionistic assessment of its merits. The aspiration of the latter would be to define the arrangements necessary to ensure that, with the furtherance of industrial policy objectives in mind, no civil or military public procurement choice is made without explicit attention to those objectives.



NOTES and REFERENCES

1. The Klepsch Report, the Normanton Opinion and the text of the Resolution of 14 June 1978 can be found in Two-Way Street: USA-Europe Arms Procurement, London: Brassey's/New York - Crane Russak, 1979.
2. Greenwood D (with Angus R) European Technological Co-operation and Defence Procurement: Statistical and Institutional Analyses of Defence Procurement and Production in the European Economic Community. Report to the Commission of the European Communities, June 1979.
3. See A European Armaments Policy - Symposium, Official Record (published by the Office of the Clerk of the Assembly of WEU) and the following papers tabled at the Assembly's Session of December 1979: Political Conditions for European Armaments Co-operation, Document 819, 5 November 1979; Definition of Armaments Requirements and Procurement in Western Europe, Document 821, 6 November 1979; and The Industrial Bases of European Security, Document 823, 7 November 1979.
4. See The Economist 26 July 1980.
5. Greenwood D (with Angus R) op. cit. at note 2.
6. See The Long-Term Defence Programme - A Summary, Annex to Final Communiqué, North Atlantic Council Meeting, Washington 30-31 May 1978, p.4.
7. Greenwood D (with Angus R) op. cit.
8. Department of Defence, Annual Report, Fiscal Year 1981, Appendix of Tables.
9. See, for example, NATO Standardisation, Interoperability and Readiness. Hearings before the Special Sub-Committee on NATO Standardization, Interoperability and Readiness, House Armed Services Committee, 95th Congress, Washington: US Government Printing Office, March 14, 1978, pp. 580-584.
10. On the concept of minimum efficient scale see Greenwood D (with Hartley K and Klotz B) Measuring Certain Benefits from Increased NATO Standardization Report prepared by C & L Associates, Potomac, Md., (for the Vertex Corporation as prime contractor) under Department of Defense Study Contract MDA-903-78-C-0166, August 1978.

11. See the Commission's publication Industrial Policy and the European Community p.1.
12. Speech to the European Parliament on presentation of the Commission's General Report for 1976 and programme for 1977, 8 February 1977.
13. Para. 39 of the Report.
14. See Two-Way Street... op.cit. at note 1, pp. 9-10.
15. Here and throughout this section I have drawn heavily on my contribution to the AWEU Symposium of October 1979. See citations at note 3. The principal proposals of my essay were embodied in a Draft Recommendation to the Council of WEU (see Doc. No. 819, p.2) and paragraphs 8 and 9 of the van Waterschoot Report submitted to the Twenty-fifth Ordinary Session of AWEU, December 1979 (loc. cit. pp. 3-4).
16. Greenwood D (with Hartley K and Klotz B), op. cit. at note 10.
17. ibid.
18. See my contribution to AWEU Symposium of October 1979, cited at note 15 (in the Official Record, cited at note 3).
19. See p.15 above.
20. See the Klepsch Report passim.
21. The Economist, 26 July 1980.
22. International Herald Tribune, 16 June 1980.