National Audit Office

Report
by the Comptroller
and Auditor General

Ministry of Defence

The Major Projects Report 2013

HC 817-I SESSION 2013-14 13 FEBRUARY 2014

Summary

1 Each year the Ministry of Defence (the Department) presents a major projects report to Parliament. The report has data on the cost, time and performance of the largest defence projects where the Department has taken the decision to invest, together with less detailed information on the largest projects where it has not yet taken the decision to invest. This report presents our analysis of the Department's data and the key findings arising from the data. The report is published alongside our examination of the Department's Equipment Plan, which examines the assumptions underpinning the Department's forecast of costs over the period 2013 to 2023. Together, these two reports aim to provide an informed basis for Parliament to examine how the Department is managing the procurement and support of the UK's defence capability.

2 The analysis in the report is based on an examination of a sample of 16 of the largest defence projects. This year we used the same sample of projects for this report as for the *Equipment Plan 2013 to 2023*. The sample comprises 11 projects for which the Department has decided to invest.

3 In November 2013, the Department concluded its negotiations with industry for the Queen Elizabeth Class aircraft carriers (Carriers). Although the *Major Projects Report 2013* covers the 2012-13 financial year and the negotiations for the Carriers were not concluded until November 2013 (outside the *Major Projects Report 2013* reporting period), the Department had allocated a budget for the additional cost in its *Equipment Plan 2013 to 2023*. As the negotiations have now been completed, the total forecast cost of the Carriers can now be disclosed and included in this report. Therefore, the report includes the cost variation resulting from the deal as if it was a 2012-13 in-year variation. All other project costs are reported as at 31 March 2013, and do not include any cost or time changes that may have occurred since that date.

Key findings

Costs

4 **In 2012-13, there was a net cost increase of £708 million across the 11 projects in our analysis.** The total planned cost of these projects was £49.5 billion, so this represents a cost growth of 1.4 per cent.

5 **The main driver for this was a £754 million cost increase on Carriers following the conclusion of the negotiations in November 2013.** The cost growth was caused by a number of factors including the delay to the schedule, and Industry's underestimation of the level of labour and materials required to build the ships, which resulted from a lack of design maturity.

6 **The impact of the Department's decision in 2012 to revert back to the Short Take-Off Vertical Landing (STOVL) variant of the Joint Strike Fighter added £120 million to the cost of the Carriers.** This was to cover the cost of re-instating the ramp and other STOVL-specific equipment and of restarting the work that was stopped as a result of the decisions taken in the 2010 Strategic Defence and Security Review. In addition, the Department now expects to write-off up to £55 million due to the reversion decision, lower than the estimate of £74 million that we reported in May 2013. This figure is being treated separately to the main Carrier cost and is not reflected in the cost growth figure of £754 million.[1]

7 **Excluding Carriers, there was a net cost decrease of £46 million across the ten remaining projects.** The costs of all but one of these have changed during 2012-13 with three projects showing increased costs and six reduced costs.

8 **The Department has changed its inflation assumptions on two of the projects, and this has accounted for more than £100 million of cost increases.** Changes to inflation assumptions during the year resulted in a £56 million cost increase for the Warrior Capability Sustainment Programme and a £45 million cost increase on the Future Strategic Tanker Aircraft. As reported in the *Equipment Plan 2013 to 2023*, changes in inflation assumptions may affect the overall affordability of the Equipment Plan, as small changes may have significant cost implications on long-term projects.

9 **Costs have been reduced by improving commercial arrangements.** The Department reduced its forecast costs by £26 million on the Core Production Capability project by renegotiating the profit rate with industry. It reduced costs by £19 million on the Future Strategic Tanker Aircraft project by finalising contract terms with industry. A reduction in forecast costs of £26 million was made on the Astute programme as a result of improved efficiency across the submarine sector.

10 **There continues to be a wide gap between forecast costs and approved costs largely due to historical performance.** The 73 projects included in our analyses since 2000 have a total forecast value of £106.9 billion, 9.0 per cent above their approved value. The eight projects in our analysis that have been approved since the 2010 Strategic Defence and Security Review, which have a combined approval value of £9.2 billion, are forecasting a slight decrease of £151 million (1.6 per cent). Carriers is the only significant cost increase to have occurred over the past two years.

11 **Larger projects are responsible for the big cost increases over the years.** The Department's 11 largest projects account for all of the £8.8 billion cost growth since 2000. By contrast, there are 47 projects in our analysis with an approval value of less than £1 billion, only two of which have increased in cost by more than £100 million. Together, the 47 projects have decreased in cost by £224 million.

1 Comptroller and Auditor General, *Ministry of Defence: Carrier Strike: The 2012 Reversion Decision*, Session 2013-14, HC 63, National Audit Office, 10 May 2013

12 **In recent years, the overall size and value of approved projects has decreased and the Department has broken up larger projects into smaller increments.**[2] The total value of approved increments and upgrades is nearly three times the amount approved for new projects since 2005. In the weapons and land equipment sectors, the Department moved away from approving many of its projects in a single block and is now more likely to approve projects in smaller increments. For example, the Complex Weapons Programme aims to procure a range of weapons through a 'pipeline of work' with industry partners. The Department originally intended to have one approval for the ten-year pipeline. However, it agreed with HM Treasury to seek approvals for specific weapons and smaller work packages within the pipeline.

Time

13 **We are unable to report on timings for two of the 11 projects we examined – Lightning II and Specialist Vehicles.** This is because the Department has not yet taken the final decision to fully manufacture and introduce them into service. Therefore, we are unable to report on the progress of these projects towards their entry into service dates and so they are not subject to the same level of Parliamentary scrutiny as the other projects which do have approved entry into service dates. This should be considered when interpreting the findings from the remaining nine projects in this report.

14 **There was a net delay this year on the remaining nine projects of 17 months. The total planned length of these projects was 1,409 months, so this represents a delay of 1.2 per cent.** This means that the timescales for these nine projects are now expected to be 21 per cent longer than the Department originally planned. Last year, the Department said it was taking a more realistic approach to planning project timescales. This year, three of the nine projects we examined reported delays during the year: a nine-month delay on Complex Weapons due to technical problems with Brimstone 2, one of the weapons in the Programme; a five-month delay to the Carriers programme which was agreed as part of the new deal; and a three-month delay on the Core Production Capability project because of renegotiations with industry over reduced profit rates. This compares favourably with last year, when eight of the 14 projects had delays, and six of these were for more than a year.

15 **The average delay for projects approved since 2000 is 23 months, which brings the increase in length to 35 per cent.** More than half of the 71 projects approved since 2000 have experienced delays of more than a year, and eight of more than five years. The eight projects covered in our analysis that have been approved since the 2010 Strategic Defence and Security Review have reported a total slippage of nine months (1.3 per cent) against an approved duration of 713 months.

2 The exception is the Future Strategic Tanker Aircraft project, with an approval value of £11.7 billion. This is a private finance initiative deal spanning 27 years and the value includes the whole-life costs rather than just the procurement cost, which is the case for all other projects in our analysis.

Performance

16 **This year the Department expects to achieve 98 per cent of its key performance measures.** These measures are set for each project at the time the Department decides to invest and indicate whether the equipment will provide the required military capability. The Department also expects to achieve all but one of the 103 defence 'lines of development' across the 11 projects. These lines of development relate to other elements of military capability that the Department needs to develop and complete to ensure that it can best use the equipment.

The Complex Weapons Programme

17 **We examined the Department's Complex Weapons Programme (the Programme), one of the projects in our sample, in more detail this year.** The Complex Weapons Programme is a new approach to defence acquisition that comprises a number of interrelated weapons projects. These projects are managed as a portfolio, which aims to be more effective and reduce costs.

18 **The Department established the pipeline as there was a need to sustain appropriate sovereign skills, to meet the UK's complex weapons requirements, to protect sovereignty and to deliver value for money.** There is a clear pipeline of work with a value of £7.7 billion up to 2022-23. This means that industry can be more certain of the Department's future plans in the sector, thus enabling industry partners to plan and sustain their skills and resources.

19 **The Department aims to achieve net financial benefits of £1.2 billion over ten years using this approach.** The Department expects to achieve these benefits by using common components and being flexible in its contracts with industry partners. Other benefits could be achieved through collaborative working with industry and by having contracts that allow requirements and costs to be traded across the weapons portfolio. In addition, the Department anticipates significant additional financial benefits from exports.

20 **These benefits could be lost if the value of the pipeline is reduced or requirements are changed.** The £1.2 billion in financial benefits has already been 'banked' by the Department and included in its spending assumptions as part of its Equipment Plan. If projects in the pipeline are delayed or cancelled, some of these benefits may be lost. The Department will then incur spending above budgeted levels or will need to reduce spending elsewhere.

21 **The pipeline's value has already decreased as the Department has deferred, cancelled or reduced the scope of some projects.** In 2010-11, the value of the pipeline was reduced from £650 million to £600 million per year and some early expenditure was deferred into the latter half of the ten-year period. Since 2008-09, expenditure has been below £600 million each year, which has already resulted in some of the expected benefits being lost, although this has been mitigated by identification of other new benefits.

22 **The requirements for some weapons in the pipeline have changed.** The Department approved the Programme six months before the 2010 *Strategic Defence and Security Review*, without considering the impact of the review. The Department was not prepared for the significant changes made to weapons and aircraft requirements, and this has meant that the work plan agreed with industry has changed.

23 **The Complex Weapons team was 18 per cent below its budgeted staffing levels in early 2013, and both the Department and industry recognise that this is a key risk to delivery of the Programme.** The Department has 27 business cases to complete over the next two years to develop projects in the Programme and to ensure that the pipeline of work materialises. Without sufficient skilled people to produce the required evidence for the business cases there could be delays in the work schedule. These delays could result in cost increases due to inflation, disruption to industry and intended benefits being lost.

Conclusion

24 With the exception of Carriers, where costs have increased by £754 million, the performance of the other major projects during 2012-13 has resulted in no overall significant cost increases and minimal delays in comparison to previous years. However, the cost increase on Carriers shows that there remains a legacy of large complex projects across the Department that continue to have a significant impact on the portfolio as a whole.

25 The Department is, through different ways of procurement, seeking to reduce the cost of some of its major projects in order to balance its budget. For example, it has introduced a portfolio approach to the procurement of its complex weapons, which is expected to bring financial benefits of £1.2 billion in the period 2010 to 2019. Cost increases, delays and any change to the scope and volume of the Programme could put these benefits at risk. As these have already been assumed in the Department's overall spending plans, this could have a significant destabilising effect on the Department's ability to balance its budget in the years to come.