

Insights

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The purpose of this November 2011 newsletter is to bring you new perspectives on key subjects to stimulate thoughts and ideas. In each edition (which are published bi-monthly), we look at an aspect of business we hope will be of interest to you as an industry leader.

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Ideas for the Future of UK Defence Procurement



At the end of the military engagement in Libya, Defence is both topical and controversial. Strong criticisms have been levelled in many directions, with assertions that the military have been poorly served by Defence Procurement. In this summary from a report - which readers may well agree is non-partisan - prepared for the Labour Party, Tony Roulstone argues for structural changes to the way in which procurement is undertaken, in order to significantly improve the results of the process.

What's Happening at the Moment in Defence Procurement?

The record of overspend and delay in defence procurement is well known because of the adverse reports of the National Audit Office in each of the last ten or more years. We hear of Eurofighter cost escalation, Nimrod delays and cancellation and the huge cost of ships and missile systems. Also, there are complaints in the press about our troops fighting in Iraq or Afghanistan without the proper equipment.

There is no doubt that defence procurement, particularly of complex weapons systems is an extremely difficult activity. The UK spends about £16bn each year on new equipment and has over £60bn of projects active at any one time. Defence is working at the limits of technology developing and integrating the latest in science and engineering to make competitive weapons systems not just for today, but that will last and be effective over their operational lifetimes which are often 30 years or more.



In general, the quality of systems that are deployed is good and this enables the UK Defence Industry to export over £7bn of military equipment each year. However, the record of project timeliness and cost control is not good. Looking at the largest projects which make up over 90% of MoD's investment in equipment, projects are on average 40-50% late and more than 10% over budget.

The position on unit cost of equipment is much worse because of the tendency to reduce the number of units to meet the budget. For example the Eurofighter at £20.6bn was 41% over budget, but because the number of aircraft has been cut from 230 to 160 the unit cost has actually risen by 75%.

The Review

The review for the Labour Party looked at the record of Defence Procurement going back 25 years and consulted with senior figures and companies in the Defence sector as well as taking evidence in the US, Israel and France and seeking information from large programme management organisations and the oil and gas sector. The review 'Ideas for future UK Defence Procurement' includes 37 recommendations and was published on 22 September 2011. The full report can be accessed [here](#).

Defence Context

The context in which defence procurement sits and the problems faced by both the MoD and the defence industry are also prevalent in other countries' Ministries and industries. While the details may vary between different projects or programmes the essential lessons of successfully managing such programmes are common. As well as consulting widely with UK industry, we sought to identify best practice from elsewhere to set defence procurement practices in the UK on a path to being more efficient, effective, affordable and streamlined.

The defence industry plays a key role in the UK economy, in particular through exports. As part of a comprehensive strategy for growth, therefore, it is important the industry is supported and sustainable. It is important too because the challenges for defence are growing and the military requirements are high. Through effective procurement practices these can be met while also providing certainty for industry.

The problematic issues of defence procurement are systemic and widespread and have become so over decades. The motivation of the various actors in the acquisition process, planning and budgeting, project management, industry-MoD interactions and industrial strategy are all issues that must be confronted. There have been numerous attempts to tackle this, notably by the last Government who implemented the Defence Industrial Strategy, SMART procurement and commissioned the Bernard Gray report into defence acquisition. Despite this, necessary lasting change was not realised and serious issues continue to require action.

We have broken these problems down into the six key areas:

1. **Balancing the Defence Equipment and Support Budget;**
2. **Strategic 'Make – Buy' – reviewing the strategic choice of developing a unique military requirement or buying equipment which is largely, or completely, off-the-self;**
3. **Implementing Firmer and Fairer Contracts with Industry;**
4. **Procurement Process and Efficiency;**
5. **Developing and maintaining the skills and capacity to deliver on time and to budget with Professional Procurement and Programme Organisation;**
6. **Balancing the Defence Equipment & Support Budgets.**

Balancing the Budget

The changes proposed by Lord Levene and Bernard Gray (made in separate reports) to both MoD decision-making and financial planning are sound and need to be built on and implemented within a framework that provides a clear financial horizon for the MoD. We have proposed that the MoD moves to ten-year rolling budgets rather than the current four to five year spending review plans. This would limit the expectation that projects beyond the spending review horizon can be accommodated into future spending periods and enable MoD planners to consider the affordability of new projects. It would also give the defence industry more information against which it can plan its investment and developments.

In his report on Defence Acquisition in 2009, Bernard Gray agreed with this analysis and recommended that the MoD move to a ten-year rolling budget. The Labour Government at the time accepted this recommendation. In our view, this was the right approach and by failing to take the plan forward, the current Government may have missed a major opportunity to correct one of the primary barriers to running better defence procurement projects in the years ahead.

The budgeting system also needs to alter the motivations of the main actors in defence procurement to move from seeking to buy 'exquisite systems' at any cost to systems which provide value within financial constraints and a ten-year planning horizon. Too often, scope-creep has led to the MoD seeking systems which exceed the current identified need in the desire to meet future but undefined threats and ensure we make use of all available technology. In this case the exquisite can be the enemy of excellence and resultant delays to delivery due to timetable slippage can leave our troops without equipment on the frontline.

To achieve and sustain different behaviours, the main actors in defence procurement need to see the advantage of restraint and the danger of maximising spend. A new paradigm of 'Design to Cost' needs to be embraced at all levels.

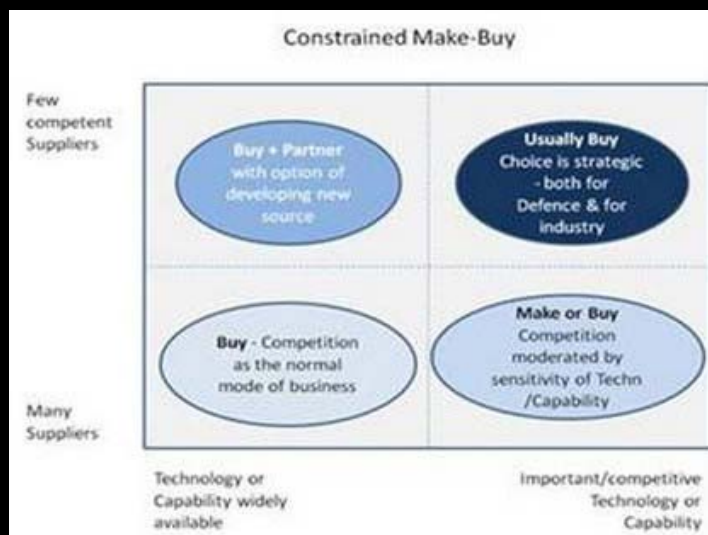
Strategic 'Make-Buy'

The MoD's defence procurement strategy should be expressed in a concrete 'Make-Buy' policy, consistent with competition, sovereign capability and research priorities.

The idea of categorising programmes in terms of 'Make' (equipment developed by the MoD) and 'Buy' (equipment that is purchased) relates to the different choices that the MoD and the defence industry have in a market where decisions are constrained and have long-term consequences. In the context of a reducing number of defence suppliers within the defence industry, combined with the aim to ensure value for money, decisions between whether to 'Make' or 'Buy' equipment have become increasingly important.



A 'Make-Buy' strategy must ultimately be the result of a series of decisions about what type of military capability will be required and what type of future procurement should be employed. Therefore, we have proposed that it should be linked to periodic defence spending reviews and a clearly stated position of what type of systems will be required over a ten-year period. A clear 'Make-Buy' strategy can provide coherence and stability to industry investment planning and R&T spend.



It is important that any 'Make-Buy' strategy supports sovereign capabilities and makes explicit the difference between 'absolute' sovereign capabilities, which are the small number entirely constructed and maintained in the UK, and 'deployment' sovereign capabilities, which are upgraded in the UK. It is proposed that there should be very few occasions where the UK does not develop and maintain the capacity to upgrade and modify its key military equipment and systems. Therefore, all 'off-the-shelf' purchases should be subject to a 'UK control' test that states that there must be UK-based upgrade capability in the UK capable of performing UORs on equipment.

Furthermore, in order to support exportability within the industry, an export business plan should be developed as part of the Main Gate approval.

Firmer and Fairer contracts with industry

When an effective market exists (at least three credible suppliers), competition is of course the best procurement policy. However, the reality is that there is seldom a viable market for major and complex defence projects. In this report, we have sought to face up to this reality and incorporate it into the development of the strategic 'Make-Buy' policy.

It is clear that commercial conditions for contracts between the MoD and industry should always be firm and ensure value for money. Where there is no effective competition, the contracting policy should aim to set tough cost benchmarks, make actual costs visible and provide significant incentives and penalties to ensure performance. The key to achieving these aims is for the MoD to: challenge suppliers and construct 'should-cost' models; use 'fixed-price' contracts as the norm; and employ 'open book' contracts for additional requirements once a programme has started.

In our view, the way contracts are managed can be greatly improved if defence companies are given more responsibility

and incentivised to improve. In this context, defence companies should accept higher levels of risk in exchange for the opportunity to generate more profit.

Procurement Process and Efficiency

The procurement of large, complex, often bespoke systems over many years has been subject to significant delay, cost increases and expansion of scope. The long programme timescales make the problem of financial planning much worse. Five long programmes are much less likely to meet an aggregate plan than ten programmes of half the length. Shorter less complex projects and stronger project management discipline are central to controlling these issues.

Defence procurement projects have clearly become too long and should be designed with shorter durations and incremental capability upgrades. Commercial projects have benefited from the widespread adoption of 'Lean Project Delivery' and such process change is essential to achieving the more rapid project delivery needed in defence procurement. If properly organised, timescale activities and overall cost could be significantly collapsed.



Procurement of equipment for Urgent Operational Requirements (UORs) in Iraq and Afghanistan has shown that effective equipment can be acquired much more quickly than 'business as usual'. The equipment that is currently procured through UORs is often used and then discarded as the process does not take the equipment's lifecycle into account. We have analysed the UOR model and propose that it should be expanded so that the process can be employed more widely and become a path to a more complete solution. A new 'UOR plus' process is required. This new process would still procure urgently needed equipment to the front-line, but it would also take into account support and logistics planning and the equipment's long-term integration into the Armed Forces.

Our main recommendation is to ensure stronger project management discipline within the MoD, giving project and programme managers the ability to control change and are held accountable. Equally, however, it is important that the responsibility industry hold is translated into obligations and it is proposed that provision is introduced to act as a back-stop in the UK, restraining or cancelling projects that exceed either their schedule or budget by a defined amount.

Professional Procurement & Programme Organisation

The key to better performance is greater professional project and programme management, faster decision-making, fuller accountability for outcomes with the single-minded pursuit of the agreed objectives and longer-term integration of military expertise. These required improvements can be taken forward and institutionalised by reforming the structure and culture of Defence Equipment & Support (DE&S) organisation.

It is recommended that DE&S should become an executive Non- Departmental Public Body (NDPB). Because of the need for DE&S to demonstrate accountability to Parliament for the expenditure of large amounts of Government money this model is preferred to a PPP or GoCo, as considered in the Bernard Gray report.

It is important to also tackle the long timescale of military procurement in comparison to the normal short period of duty for military personnel in DE&S roles, the ability of military personnel to gain adequate and appropriate training, the potential for divided loyalties, and retaining civilian staff for complex programme management roles.

We propose a number of changes, including the establishment of a new Weapon Engineering Service into which military staff would be encouraged to transfer after they have served in their own Service, probably before the age of 40. Furthermore, the reporting structure of DE&S needs to be altered to provide Project Teams with greater authority, project and procurement managers must be better trained, more capable and more professional and there needs to be much better development and retention of estimating and costing skills.

Key Recommendations

- 10 year defence financial horizon
- DE&S as an NDPB
- Weapons Engineering Service
- 20% over-run triggers project cancellation
- UOR+ lifecycle
- 'UK control' of sovereign capabilities to deploy
- 1 month for key decisions
- 'Strategic' Make-Buy'



Tony Roulstone was a member of the review of UK Defence Procurement for the Labour Party. He is a longstanding member of acumen7. He had a 20 year career at Rolls-Royce plc in nuclear and aerospace and is now teaching a Nuclear Energy masters course at the University of Cambridge.

NEXT EDITION: What Really Needs Fixing in the NHS

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