



National Audit Office

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## **Report**

by the Comptroller  
and Auditor General

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## **Ministry of Defence**

# Major Projects Report 2015 and the Equipment Plan 2015 to 2025

## Key facts

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**£69bn**

cost of the Ministry of Defence's 10-year Equipment Procurement Plan

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**£84bn**

cost of the Department's 10-year Equipment Support Plan

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**£3.5bn**

amount by which the 10-year Equipment Plan is higher than last year (procurement and support)

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**£247 million** the decrease in the forecast cost of the approved projects within our review of major projects – a 0.4% decrease in current forecast costs

**£4.3 billion** Department's contingency budget to mitigate potential increases in the cost of the 10-year Equipment Plan

**£5 billion** the extent to which project teams may be underestimating the financial risks within project budgets, according to the Department's independent Cost Assurance and Analysis Service

**60 months** in-year time slippage of these projects, 52 months of which were attributable to one project to accommodate a new requirement – the net variance across other projects was 8 months

**12 projects** number of procurement projects in our sample of 17 that display good practice in forecasting cost

**£14.9 billion** amount the Department is planning to spend on equipment procurement and support in 2015-16, representing 46% of its core budget

**0.3%** underspend against the original equipment budget in 2014-15, representing a better matching of expenditure to budget than previous years

**5%** underspend against the final total programme of work for 2014-15, also an improvement on last year

**99%** expected delivery of Key User Requirements of the approved projects within our review of major projects

# Summary

## Scope of the report

**1** Since 2012, the Ministry of Defence (the Department) has published an annual Affordability Statement on the affordability of its 10-year plan to deliver and support the equipment that the Armed Forces require to meet their objectives.<sup>1</sup> We report on the robustness of the assumptions underlying the Statement.

**2** Each year the Department also presents to the Committee of Public Accounts a Major Projects Report, which provides data on the cost, time and performance of the largest defence projects.<sup>2</sup> We review the information underlying in-year variations to cost, time and performance.

**3** The Equipment Plan is the Department's forecast budget to cover the costs of procurement and support of military equipment for the next 10 years. In 2012, the Department adopted a new approach to generate greater stability in its procurement activity. This involved developing a budget for a 'core programme' of key equipment projects, with additional sums set aside for contingency and emerging requirements. The Equipment Plan is updated annually. For the period 2015 to 2025, the equipment budget is £166 billion, made up of procurement (£69 billion) and support (£84 billion) budgets, a central contingency reserve (£4.3 billion), and an unallocated budget (£9.5 billion) that the Department has not yet committed to specific programmes. The Plan is funded from the Department's overall budget, and makes up more than 40% of its planned spend.

**4** This report combines the Major Projects Report and the Equipment Plan to give a rounded view of the Department's progress and maintenance of its equipment portfolio. We have selected a sample of 17 projects as the basis for reporting on performance and to support our review of affordability.<sup>3</sup> For continuity, we have used the same sample as in 2014. Together these projects make up a significant proportion of the Department's equipment spend.

**5** Fiscal responsibility for the Equipment Plan is delegated to the three Front Line Commands of Air, Army and Navy, the Joint Forces Command and the Strategic Programmes Directorate within Head Office (collectively known as 'the Commands'). Responsibility for project delivery remains principally with the Defence Equipment and Support organisation with delivery of Information Systems and Services the responsibility of the Joint Forces Command.

<sup>1</sup> These objectives are set out in: HM Government, *A Strong Britain in an Age of Uncertainty: The National Security Strategy*, Cm 7953, October 2010.

<sup>2</sup> The project summary sheets the Department submits to Parliament are contained in Volume II of this report.

<sup>3</sup> We also looked at the assumptions underlying a small additional sample of support projects.

**6** We have not set out to offer a definitive view on the affordability of the Equipment Plan as it is, by its nature, based on assumptions about the future that will inevitably change. Rather, we review the assumptions that underpin the forecast costs and funding to assess whether they were reasonable and consistently applied when they were made. We explain our approach in Part One. We look at: the Department's assumptions underpinning the forecast costs of the Equipment Plan (Part Two); and the assumptions underpinning available future funding (Part Three). Parts Two and Three define whether the plan is affordable. In Part Four we review whether the disclosures in the Department's statement are sufficient for the reader to understand fully the sensitivities of the affordability position. Appendices One and Two contain full details of our audit procedures, and Figure 14 gives an overview of the projects included in our analysis. Summaries of the projects in our sample are included at Appendix Four. The full set of information for each project is set out in the project summary sheets prepared by project teams, which are included as Volume II of this report.

## **Key findings**

### The Department's ability to fund the Equipment Plan

**7** **The forecast cost of the Equipment Plan 2015 to 2025 is £0.7 billion higher than the forecast cost of the 2014 to 2024 Equipment Plan across the 9 years they have in common. Overall, the forecast cost of the Equipment Plan 2015 to 2025 is £3.5 billion higher, mainly due to the effect of bringing 2025 into the 10-year planning period.** The forecast cost of the plan for 2015 to 2025 is £166.4 billion compared with £162.9 billion for the period 2014 to 2024 (see **Figure 1**). Since 2012, the Department has emphasised the importance of the affordability of its core equipment programme. For the Department to have confidence that the Equipment Plan is affordable, the combined cost forecasts for its core programme of projects need to be contained within the sums made available by HM Treasury, allowing for the non-equipment commitments of the Department. The Department has held funding back for the period beyond 2021-22 to preserve flexibility ahead of the outcomes of the Spending Review and Strategic Defence and Security Review (paragraphs 2.2 and 2.3).

**8** **The Department was prudent in planning its Equipment Plan funding for 2015-16 on the basis of the previous year's assumptions about future funding of its core budget.** Government announcements about future funding of the defence budget have confirmed that Defence can continue to plan on growing the Equipment Plan budget by 1% above inflation year-on-year for the remainder of this Parliament (although this is not guaranteed for the full period of the Equipment Plan). The Department can choose to spend more of its core budget than that on equipment procurement and support (paragraphs 3.3, 3.4 and 3.16).

**Figure 1**  
The 10-year forecast cost profiles of the Equipment Plan 2014 and Equipment Plan 2015

This shows changes in the forecast plan between 2013 and 2015



**Note**

1 The Equipment Plan covers a forecast 10-year period and is produced annually. Therefore, successive plans share a 9-year period in common, with an additional year brought into the scope of the Equipment Plan each year.

Source: National Audit Office analysis of Departmental data

**9 Any judgement about whether funding levels will be adequate in the future depends upon the results of the government's Spending Review, due in November 2015, and Strategic Defence and Security Review.** Government announcements about future funding of the defence budget in July 2015 confirmed the realism of the Department's March 2015 assumptions about money available for the 2015 Equipment Plan until 2020-21. In the meantime, the Department has budgeted prudently for the years beyond 2020-21 to maintain financial flexibility ahead of the Spending Review (paragraphs 3.2 and 3.4 to 3.5).

**10 The Department's contingency may not be enough to mitigate the combined effects of underestimates in project team costs and equipment plan budgets.** The Department has a £4.3 billion contingency budget across the 10-year Plan to mitigate potential cost increases within the core Equipment Plan. This is £0.7 billion less than the current 'realistic' estimate of cost outturn of the Equipment Plan made by the Department's Cost Assurance and Analysis Service. If this estimate proves to be correct, the Department may need to draw on the £9.5 billion it has set aside to deliver wider defence capability, which is not currently included in the core programme (paragraphs 2.13 and 3.9 to 3.11).

**11 The Department's Affordability Statement should be clearer about uncertainties in the costs within the Equipment Plan.** The Statement does not explain the range of possible cost outcomes across projects, even though it is good practice to express forecasts in these terms in recognition of the uncertainties within forecasts. Nor does it quantify risks not included in cost forecasts (paragraph 4.5).

Confidence in performance of major procurement projects

**12 Our review of the forecast cost of 13 major projects where the Department has decided to buy equipment shows that in aggregate the cost and performance of these projects has remained stable during 2014-15.** The forecast cost of these projects has reduced by £247 million (0.4%). This was largely due to an accounting adjustment on the Typhoon fighter jet project. Forecast costs reduced on 5 other projects and increased in 3, notably the Astute submarine project. The Department forecasts the projects will achieve 99% of their intended capability (paragraphs 2.6, 2.7 and Appendix Three).

**13 With one notable exception, projects across our sample have reduced the overall level of time slippage compared to last year.** During 2014-15 there were in-year time variations totalling a net 60 months (compared with 14 months in 2013-14) for 5 out of 12 projects. Most of this was a net 52-month deferment of the final stage of the Core Production Capability project. This was done to accommodate the production of an additional reactor core for HMS Vanguard and to maintain the capability to supply a further core for HMS Victorious, if required. This was a new requirement that the project team could not have foreseen and which was outside their control. The remaining projects had a net variation of 8 months, compared with 14 months in 2013-14 (Appendix Three).

**14 The longstanding annual review of Major Projects does not align with the Department's more extensive internal performance reporting processes.** Over the coming months the Department and the National Audit Office (NAO) will work together to develop a more cost-effective approach to keeping Parliament informed about the progress of major defence projects, capitalising on expected improvements in data quality to reduce the resources required for data validation (paragraphs 1.11 and 1.12).

Confidence in the longer-term forecasts of performance in our sample

**15 Forecast costs for our sample of projects across the 10-year Equipment Plan period are largely stable.** Alongside our review of the aggregate cost changes from the previous year (paragraph 10), we also undertook a detailed review of the major cost lines for 17 of the largest procurement projects to see whether costs were stable at the project level. We found that the forecast costs for the period 2015 to 2025 increased by £0.7 billion (1.6%) compared with the forecast cost last year (paragraph 2.5).

**16 Projects in our sample have improved their cost forecasting and risk management practices.** Twelve of the 17 procurement projects had generated a range of potential costs in line with good practice, compared with 9 projects in 2014. Most teams' approach to – and understanding of – risk management is now reasonable. However, we still have concerns about how a core of procurement and support teams in our sample value risks and incorporate those risks into cost models. In 7 projects we found that teams were using inflation rates which were either out-of-date or not evidence-based (paragraphs 2.16 to 2.20).

Confidence in the longer-term forecasts of performance in the Department's portfolio

**17 There is evidence that the Department and its contractors are still underspending as they struggle to carry out planned activities on schedule, which could be an indicator of future slippage in delivering these projects.** The Department spent £14.47 billion in 2014-15. This was a £41 million underspend against its original equipment budget, compared with an overspend of £185 million in 2013-14. The Department again programmed additional work against its budget on the assumption that not all of the planned spend would occur in-year, amounting to around £700 million in 2014-15. Without this additional work the underspend on the programme would have been £732 million. The Cost Assurance and Analysis Service's annual detailed review into the causes of project underspending was not available before publication of our report this year. Previous reports have shown that re-scheduling of activities to reflect slower-than-expected progress was an important contributory factor. There is evidence to support the view that this is still the case for our sample of procurement projects, which had a net underspend of £295 million in 2014-15, compared with a slight overspend in 2013-14. A significant contributory factor was the movement of activity into future years, both planned and unplanned (paragraphs 2.9 to 2.12).

**18 How the Department manages a small number of very large procurement projects will be crucial in whether it maintains the affordability of the Equipment Plan.**

The Department's Cost Assurance and Analysis Service estimates that procurement costs could be underestimated by as much as £2 billion. Three-quarters of this amount is attributable to 4 projects, including the Successor and Astute submarines and Type 26 warship. The Department's Sentinel project monitoring system also gives high-risk ratings to some of these 4 projects (paragraphs 2.13 to 2.15 and Appendix Three).

**19 The Department faces a continuing challenge in reining in support costs.**

The independent cost estimates of the Department's Cost Assurance and Analysis Service now cover a greater proportion of the support budget. As a result, it estimates that the level of understatement of support costs within the Equipment Plan has risen from £2 billion (based on 28% coverage) to £2.8 billion in 2015 (covering the total support plan). As the Equipment Plan period rolls forward, it is encompassing the entry into service of major new equipment. As a result, the budget for support of equipment not yet in service has risen 23% in 2 years. Our validation work continues to show that cost forecasts are not as well developed for support projects (paragraphs 2.3, 2.4 and Figure 7).

## **Conclusion**

**20** The Equipment Plan looks more stable than last year and progress has been maintained. Analysis of our sample of major projects indicates that the Department has continued to maintain overall stability within the costs of the 10-year Equipment Plan. There was little sign of in-year cost growth or increase in forecast costs in the rest of the 10-year planning period. There are also indications that the Equipment Plan will remain affordable for the rest of the Parliament if this stability is maintained, based on the level of funding which seems likely to be made available.

**21** The Department will need to remain vigilant, however. Uncertainties about future cost increases of some very high-value projects that are still at the pre-contract stage, together with the Department's need to make room in its budget for the support costs of a range of new equipment currently being procured, show that the drivers of cost increases remain present. The large time slippage on one project in our sample, due to a low-probability, high-impact risk materialising this year, shows the importance of incorporating such risks into cost plans and forecasts across all projects.



## Recommendations

- a **The Department should improve the transparency of the Affordability Statement by giving more insight into how the forecast costs of projects within the Equipment Plan might vary.** There are inherent uncertainties around projects at varying levels of maturity. The Department's guidance on good practice in costing projects explains that a range of potential costs should be reported to reflect levels of uncertainty, and that high impact, low probability risks should be accounted for in plans. The Department should also apply this at the portfolio level.
- b **The Department needs to give urgent attention to closing systemic and project-specific capability gaps within project teams.** For example, a lack of capability in finance matters continues to give rise to large accounting corrections and adjustments. The success of the Defence Equipment and Support organisation's transformation programme relies on removing capability gaps of this sort.
- c **The Department should enforce compliance with mandated guidance and recognised good practice on project management and other issues by its project teams.** This is integral to the Defence Equipment and Support organisation's transformation programme.
- d **The Department should use the Affordability Statement to clarify its position on programming additional work in-year to ensure that it spends the equipment budget.** The Department continues to rely on the programming of additional work to compensate for likely underspends on core activities in the Equipment Plan. The Department should ask the Commands to explain how they will use their new responsibilities for in-year budget management to provide incentives for contractors to either deliver contracted levels of activity or develop more realistic delivery plans. The Department should develop a clear timetable for minimising or removing reliance on over-programming to spend its budget.
- e **The Department should work with the NAO to produce a more timely and efficient Parliamentary accountability process to report progress on major projects.** The format of the Major Projects Report, developed more than 30 years ago, does not align with the information produced by the Department's internal systems.