National Audit Office

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL

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Ministry of Defence

The Major Projects Report 2010

Summary

1 The Major Projects Report 2010 details the cost, time and performance of 30 military equipment projects from across the Ministry of Defence (the Department) for the year ending 31 March 2010[1]. Project Summary Sheets are compiled by the Department, and submitted by them to Parliament[2]. Copies of the Executive Project Summary Sheets are at Appendix Two of this report, and full Project Summary Sheets are available in Volume II[3] of this Report and on our website[4]. This Report focuses on the 15 biggest projects where the main investment decision has been made. Analysis of the key data, including the five projects in-service and ten in the Assessment Phase, are on our website[4].

Context for the Major Projects Report 2010

2 Our report into the **Strategic Financial Management of the Defence Budget**[5] concluded that the Department would find it easier to prioritise and find efficiencies if it had better visibility of its costs. The report noted that the Strategic Defence and Security Review will provide an opportunity for the Department to rebalance its future spending plans in the short term. Over the longer term however, the challenge for the Department will be to ensure that these plans remain in balance. Perpetuating the cycle of over-committed plans, short-term cuts and re-profiling of expenditure would mean the continuation of poor value for money for the taxpayer on the projects affected and a reduction in the funds available to support front-line activities. Also, **The Major Projects Report 2009**[6] drew attention to the gap (estimated as between £6 billion and £36 billion) between estimated funding and the cost of the Defence budget over the next ten years, and that the Department was taking decisions which were poor value for money. The report also indicated signs of improved project control.

3 This Report builds on the findings from these two reports – identifying areas where the overcommitted Defence budget is driving uneconomic central Departmental decisions, but also highlighting improvements in project-level performance.

1 Our methodology is described in Appendix One.
2 The National Audit Office validates the information contained within the Project Summary Sheets to ensure it is consistent with the project performance and accounting records of the Department. The information is not subject to a full audit however.
3 *The Major Projects Report 2010*, HC 489-II, Parliamentary Session 2010-2011.
4 www.nao.org.uk/major-projects-2010.
5 Strategic Financial Management of the Defence Budget, HC 290 Parliamentary Session 2010-11.
6 The Major Projects Report 2009, HC 85-I,II Parliamentary Session 2009-2010.

In-year performance

4 **Figure 1** summarises the key data from the 2010 report. **The most significant development has been an in-year cost increase of £3.3 billion**. This has arisen as a result of central Departmental decisions taken as a consequence of the mismatch between planned expenditure and the forecast Defence budget, referred to above. Specifically, the Department has committed an additional £2.7 billion to the Typhoon procurement programme including purchasing a further 16 Typhoon combat aircraft (paragraphs 11 and 2.2-2.4); and £650 million of the in-year cost increase on the Queen Elizabeth Class aircraft carrier that has resulted from the 2008 decision to delay the introduction into service of these vessels (paragraphs 12 and 2.6-2.8).

5 **Cost performance on the remaining 13 projects has been largely stable in-year.** The **rate of timescale slippage has also reduced significantly** since last year – falling to an average of fewer than two months additional delay per project – with eight projects reporting no additional slippage and A400M reporting schedule recovery. The Department also expects to meet 98 per cent of its Key Performance Measures – up from 96 per cent last year. This is an encouraging performance from the Department's project teams.

Figure 1
Headline figures for cost, time and performance for the largest 15 projects

	Major Projects Report 2010	Major Projects Report 2009
Total forecast cost	£67.1 billion	£60.2 billion
Number of projects	15 projects	15 projects
In-year cost increase	£3.3 billion	£1.2 billion
In-year slippage	27 months (average: two months)	93 months (average: seven months)
Key Performance Measures 'To be met'	189 of 193 across 15 projects are 'To be met', of which 27 across nine projects are 'At risk'	185 of 192 across 15 projects are 'To be met', of which 21 across six projects are 'At risk'
Defence Lines of Development 'To be met'	118, across 15 projects are 'To be met', of which 31 across 11 projects are 'At risk'. Three Lines of Development on one project were not assessed	124, across 15 projects are 'To be met', of which 34 across 13 projects are 'At risk'. Six Lines of Development on three projects were not assessed

NOTES

1 Joint Combat Aircraft has been excluded from the analysis of average in-year slippage as it has no In-Service Date defined.

2 These figures are not directly comparable due to differences in the project population. Thirteen of the fifteen post-main investment decision projects reported in the Major Projects Report 2009 continue to be reported in 2010. The Terrier and Support Vehicles' projects reported in the Major Projects Report 2009 have been replaced in the Major Projects Report 2010 post-main investment decision population by the Nimrod MRA4 and Tornado Capability Development projects. The Support Vehicles' project is now part of the Support Projects' population.

Source: National Audit Office analysis of Departmental data

6 The improved performance reflects, in part, a number of initiatives to better understand drivers to project performance. Notably, Defence Equipment and Support, the part of the Department charged with buying and supporting defence equipment, has recently started using a project monitoring system called Sentinel. This system uses a number of metrics to quantitatively assess the overall 'health' of selected projects. By providing early warning of emerging issues Sentinel is a potentially important step forward for the Department as it seeks to sustain the emerging trend of improving project performance.

7 On the **Nimrod MRA4** reconnaissance aircraft the Department took an informed decision to consider the balance of costs, risks and the operational impact of delaying service entry in order to focus resources on capabilities more relevant to current operations. Consequently, the Department decided to delay the Nimrod MRA4 by 22 months (which represents almost all of the total slippage reported this year across the 15 projects) and intends to undertake mitigating action to address some of the capability risks it presents.

Central Departmental decisions taken to try to balance the defence budget

8 The in-year cost increase of £3.3 billion is largely as a result of central Departmental decisions taken as a consequence of the mismatch between planned expenditure and the forecast Defence budget. This Report highlights three types of decision, outlined below, which the Department has taken to manage its budget. They have all had the effect of reducing cash flow requirements in the short term, making it easier for the Department to manage its budget in-year, but the effect has been to reduce long-term value for money overall across the Defence budget.

9 Not including realistic budgetary provision to reflect likely project outcomes. On the **Typhoon combat aircraft** project, the Department signed a Memorandum of Understanding with the Partner Nations to procure 232 aircraft in three tranches, subject to reaching an agreed financial ceiling[7]. The Department made budgetary provision to spend up to this ceiling. The costs of the first two tranches of aircraft were higher than expected, based on the estimate approved when the main investment decision was taken. The remaining budget was therefore insufficient to procure all 88 Tranche 3 aircraft.

10 In addition to the likely shortfall in the budget, the Department did not have a requirement for all 88 aircraft in the Tranche 3 buy. Under the Memorandum of Understanding, any Partner which unilaterally announced its intention to reduce the number of aircraft procured from Tranche 3 could be liable to make good the additional costs to other Partners up to the agreed financial ceiling. These costs were likely to be significant and would include related industrial implications. A further complication was speculation about the intentions of the other Partners, and the Department believed that some did not wish to take their full number of aircraft or to proceed with Tranche 3 at all. It was also the case that significant export orders, if achieved, could potentially alter these discussions. The Department was therefore faced with a difficult set of choices.

7 This agreement, signed by the four Partner Nations – Italy, Germany, Spain and the United Kingdom – in 1998, was also reflected in a joint contract placed with industry.

Despite the likelihood that it would incur significant costs whatever course of action it chose to pursue, in 2004 the Department decided not to provide budgetary provision for Tranche 3 and removed the remaining funding of £978 million.

11 Following intensive negotiations, the Department subsequently decided that best value for money in the circumstances would be to buy an additional 16 aircraft to take it up to the financial ceiling whilst meeting operational requirements. In July 2009 the Department approved an additional £2.7 billion for the Typhoon programme including the purchase of these aircraft, which it believes meets its outstanding financial obligations. This represented a new financial commitment for the Department, and was a significant contributor to the gap between estimated funding and the cost of the Defence budget over the next ten years which we reported in the Major Projects Report 2009 as between £6 billion and £36 billion.

12 **Slowing down of projects** whereby money is taken out of earlier years, often resulting in an overall increase in costs and a delay in delivering new defence capability. For example, in December 2008, the Department decided to slow down the production of the two **Queen Elizabeth Class aircraft carriers**. The Major Projects Report 2009 recorded that the Department expected the total net cost increase resulting from this decision to be £908 million, including cost of capital. However, the Department took the decision on the basis of initial estimates from industry. The Department now estimates that, partly as a result of this deferral, it will incur a further £650 million of additional expenditure, bringing the total project cost increase to £1.56 billion.

13 A further way the Department seeks to manage its budget is to **reduce the number of items to be procured**. Such decisions may mitigate cost increases on a specific project or compensate for wider cost increases elsewhere in the Defence budget. A reduction in numbers may also be a sensible response to changes in the security environment. This was the case on the **Support Vehicles** project where the number of units to be procured reduced by 1,303 vehicles because of changed operational requirements. Whatever the reason, defence projects tend to include significant development costs and the effect of reducing numbers is to share these non-recurring costs across a smaller number of production units. Reductions in numbers therefore tend to increase unit costs and be economically inefficient, especially if made after the main investment decision has been taken. The balance between development and production costs is an important factor when the Department decides whether a project offers sufficient value for it to invest in. By changing this ratio, reducing the number of items to be procured can adversely affect the perceived value of the project.

14 On the **Nimrod MRA4** reconnaissance aircraft the number of aircraft being procured has progressively reduced from 21 to nine and the unit cost is now three times the figure expected when the investment decision was made. In some cases, such as the **Lynx Wildcat** helicopter project, the Department has been able to mitigate the increase in unit costs by working with its industry partners to improve the efficiency of production. However, even in this case the scale of development costs meant that a decision to reduce helicopter numbers by 23 per cent[8] saved only 12 per cent of the project's costs.

8 *The Major Projects Report 2009*, HC 85-I,II Parliamentary Session 2009-2010, p4.

15 The Strategic Defence and Security Review should provide an opportunity for the Department to re-balance its policy intent and the available funding to provide a solid baseline against which to make future equipment acquisition decisions. The Department recently committed to report annually to Parliament on the affordability of the ten-year Equipment Plan[9]. We will provide a statement of assurance and associated commentary on the report. The Department is still finalising the form of its report but, provided the scope is sufficient, the improved transparency should provide a stimulus to more prudent financial management. In particular, both the Strategic Defence and Security Review and the reporting on affordability of the Equipment Plan should help deter practices which slow down projects, not recognise potential costs or reduce equipment numbers and have adverse value for money implications.

Conclusion on value for money

16 For the second successive year the cost performance on the majority of projects has been broadly stable. The rate of timescale slippage has reduced significantly since last year falling to an average of two months delay per project – with eight projects reporting no additional slippage and A400M accelerating its forecast In-Service Date by nine months. There are also examples where the Department has begun to take pragmatic decisions to re-prioritise resources to meet pressing operational needs and better monitor the drivers underlying good project performance.

17 The in-year cost increase of £3.3 billion is a result of central Departmental decisions taken as a consequence of the mismatch between planned expenditure and the forecast Defence budget. The reasons for the cost increase illustrate both the causes and effects of the Department's inability to manage its budget effectively and represent poor value for money for the taxpayer. On the Typhoon combat aircraft project the Department did not include realistic provision in its budgets to reflect likely project outcomes. The Department's additional £2.7 billion commitment to the Typhoon programme including the purchase of 16 Tranche 3A Typhoon aircraft has therefore had to be accommodated by making savings elsewhere in the Defence budget.

18 Savings may come from reducing the numbers of equipments being procured typically increasing the unit cost of the remaining equipments as development costs are spread over smaller numbers, or slowing projects down. Such decisions can result in an overall increase in costs and a delay in delivering new defence capability. This was the case with the Queen Elizabeth Class aircraft carrier, where the Department made the decision to delay the project in 2008 based on an initial estimate of the cost implications, resulting in a further reported cost increase this year of £650 million, bringing the total long-term cost increase attributed to the 2008 decision to £1.56 billion.

9 House of Commons Defence Committee, Defence Equipment 2010, HC 99, Parliamentary Session 2009-2010.