

# **Procurement Practices and State-industry Relations in the United Kingdom**

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August 2002

## **Abstract:**

This paper provides an analysis of the changes in the nature of procurement practices and the relations between state and industry in the UK that have taken place since the end of the Cold War. It considers the restructuring and reorganisation that has taken place, comparing the decades before and after the Cold War. It finds that despite the marked changes that have taken place there still lies considerable continuity.

This paper has developed from an earlier version presented at the COST A10 Action workshop on "The Future of European Arms Production", Stockholm International Peace Research Institute, October 2000, the proceedings of which are available in Serfati (2001). We are grateful to the participants and to John Selby, Claude Serfati and Ron Smith for comments and suggestions. Dunne is grateful to the ESRC for support under grant R00239388.

## **1. Introduction**

With the ending of the Cold War many countries took the opportunity to reduce their military expenditure substantially. Worldwide this constituted a massive reduction in military spending, especially procurement expenditure, which reflected a clear change in the attitude of nation states towards their defence industries, and a marked change in state-arms industry relations. The previously held commitments of governments to the maintenance of comprehensive national defence industrial capability seemed to be jettisoned and increasingly the concern was for “value for money” in defence procurement and a move towards competitive tendering, rather than the cost-plus contracts that had characterised the Cold War period. The cosy State company relations of the Cold War seemed to be replaced by a much more adversarial stance by most Governments. These changes led to a massive restructuring of the international arms market, with defence companies downsizing, merging and internationalising. During the latter half of the 1990’s there was growing resistance to further cuts in military spending and by the end of the decade there was evidence of a bottoming out of expenditures and some evidence of increasing military burdens. At the same time there was some evidence that the attitudes of the late 1980s were being held less consistently in the wake of the massive restructuring of the industry internationally. While the general trends are clear, the specific nature of the changes that have taken place in procurement and in state industry relations are still the subject of analysis and of some debate.

This paper provides a contribution to the growing literature, by investigating the nature and extent of the changes in procurement policies and state-industry relations in the UK. This provides a particularly useful case study as the changes that have taken place in the UK have in some aspects preceded and influenced those in other countries. The next section considers the patterns of military spending and defence strategy. This is followed by an analysis of the changes procurement policies and state industry relations in Section 3. Case studies of specific procurement projects are examined in Section 4, which is followed by consideration of changes in the companies in Section 4. Finally, section 5 provides some conclusions.

## 2. Military Spending and Strategy

The thawing of the Cold War in the mid 1980s led to huge changes in military burdens worldwide. Arms procurement expenditure declined more quickly than overall expenditure and the international arms market moved to a situation of declining demand and overcapacity. As Table 1 shows apart from Greece and Turkey all of the OECD economies saw marked reductions in their military burdens. In the UK expenditure on equipment in real terms showed a decline of 41.1% over a thirteen-year period from 1983/84 as shown in Table 2. This was all very different to the Cold War period, when the superpower conflict fuelled continually increasing military expenditure and moved client governments into much more powerful positions in bargains with producers. As with other countries the British State was concerned with maintaining national defence industrial capacities and capabilities and intervened to determine the shape and structure of the industry. With substantial declines in the level of defence expenditure and expenditure on equipment in real terms from the mid 1980s, UK defence policy experienced conflicting pressures from security priorities and budgetary constraints, leading to increased prioritisation by the MoD on achieving improved 'value for money' in defence procurement.

Following the end of the Cold War there was substantial reassessment of threat perceptions, leading to a series of defence reviews. To a large degree these reviews were driven by budgetary constraints and incremental cuts in defence expenditure. The Strategic Defence Review in 1997 was perceived to be an exception to this rule. It was intended as a thorough review of the UK's defence and security policies in an attempt to establish a coherent strategic rationale for structure and equipping of the Armed Forces and to overcome problems of overstretch. While there were still further real reductions in defence expenditure, the SDR committed the new Labour Government to the maintenance of a strong UK defence industrial base and to developing a force structure equipped to meet new challenges to the UK's security. This implied a change in the type of equipment being procured by the MoD, with a move away from the priorities of the Cold War (e.g. anti-submarine warfare and air defence capabilities) towards equipment that would enhance the flexibility and mobility of the Armed Forces (Macdonald, 2000, p. 50).

Like other defence reviews of the 1990s, the SDR did not alter fundamentally the core objectives of UK defence policy. Rather the Anglo-American special relationship, the maintenance of an independent strategic deterrent and membership of NATO remain at the heart of UK defence policy. The SDR did little to enhance the development of a European Security and Defence Identity within

the EU, despite the fact that intra-European co-operation is likely to be increasingly common. It did, however, herald the internationalisation of the UK's defence and security policies, with formal recognition of the UK's participation in international peacekeeping operations, through the new 'defence diplomacy' role for the Armed Forces, and the need for greater 'expeditionary' capability to fulfil this role (MoD, 1998)

### **3. Procurement and Competition**

These marked changes in military spending and the strategic environment were reflected in changes in the procurement process. During the Cold War the relationship between the state and the defence industry within the UK was characterised by a monopsonist state, which controlled the form and nature of the UK defence industry. Procurement policy was protectionist and acted as a form policy of disguised industrial policy, with high levels of defence expenditure maintaining demand in certain industries and the MoD maintaining preferred suppliers within the UK defence industry. This could be characterised as a 'pluralist corporatist' policy, with state interventions undertaken to maintain defence industrial capacities, but with the industry having a dynamic role in influencing Government industrial and technology policy. The effect of this has been argued to be that civil research and development (R&D) was 'crowded out' and investment drawn towards the defence industry at the expense of civil industry (Dunne and Smith, 1992).

The Cold War relationship was radically transformed during the 1980s through the adoption of what might be termed a 'neo-liberal' approach to defence procurement. This saw the introduction of both domestic competition and the 'credible threat' of foreign competition into the UK market<sup>1</sup>. The privatisation of nationalised industries, which had started earlier, combined with a 'value for money' approach and competition policy introduced a new adversarialism into UK defence procurement. The traditional sponsorship of the defence industry by the British State gave way to a more commercial relationship between the MoD and its suppliers. This saw the transfer of R&D risk to industry and the adoption of a 'hands off' approach to defence industrial restructuring (Dunne, 1995). Government did, however, maintain some support for the defence industry both in relation to arms exports (with an increased emphasis placed on the promotion of defence exports) and more general policy issues.<sup>2</sup>

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<sup>1</sup> This was most evident in the cancellation of the late and massively over budget Nimrod project and the purchase of the US AWACS. This represented the first significant proof that the government would consider the option of buying major weapons systems from abroad even when the UK defence industrial base could in principle produce it.

<sup>2</sup> The Defence Export Services Organisation (DESO) survived as a corporatist structure throughout the 1980s and supported companies in their search for export markets. Additionally, the DTI took over from the MoD as the sponsoring

The changing market environment, with the marked cuts in procurement worldwide and the reduced possibility of maintaining domestic capability across all major systems, spurred on an internationalisation of the companies (Dunne, 2000).

During the 1990s concerns were expressed about the effect of the open competition policy on the long-term viability of some UK defence industrial capabilities and the ability of the UK industry to restructure internationally. This led to calls for specific policy measures to aid the restructuring process within the UK and Europe (Ernst & Young, 1994; Wiles, 1996). UK defence procurement policy appeared to be both confused and inconsistent, as the MoD sought to adjust to a changing market environment and respond to criticisms of its competition policy. The exact definition of 'value for money' was unclear. Previously it had been interpreted in terms of the cheapest acquisition cost, but during the 1990s a broader and longer-term approach was introduced. Competition was still important, but there was a commitment to give more systematic consideration to the longer-term industrial implications of procurement decisions, and a recognition that both European and transatlantic collaboration were increasingly important (House of Commons, 1995a, pp. xiii-xiv, para 25; House of Commons 1996b, pp. v-vi, paras. 13-14). Recognition of the limits to competition policy, led to renewed emphasis on non-competitive contracts, with attempts to reduce risk by giving more attention to technology demonstration, reliability and maintainability, incremental procurement and the through-life costs of defence equipment. 'Strategic plans' were developed in relation to defence R&D and exports, with increasing consideration of export potential of defence equipment and a 'selecting winners' in exports policy was adopted. Additionally, a 'defence based' list of strategic capabilities, which the Government was committed to preserving, was drawn up (House of Commons 1996a, p. vi, paras. 18-19).

This new emphasis on the industrial implications of procurement decisions also affected the procurement process. Since the 1970s, equipment projects had been required to go through a series of distinct phases separated by periods during which projects were reviewed and performance to date assessed. This process remained essentially unchanged until 1998. It was the MoD's intention that by applying this 'Downey Cycle' that each project would be put through thorough scrutiny before approval was granted for the next phase of the procurement to proceed in order to control costs and prevent delays ( as outlined in Appendix 1). However, the MoD still failed to overcome the endemic problems of cost over-run and delay in defence procurement. This failure was attributed to the highly

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department of the defence industry, although the resources it targeted at defence industrial restructuring were tiny in

bureaucratic procurement process, with its consensus culture, ineffectiveness in decision-making and poor scrutiny of projects (Kincaid, 1997, p. 14). In addition, failure on the part of the MoD to implement properly the Downey procedures and insufficient funding in the early phases were seen as key factors leading to delays and cost-overruns<sup>3</sup> (Cooper, 1997, pp. 14-15).

The SDR introduced the idea of ‘smart procurement’ to tackle the problems of cost over-run and delay. This aimed to increase the involvement of industry in the procurement process, and to provide a more flexible approach to procurement, with different processes for different types of equipment (Ministry of Defence, 1998a, p. 41, para. 157). To overcome the perceived problems of excessive bureaucracy, ineffective scrutiny and lack of accountability projects were to be submitted to the EAC for assessment on only two occasions during the project cycle, with more detailed scrutiny early in the process (Ministry of Defence, 1998a, p. 42, para. 158). Integrated project teams, simulation of the life cycle of a product, trade-offs between cost and performance, concurrent engineering and the use of risk management tools and a commitment to investing up to 15% of total development costs were intended to reduce the development cycle and costs (Ministry of Defence, 1998a, p. 42, para. 158).<sup>4</sup>

To consider these changes further and to evaluate their impact over the period we need to consider some concrete examples of weapons systems procured over the period. The next section discusses the development of the A400M or Future Large Aircraft (FLA), the Apache attack helicopter and the Bowman communication system.

#### **4. Case Studies of Specific Procurement Projects**

Considering the case of the Future Large Aircraft (FLA) the most striking feature is a very clear move away from the MoD’s traditional role as sponsor of the UK defence industry, to a central concern for short-term budgetary considerations. Budgetary constraints first prompted the decision of the MoD to withdraw from the FLA project in 1989 and instead to adopt an ‘off-the-shelf’ procurement strategy. Similarly, the decision to bring forward the first tranche of the Hercules replacement was made because of the availability of funds in the procurement budget in the short-term and owing to concerns over the long-term availability of funds for this project. As there was

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comparison to the MoD’s procurement budget.

<sup>3</sup>The MoD estimated that only 8%, as opposed to a recommended 15% to 25%, of development costs were spent in the early concept phases of the procurement process

<sup>4</sup> This target for investment during the early stages of the project cycle was first suggested in the Downey Report. Since the 1970s the MoD has failed consistently to achieve this level of investment in large part owing to budgetary constraints.

only one product (the C-130J) available within the new timescale there was little scope for a real competition to replace the first tranche of the RAF's Hercules fleet (House of Commons, 1994b, evidence, p. 23).

In response BAe adopted an unusual high profile, controversial and aggressive lobbying campaign in order to persuade the MoD to delay its decision on the first tranche of the Hercules Rolling Replacement and to re-enter the FLA programme. Arguments about military and civil industrial implications of the procurement decision were used, with the FLA programme argued to be crucial to maintaining the company's position as lead supplier of wing technology on the Airbus programme. While the Government provided only a general commitment to consider industrial implications and gave no indication as to what priority would be given to these as opposed to other factors, it is evident that BAe's campaign was at least partially successful in influencing the procurement decision in the company's favour (Macdonald, 2000, p. 194).

Following BAe's lobbying campaign in relation to the first tranche of the Hercules Rolling Replacement, a new model of collaboration was introduced. This new model was based on commercial practice in the civil aerospace industry. One important innovation was the elimination of governmental reassessment and alterations to specification between the phases of the project cycle. In addition, a single development and production phase was proposed and there was no commitment on the part of the governments to buy the aircraft until the production contract was signed. (MacDonald, 2000). Difficulties arose with the new collaborative arrangements owing to the MoD's desire to run a competition for the second tranche of the Hercules Rolling Replacement requirement.<sup>5</sup>

This would suggest that the FLA programme exemplified the 'partnership' approach to defence procurement, designed to maintain UK defence industrial capabilities, and may be seen also as an embryonic form of the 'smart procurement' initiative. The MoD also adopted a competitive procurement strategy for the second tranche of the Hercules Rolling Replacement requirement. However, the fact that the ESR was written around the FLA calls into question the ability of the

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<sup>5</sup> Other complicating factors were the need to draw up a European Staff Requirement (ESR) that suited the varying needs of eight separate Air Forces, different approaches to procurement management, financing problems and a politically driven proposal to consider incorporating Antonov into the FLA programme. This proposal was not pursued and the competition for the second tranche was between the FLA (FLA), the C-130J and the C17.

MoD to have made an impartial decision. The MoD's decision in April 2000 to order 25 A400M aircraft was, therefore, not unexpected.<sup>6</sup>

In 1994, the MoD ran a competition to choose an attack helicopter for the British Army. Six helicopters were considered (including four from the USA) consisting of the Apache made by McDonnell Douglas, the Tiger made by Eurocopter, the Cobra Venom made by Bell, the Italian Agusta A129, the Comanche made by Boeing Sikorsky and the Rooivalk manufactured by the South African firm Atlas Aviation. Three UK companies were possible prime contractors – Westland for the Apache, BAe for the Tiger and GEC Marconi for the Cobra Venom. By the end of the bidding process the MoD's decision was a choice between the Apache and the Tiger, with the Apache being selected. In contrast to BAe's approach detailed above, Westland adopted a low profile and non-confrontational approach to political lobbying in the attack helicopter procurement, involving sub-contractors and gained support from politicians. It placed considerable emphasis on the nation-wide benefits of the Industrial Participation (IP) package accompanying the Apache, which was worth £2bn.

In fact much of Westland's lobbying was irrelevant, as evidence suggests that the over-riding consideration of the MoD was to obtain the most cost-effective solution to the requirement. The various contenders were judged, after extensive operational analysis, on the basis of maximum 'value for money'. In part this was a response to the Hercules Rolling Replacement, where the decision-making process was influenced by political lobbying, but it may also have been motivated by a desire to prove that the competition policy was still applicable during a period in which this policy was receiving increasing criticism. There was little to separate the various IP packages and hence consideration of industrial implications had only a marginal impact on the procurement decision (MacDonald, 2000, p. 197).

The selection of the Apache helped secure Westland's position as the sole domestic supplier of military helicopters to the MoD. There is evidence of intense political pressure advocating the more expensive Tiger was brought to bear by the French and German Governments, in addition to

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<sup>6</sup> Although this decision is likely to have been due in part to consideration of industrial implications, concern remains that the number of aircraft ordered may not prove to be enough to secure BAe's wing work on the Airbus programme.



lobbying from BAe, who planned to get involved. Despite this, it appears that the MoD officials prioritised operational and financial factors over the promotion of European collaboration.<sup>7</sup>

The MoD's decision in the attack helicopter procurement has implications for the restructuring of the UK and European defence industries. Eurocopter's failure to secure the MoD contract was a setback for the Tiger programme. In contrast, the decision to purchase the Apache may have encouraged Westland and Agusta (Westland's Italian partner on the Apache programme) to explore the possibility of an industrial alliance and intended merger. Whilst the long-term effects of the attack helicopter procurement on European defence industrial restructuring are unclear, all of the aircraft available to the MoD to a greater or lesser degree represented moves towards the internationalisation of the supply-side of the defence market. For Westland, this internationalisation offered the opportunity to expand into markets overseas to which they otherwise would have been unable to obtain access, but resulted also in another European market being penetrated by the US defence industry.

Another large project in which short-term budgetary pressures are evident is the Bowman programme. This project to provide battlefield communication systems was characterised by insufficient early investment, cost over-run and delay. On four occasions between 1991 and 1995 the project was delayed owing to budgetary pressures (National Audit Office, 1996a, p. 26, para. 3.19). By 1998 there had been a slippage in the in-service date (ISD) by 75 months and cost escalation to over £100m for the development of the system.<sup>8</sup>

Initially the MoD's intention was to have competition at all stages of the project. Two possible solutions to the requirement were proposed: the Yeoman system by Siemens Plessey and the Crossbow system by ITT. In order to control cost escalation, the MoD required each of the bidders to meet 50% of the development costs of the new systems. Unfortunately as costs soared, the bidders found it increasingly difficult to bear their share of the risk associated with developing systems to meet the Bowman requirement within a competitive procurement environment, which in turn prompted the potential suppliers to collapse the competition and to form a joint venture company called Archer Communications Systems Ltd. (ACSL).

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<sup>7</sup> They did state the implications of choosing the Tiger for France and Germany and the industrial benefits that would have come to the UK. They also saw MoD's policy as to promote European collaboration, but not at the expense of achieving 'value for money' (Macdonald, 2000, p 204).

<sup>8</sup> Additionally, there were extra financial costs arising from running on the Clansman system, estimated at £2m per annum (National Audit Office, 2000b, p. 47, para. 3.25).

The Procurement Executive (PE) initially resisted the collapse of the competition, but lobbying by industry through MoD officials and politicians led to a change of mind<sup>9</sup>. In particular, there was support for the new joint venture from the Operational Requirements (OR) staff, who were keen to prevent further delay in the timescale of the project. The PE was, however, unwilling to abandon the competition policy completely and they sought to maintain competition at the sub-contract level. This led to difficulties as companies were unwilling to bid against ACSL partners in sub-contract competitions. A new management strategy was adopted based on the NAPNOC approach, with the objective of controlling costs and delivering the equipment within the revised timescale. In 1998 it was estimated that this accounted for between 28% and 30% of the project (National Audit Office, 1998, p.38, para 3.31).<sup>10</sup>.

In 1998, the MoD sought to apply its 'partnership' policy to the Bowman project. The Department devolved developmental risks and management responsibility to ACSL with the intention of obtaining shorter development timescales and reduced development costs. The intention was to model of 'smart procurement' initiative in the Bowman programme.<sup>11</sup> In 1999, the MoD launched a separate competition for a new personal VHF radio for the army and reduced the Bowman requirement to better suit the post Cold War operational scenario. The Department also launched a review of the project in order to determine ACSL's ability to produce a proposal for the VHF personal radio. Despite these attempts to rectify deficiencies in the Bowman, the Defence Committee concluded:

“Bowman remains a very good example of the antithesis of smart procurement – with over-ambitious requirements, inadequate competition and a lack of clear leadership...” (House of Commons, 2000a, p. xx, para. 43)

A further delay in the ISD of Bowman was announced in December 1999, with the project now 8 years overdue. ACSL also failed to let a sufficient amount of sub-contract work by competition (House of Commons, 2000a, pp. xxiv-xxv, paras. 55-57) and failed to propose a solution to the VHF radio requirement. In response the MoD decided to terminate its relationship with ACSL, reopened the competition and sought proposals from alternative suppliers (Thompson-CSF and Computing Devices Canada) to meet the Bowman requirement (National Audit Office, 2000b, p. 22, para. 3.32).

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<sup>9</sup> The CDP was particularly strong in his opposition to this development

<sup>10</sup> Previously the NAPNOC element accounted for only 10% of the project.

The experience of the MoD over Bowman, shows the problems of introducing competition, particularly after the restructuring of industry and the strength of the industry in influencing decision making through lobbying. The later attempts to provide competitive procurement with concern for industrial capacity, cannot be considered a success and point to future problems the MoD is likely to have to deal with.

## **5. Procurement and State Industry Relations**

It is clear from the case studies that budgetary considerations are one of the most important factors in determining the nature of defence procurement decision-making. The amount of funds available for, and priority given to, a particular project can have a substantial influence on the timing of the project, the procurement strategy adopted and cost escalation involved in a project. These in turn may determine the equipment options that are considered and the extent and nature of Industrial Participation in the project, both of which have considerable implications for UK industry.

Additionally, it is apparent that political lobbying is perceived by industry to be an important in influencing procurement decisions, although in practice it has varying degrees of effectiveness. To a large degree the effectiveness of the lobbying may be dependent upon a variety of particular circumstances unique to each project and on occasions to the wider political sensitivity of a particular procurement decision owing to specific industrial or employment factors. The extent and influence of explicit lobbying is clearly an important aspect of the change from the old 'pluralist corporatist' state/industry relationship and on occasions can be a decisive influence upon MoD procurement decision-making. Aside from the growth of 'political' lobbying (of ministers etc.), the public relations aspect of lobbying, and the direct appeal to various 'stakeholders', such as unions, regional development bodies and even the EU are all likely to continue to be important for competitive procurements. They are also likely to play an important role at the sub-contract level and in attempts to win approval for funding for particular projects. This could be argued to reflect the re-emergence of strategic alliances between vested interests in industry and the military in order to influence operational requirement setting, defence procurement policy and decision-making in relation to specific equipment options - a reinvention of the "Military Industrial Complex", replacing the direct interrelations that had been damaged by the introduction of competitive procurement.

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<sup>11</sup> The project was characterised by bench marking, a trade off in requirements in phasing, an attempt to cost before

It is evident also that while industrial implications are clearly a major factor that influences procurement decision-making on some occasions, on other occasions the significance of this factor is much less. Moreover, in the case of the A400M it would appear that the MoD considered not just the defence industrial implications, but also the civil industrial implications of the procurement decision. If replicated in other procurements, this would indicate the operation of an informal industrial policy with the objective of preserving specific civil industrial capabilities. However, no consistent pattern is applied to all procurement projects. Occasionally the Government may be willing to overlook its own rules regarding 'value for money' out of concern about the (defence or civil) industrial implications of a particular procurement decision, whilst on other occasions the MoD may be willing to sacrifice a military capability in the pursuit of 'value for money'. In some cases industrial implications may feature very little in the MoD's decision-making, particularly if there is little to separate the industrial participation packages being offered by the different bidders.

During the late 1990s the MoD's competition policy was under strain and to some degree conflicted with attempts to promote European collaboration. Whilst the MoD's commitment to European collaboration was lukewarm, procurement decisions encouraged the development of transatlantic and transnational industrial alliances. Moreover, in the Bowman case supply-side restructuring in response to cost escalation made the MoD's attempts to maintain the competition policy problematic. The MoD's continued use of competition as the prime means to achieve 'value for money', therefore, may be increasingly called into question. However, it is difficult to see how the Department is able to ensure 'value for money' in the absence of the option of competition as evidenced by the re-opening of the Bowman competition.

It is evident also that the UK Government's commitment to European collaboration was lukewarm. In particular, the MoD was unwilling to sacrifice the achievement of maximum 'value for money' in favour of promoting the restructuring of the European defence industry. Additionally, there have been significant steps towards the establishment of transatlantic industrial links.

The cases studies also illustrate the evolving nature and complexity of the British State's relationship with the defence industry during the 1990s. Although, initially the FLA (A400M) programme was a state sponsored collaborative venture reflecting the old 'pluralist corporatist' relationship, during the early 1990s it became subject to the application of the neo-liberal approach. By the late 1990s it had

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letting major contracts, incremental procurement and the use of 'off-the-shelf' technologies.

become a pre-cursor to the 'smart procurement' approach.<sup>12</sup> In contrast, the Apache procurement was consistently managed under the influence of the neo-liberal approach.<sup>13</sup> The Bowman programme, although initially reflective of the neo-liberal approach, was complicated by the collapse of the competition and supply-side restructuring.<sup>14</sup> The MoD's subsequent decision to reopen the competition indicates that the MoD finds it difficult to achieve 'value for money' in a post-competition environment. The extent to which political and industrial factors influence any specific procurement decision is dependent to a large degree upon the overall balance between equipment options of operational and financial considerations.

Changes in the procurement process also reflected changes in the relative power of the different actors within the State. Before the mid 1980's the MoD was seen as the sponsor of the defence industry, but with 'competition, it seemed to become the industry's customer, with the DTI taking the sponsorship role. Within the MoD, however, different parts of the organisation have different types of relationship with industry. For example, it is clear that the Operational Requirements (OR) staff have a distinctive relationship with industry, in which both sides engage in a dialogue over future equipment requirements and technological options and their mutual interests. Within the process of setting operational requirements, industry may play an agenda setting role by suggesting equipment options. Additionally, it would appear that during the middle and late 1990s the MoD sought to return to aspects of the traditional Cold War relationship with its suppliers whilst preserving the key elements of the reforms. The Department sought to balance its formal role as the 'customer' of the defence industry, whilst still engaging in (and giving more priority to) its remaining informal sponsorship activities. At a general policy level this is exemplified by the activities of DESO, the greater weight given to the consideration of industrial implications in the procurement process and the increased consultation by the Procurement Executive (PE) (renamed the Defence Procurement Agency in April 1999) with the DTI and industry (Macdonald, 2000, p. 222).

There is certainly support for the view that there was a change of approach by the MoD during the middle 1990s in the case studies. Perhaps the most significant aspect of this change was the move

<sup>12</sup> It should be noted, however, that this change in approach was the result of political pressure rather than owing to a fundamental shift in procurement policy on the part of the MoD. This supports the view that industry is not a passive actor in the relationship, but rather, as argued by Dunne (1995) plays a dynamic role in influencing and procurement policy formation and decision-making.

<sup>13</sup> Although it was acknowledged that this project was managed under the 'old regime', the implication being that under the new regime there was less strict adherence to a narrow definition of 'value for money' and more emphasis upon industrial implications.

<sup>14</sup> As in the case of the FLA programme, the indication is that industry is an active participant within the overall state/industry relationship.

away from strict competition and the application of an 'off-the-shelf' procurement policy and the adoption of 'partnership' relationships based preserving the long-term future of defence industrial capabilities within a market characterised by national and international monopolies. Loss of competition has made it more difficult for the MoD to maximise the achievement of 'value for money'. The 'smart procurement' initiative potentially could help to address this problem by developing the 'partnership' relationship between the MoD and industry. However, to the extent that there was a genuine attempt to transform the Bowman project by 'smart procurement' practices and that attempt failed, it is questionable whether the 'smart procurement' initiative will eliminate delays and cost overruns for UK defence procurement.

## **6. Company Changes**

In response to changes in the demand side of the arms market there were also substantial supply side changes. The major defence companies moved away from being manufacturing companies over a range of products to become systems integrators, putting the products of other contractors together. This is what Ann Markusen calls 'hollowing out'. British Aerospace is the obvious UK example, which in achieving profitability and becoming the apple of financial capitals eye shed half of its workforce and a lot of its production facilities.

In this way subcontracting has become increasingly important for the defence contractors, as they outsource. This has also led to more non-traditional companies being involved in work for defence companies. It is also clear that the supply chains have extended internationally. This is nowhere clearer than in British Aerospace's moves into South Africa (Batchelor and Dunne, 1999). There have also been numerous cross border equity swaps and purchases, the development of joint ventures, licensed production, technology transfer, which are clearly a strategy of internationalisation by the companies. These developments by the companies were well ahead of the national governments' willingness to allow control over their national defence industrial base (DIB) to wane (Skoens and Weidacher, 1999).

This has led to industrial networks developing across the world, making the existence of a comprehensive production capability within any country other than the US an impossibility and even in the case of the US unlikely. In addition, finance capital became of growing importance for survival of companies and had a hand in determining the form of restructuring of the industry. The companies have not globalised, however, in the sense of becoming transnational and losing their home base.

They remain tied to their national bases, despite some British Aerospace claims.<sup>15</sup> They require the support of national governments as major customers and national orders are important in getting export orders. In addition, they get considerable support from the UK Government in export promotion.

There were clear changes in the nature of the companies as they became more like civil companies and took on the corporate governance structures of civil companies. They still retained close links with the Procurement Executive, however, so there were still some differences, but they recognised the importance of their customer's perception of them in a way they had not before (Evans and Price, 1999). One interesting change was recognition of the importance of their different stakeholding groups. They recognised the importance of reputation and that a change in their identity was important (Dunne and Parsa, 1999).<sup>16</sup> It was no longer only the Government that was important and the other stakeholder groups could assist the companies in lobbying for state support and orders.

There have also been changes in employment relations. Companies have shed large numbers of employees and as companies moved away from production they have retained an increasing proportion of engineers and scientists. There are also a range of subcontracting companies dependent on them, many of these not obviously producers of military goods, as increasing spin in of civil technologies.

With the cuts in procurement trade, exports orders became increasing important to the companies. At the same time the subcontracting and the creation of industrial networks has led to an increase in trade within companies and within their networks. This could lead to less visibility of the arms trade in future and make it difficult to control or monitor.

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<sup>15</sup> In 1997 a British Aerospace director at a UK aerospace trades union conference said "We want to be seen as British in Britain, German in Germany, Chinese in China and so on". This was an attempt to redefine BAe and there have been an extension of networks etc. Nevertheless, BAe remains a UK based company and still sees the UK MoD as its main customer, as Evans and Price (1999) affirms. The change in British Aerospace's name to BAE Systems, with the acquisition of Marconi Electronic Systems, does not really alter this. It does, however, reflect their status as a more diversified weapons producer, less focussed on aerospace.

<sup>16</sup> Not a lot of work has been done on this and an interesting project would be to look at the role of Directors and types of directors on the boards and how this has changed.

## 6. Conclusions

This paper has provided an overview of changes in arms procurement and state-industry relation in the UK in the post Cold War. It is clear that there has been considerable change, but also that there is also a considerable degree of continuity. During the Cold War the State policy towards the defence industry would seem to be of a 'pluralist corporatist' form, with state interventions to maintain defence industrial capacities and the industry having a dynamic role in influencing Government industrial and technology policy within the context of the Military Industrial Complex (MIC). There was a monopsonist state, which controlled the form and nature of the UK defence industry, with protectionist procurement policy. Preferred suppliers, and industrial policy were used to maintain demand in certain sectors of the economy.

In the mid 1980s the Cold War relationship was radically transformed through the application of the competition. There was a break from the traditional sponsorship of the defence industry by the State with the introduction of a commercial relationship, and a 'hands off' approach to defence industrial restructuring. The State focussed on financial considerations and military priorities, though it did support arms exports. The changing market environment, with the marked cuts in procurement worldwide, spurred on an internationalisation of the companies, reducing any possibility of maintaining domestic capability across all major systems. There was also overt political lobbying by the privately owned contractors, which sprung up to replace the direct state-contractor links.

During the 1990s the British State's initial response to the restructuring and internationalisation on the supply-side of the defence market was to continue moves towards open competition. However, competition led to contractors exiting the industry or being taken over and this began to threaten specific UK defence industrial capabilities. The State moved to a more supportive stance, with the industry beginning to exercise its political muscle. It was, however, unclear whether an informal defence industrial policy was being operated or whether the British State was simply responding to successful lobbying by industry. Certainly, the MoD continued to award defence equipment contracts to UK based industry and even to new 'preferred contractors' and was now faced with more domestic monopoly suppliers.

The relationship between the British State and the UK defence industry during the middle 1990s was characterised by both conflict and co-operation. On the one hand adversarial elements of the relationship were exhibited through the continued operation of the competition policy and the pursuit



of improved short-term 'value for money'. On the other hand more co-operative aspects of the relationship were apparent. In particular, the longer-term aspects of the state/industry relationship designed to preserve UK defence industrial capabilities and based on a 'partnership' between the state and the defence industry was emerging.

This does seem to bear a striking resemblance to the 'pluralist corporatist' relationship that existed during the Cold War and the state/industry relationship during the 1990s. It could be considered a reinvention or 'reconstruction' of the Military Industrial Complex (MIC) in a more informal, international, and a less visible form. The major defence contractors are no longer the workshop of the MoD, but more commercially based firms, with large numbers of contractors, that use lobbying to influence government. They do this using their subcontractors and trade unions, local government and development corporations, particularly in areas where they are important to the local economies. Companies need local sales as they provide a solid base and to help them win export markets. They are more international and so can use the threat of losing jobs in the UK as well as being able to influence domestic procurement through their links abroad, such as through the EU. Companies are also involved in determining the threat and the response to it with the changes in procurement, particularly with the introduction of 'smart procurement', which gives industry a greater role in the management of specific projects. In addition, the increasing use of civil technology in weapons system, the development of dual use technologies, and the increase in intra-company trade has made trade less visible. Despite the companies remaining dependent upon their national governments, there could be problems of control of arms transfers internationally.

There have certainly marked changes in state-defence industry relations in the post Cold War world as well as in the industry itself and we are only now starting to understand them. It would appear that the defence sector has considerable resilience and that many of the changes that have taken place have recreated its favourable position within the UK. At the core of the state/industry relationship is a mutual dependence, which ensured that there were limits to the extent to which the neo-liberal approach was applied to UK defence procurement and prompted a revival of the 'pluralist corporatist' approach, albeit adapted to the new international market structure. The new relationship is characterised by monopoly and oligopoly suppliers, as opposed to a national monopoly customer as characterised the traditional 'pluralist corporatist' relationship. Nevertheless the MoD retains the power of being a monopoly purchaser. This is because the supply-side of the international market structure is composed of nationally or regionally based companies. Moreover, domestic procurement and MoD export promotion activities are crucial to the success of industry in export markets.

Consequently, the balance of power in the state/defence industry relationship during the late 1990s was remarkably similar to the situation as it existed during the late 1970s. There is no doubt that the last two decades have seen many changes in the arms industry and arms procurement, but what is clear is that there is considerable continuity.

**Table 1****Defence Expenditure as a Share of GDP (1980 – 1994)**

Share of GDP

|             | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Germany     | 3.3  | 3.4  | 3.4  | 3.4  | 3.3  | 3.2  | 3.1  | 3.1  | 2.9  | 2.8  | 2.8  | 2.3  | 2.1  | 2    | 1.8  | 1.   |
| France      | 4    | 4.1  | 4.1  | 4.1  | 4    | 4    | 3.9  | 4    | 3.8  | 3.7  | 3.6  | 3.6  | 3.4  | 3.4  | 3.3  | 3.   |
| Italy       | 2.1  | 2.1  | 2.3  | 2.3  | 2.3  | 2.3  | 2.2  | 2.4  | 2.5  | 2.4  | 2.1  | 2.1  | 2.1  | 2.1  | 2    | 1.   |
| Netherlands | 3.1  | 3.2  | 3.2  | 3.2  | 3.2  | 3.1  | 3.1  | 3    | 2.9  | 2.8  | 2.6  | 2.5  | 2.5  | 2.3  | 2.1  | 2    |
| Belgium     | 3.3  | 3.4  | 3.3  | 3.2  | 3.1  | 3    | 3    | 2.9  | 2.7  | 2.5  | 2.4  | 2.3  | 1.8  | 1.7  | 1.7  | 1.   |
| UK          | 4.7  | 4.7  | 5.1  | 5.1  | 5.3  | 5.1  | 4.9  | 4.6  | 4.3  | 4.1  | 3.9  | 4.2  | 3.8  | 3.6  | 3.4  | 3    |
| Denmark     | 2.4  | 2.5  | 2.5  | 2.5  | 2.3  | 2.2  | 2    | 2.1  | 2.2  | 2.1  | 2.1  | 2    | 1.9  | 1.9  | 1.8  | 1.   |
| Spain       | 3.1  | 3.2  | 3.2  | 2.4  | 2.4  | 2.4  | 2.2  | 2.4  | 2.1  | 2    | 1.8  | 1.7  | 1.6  | 1.7  | 1.5  | 1.   |
| Greece      | 6.7  | 7    | 6.8  | 6.3  | 7.1  | 7    | 6.2  | 6.3  | 6.2  | 4.6  | 4.7  | 4.3  | 4.5  | 4.4  | 4.4  | 4.   |
| Portugal    | 3.5  | 3.5  | 3.5  | 3.3  | 3.3  | 3.1  | 3.2  | 3.1  | 3.2  | 2.8  | 2.8  | 2.8  | 2.8  | 2.6  | 2.5  | 2.   |
| US          | 5.4  | 5.7  | 6.3  | 6.5  | 6.4  | 6.6  | 6.7  | 6.3  | 6.1  | 5.6  | 5.3  | 4.7  | 4.9  | 4.5  | 4.2  | 3.   |
| Canada      | 1.8  | 1.8  | 2    | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2    | 2    | 1.9  | 1.9  | 1.9  | 1.7  | 1.   |
| Japan       | 0.9  | 0.9  | 0.9  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 0.9  | 1    | 1    | 1    | 1    |
| Australia   | 2.5  | 2.6  | 2.7  | 2.7  | 2.7  | 2.7  | 2.7  | 2.7  | 2.5  | 2.3  | 2.4  | 2.6  | 2.5  | 2.5  | 2.4  | 2.   |
| Norway      | 2.9  | 2.9  | 3    | 3.1  | 2.8  | 3.1  | 3.1  | 3.3  | 3.2  | 3    | 2.9  | 2.8  | 3    | 2.7  | 2.8  | 2.   |
| New Zealand |      |      |      |      |      |      | 2.1  | 2.1  | 1.8  | 1.8  | 1.9  | 1.8  | 1.7  | 1.5  | 1.3  | 1.   |
| Sweden      | 3    | 3    | 2.9  | 2.8  | 2.7  | 2.6  | 2.6  | 2.5  | 2.4  | 2.3  | 2.3  | 2.4  | 2.5  | 2.5  | 2.4  | 2.   |
| Finland     | 1.9  | 1.9  | 2.1  | 2.1  | 2    | 1.9  | 2    | 1.9  | 1.9  | 1.4  | 1.4  | 1.8  | 2    | 1.9  | 1.8  | 1.   |
| Switzerland | 1.9  | 1.8  | 1.9  | 1.9  | 1.9  | 2    | 1.8  | 1.7  | 1.7  | 1.9  | 1.9  | 1.8  | 1.8  | 1.6  | 1.6  | 1.   |
| Austria     | 1.2  | 1.2  | 1.2  | 1.3  | 1.2  | 1.2  | 1.3  | 1.2  | 1.1  | 1.1  | 1    | 0.9  | 1    | 1    | 0.9  | 0.   |
| Turkey      | 4.3  | 4.9  | 5.2  | 4.8  | 4.4  | 4.5  | 4.8  | 3.3  | 3    | 3.3  | 3.5  | 3.7  | 3.7  | 3.8  | 3.9  | 3.   |

**Table 2**  
**Total UK Defence Expenditure and Expenditure on Equipment (1983/84 - 1998/99)**

| Year                  | 1983/84<br>£bn | 1984/85<br>£bn | 1986/87<br>£bn | 1988/89<br>£bn | 1991/92<br>£bn |
|-----------------------|----------------|----------------|----------------|----------------|----------------|
| Defence Exp.          | 15.487         | 17.122         | 18.163         | 19.072         | 24.562         |
| Real<br>Defence Exp.  | 26.589         | 27.990         | 27.325         | 25.533         | 26.783         |
| Exp. on<br>Eqmt.      | 6.939          | 7.838          | 7.885          | 8.038          | 9.569          |
| Real Exp.<br>On Eqmt. | 13.032         | 12.813         | 11.862         | 10.761         | 10.435         |

| Year                  | 1993/94<br>£bn | 1995/96<br>£bn | 1996/97<br>£bn | 1997/98<br>£bn | 1998/99<br>£bn |
|-----------------------|----------------|----------------|----------------|----------------|----------------|
| Defence Exp.          | 23.424         | 21.517         | 21.425         | 21.923         | 22.624         |
| Real<br>Defence Exp.  | 23.854         | 21.133         | 20.293         | 20.258         | 20.446         |
| Exp. on<br>Eqmt.      | 8.782          | 8.583          | 8.106          | N/A            | N/A            |
| Real Exp.<br>On Eqmt. | 8.943          | 8.353          | 7.677          | N/A            | N/A            |

Sources: *UK Defence Statistics 1994-97*; *DASA historical database*; *Public Expenditure Statistical Analysis 1996-97*.

Notes:

1/ Figures for 1995/96 to 1998/99 are estimates.

2/ Real expenditure figures are calculated at 1994/95 prices with HM Treasury GDP deflators published in April 1996.

3/ Figures for expenditure on equipment have been adjusted to compensate for alterations in the criteria used by the MoD to calculate the figures quoted in UK Defence Statistics.

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## Appendix 1

The project approval process of the MoD remained essentially unchanged from 1981 through to 1998 and was previously detailed in the literature (Small et. al., 1985, pp. 12-15; Cooper, 1997, pp. 12-13). Based on the Downey Cycle, the aim was to introduce effective scrutiny in order to control costs and prevent delays. The Downey Cycle may be summarised as follows:

- *Staff Target*: The Staff Target sets the operational requirement down on paper in the form of a broad description of the role that the equipment is meant to fulfil, the level of performance required and likely problems, objectives and constraints. This is normally done in consultation with DERA and industry regarding how existing technology could be applied to meet the identified equipment need. Until 1998, this stage was followed by reference of the project to the Equipment Approvals Committee (EAC) and, if sufficiently large, reference to Ministers for approval to proceed to the next stage in the procurement process.
- *Feasibility Study*: The Feasibility Study assesses the feasibility of meeting the Staff Target. Factors such as technology, cost and time are considered as well as a range of solutions to the Staff Target. Specific identification is given to those available within current levels of technology and includes, on occasions, the involvement of DERA and/or industry.
- *Staff Requirement*: This is a detailed statement that describes the purpose of the equipment and its required performance. At this phase specific detail is provided as to the function of the proposed equipment and its expected performance. Following the Staff Requirement phase the project was again, until 1998, referred to the EAC and to Ministers.
- ◆ *Project Definition*: The Project Definition (PD) phase is a thorough study of any major technical risks associated with meeting the Staff Requirement. In addition industry is asked to produce detailed estimates of the likely cost of and timescale for development and production. This may cause considerable work and significant cost for industry if the MoD does not completely fund the PD. In particularly technically complex projects (e.g. the Bowman battlefield communications system) the PD phase may be split into two stages. Following this phase the MoD will assess the different tenders submitted by industry and sign a contract with the successful bidder. There could be separate contracts for both the development and production stages or a single contract to cover both stages. Major projects were again, until 1998, subject to scrutiny and required the approval of the EAC and Ministers.
- *Full Development*: At this stage the design of the equipment is developed to a stage where production can start and this may include the building of prototypes. If it is an off-the-shelf procurement then it will not be necessary to enter the Full Development stage. However, foreign equipment may require significant alteration to meet specific UK military requirements.
- *Production*: Production is the final stage in the process and can be split into two or more tranches. The first tranche may be approved at the same time as Full Development with subsequent tranches approved at later dates. Prior to production of the second and subsequent tranches Ministerial approval was again, until 1998, sought for major projects.

- *In service support and disposal:* In 1993, the MoD included in its description of the procurement process the provision of in-service support to equipment once deployed and the disposal of equipment at the end of its Service life (Ministry of Defence, 1993, p. 23, paras 4.14-4.14).<sup>17</sup>

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<sup>17</sup> Major mid-life updates of equipment are treated as separate projects (Ministry of Defence, 1993, p. 21, para. 4.1).