House of Commons

Committee of Public Accounts

The Defence Equipment Plan

Fifty-sixth Report of Session 2016–17

Report, together with formal minutes relating to the report

Ordered by the House of Commons to be printed 24 April 2017

HC 957
Published on 25 April 2017
by authority of the House of Commons

The Committee of Public Accounts

The Committee of Public Accounts is appointed by the House of Commons to examine "the accounts showing the appropriation of the sums granted by Parliament to meet the public expenditure, and of such other accounts laid before Parliament as the committee may think fit" (Standing Order No. 148).

Current membership

Meg Hillier MP (*Labour (Co-op), Hackney South and Shoreditch*) (Chair)

Mr Richard Bacon MP (*Conservative, South Norfolk*)

Philip Boswell MP (*Scottish National Party, Coatbridge, Chryston and Bellshill*)

Charlie Elphicke MP (*Conservative, Dover*)

Chris Evans MP (*Labour (Co-op), Islwyn*)

Caroline Flint MP (*Labour, Don Valley*)

Kevin Foster MP (*Conservative, Torbay*)

Simon Kirby MP (*Conservative, Brighton, Kemptown*)

Kwasi Kwarteng MP (*Conservative, Spelthorne*)

Nigel Mills MP (*Conservative, Amber Valley*)

Anne Marie Morris MP (*Conservative, Newton Abbot*)

Bridget Phillipson MP (*Labour, Houghton and Sunderland South*)

John Pugh MP (*Liberal Democrat, Southport*)

Karin Smyth MP (*Labour, Bristol South*)

Mrs Anne-Marie Trevelyan MP (*Conservative, Berwick-upon-Tweed*)

Powers

Powers of the Committee of Public Accounts are set out in House of Commons Standing Orders, principally in SO No. 148. These are available on the Internet via www.parliament.uk.

Publication

Committee reports are published on the Committee's website and in print by Order of the House.

Evidence relating to this report is published on the inquiry publications page of the Committee's website.

Committee staff

The current staff of the Committee are Dr Stephen McGinness (Clerk), Dr Mark Ewbank (Second Clerk), Hannah Wentworth (Chair Support), Dominic Stockbridge (Senior Committee Assistant), Sue Alexander and Ruby Radley (Committee Assistants), and Tim Bowden (Media Officer).

Contacts

All correspondence should be addressed to the Clerk of the Committee of Public Accounts, House of Commons, London SW1A 0AA. The telephone number for general enquiries is 020 7219 4099; the Committee's email address is pubaccom@parliament.uk.

Contents

Summary

We are very concerned that the Ministry of Defence's (the Department's) Equipment Plan is at greater risk of becoming unaffordable than at any time since its inception in 2012. Maintaining affordability is now heavily reliant on a highly ambitious, but still under-developed, programme of efficiency savings from within the Plan and the wider Defence budget. The Plan continues to be vulnerable to cost growth because of uncertainties around the costs of new projects, continued problems with cost control on some long-standing projects, and the significant fall in the value of the pound against the US dollar. The Department has used more than £10 billion previously set aside to meet new requirements to help fund its existing core programme, leaving it little flexibility to deal with changing military priorities. Over the past five years the Department has transformed its financial management of large projects. We are worried that the increase in commitments without a commensurate increase in funding puts this stability and the ability of the Department to deliver what our forces need to operate effectively at real risk.

Introduction

Following the identification of a long-term imbalance between available funding and forecast expenditure in 2009, the Ministry of Defence (the Department) had to re-scope, cancel and delay a number of equipment procurements to balance its budget. In response to this, and to generate greater stability in procurement activity, in 2012 the Department took the important step of producing an annually updated 10-year Equipment Plan (the Plan) which forecasts spend on military equipment and related support. Annually, the Department publishes a Statement on the affordability of the Plan, and at the request of the Secretary of State, the Comptroller and Auditor General reports on the robustness of the assumptions underpinning the Plan. After a period of relative stability, the 2015 Strategic Defence and Security Review (the Review) added over £24 billion of new commitments to the Plan which is forecasting expenditure of £178 billion from 2016 to 2026. Additional external funding supports only just over £6 billion of these new commitments. The rest is to be met by efficiency savings from existing projects in the plan and other areas of the wider defence budget. The Plan accounts for over 40% of the entire Defence budget.

Conclusions and recommendations

1. **The Ministry of Defence committed itself to new equipment purchases arising from the 2015 Strategic Defence and Security Review before it had established how these would be paid for.** The 2016 Equipment Plan (the Plan) contains £24.4 billion of additional commitments. Only £6.4 billion of this increase is to be met by additional funding from outside the Ministry of Defence (the Department). To meet a significant element of these new commitments, the Department must generate £5.8 billion of new savings from projects within the Plan, in addition to further savings of £1.5 billion from the wider Defence budget, which is itself already under increasing cost pressure. While over a year has passed since the publication of the 2015 Strategic Defence and Security Review (the Review), the Department has not yet identified how all the required savings will be achieved calling into question the affordability of the Plan and whether all current commitments can be met. This risk is exacerbated by the fact that the Department has yet to realise £2.5 billion of savings brought forward from last year's Plan.

   Recommendation: ***When the Department presents the next Equipment Plan to Parliament, it should report on progress being made against its 2015 and 2016 plan targets, and detail the impact on the Plan of any shortfall in available funding resulting from a failure to meet these targets, including any resulting time slippages or cost increases on individual projects.***

2. **Uncertainties and over-optimism in project costs mean that the cost of the Plan might be significantly understated.** The Department's current costing practice, which does not adequately take account of the inherent uncertainties in the costs of projects at an early stage of development, can lead to significant understatement in the likely cost, at a time when the Review has resulted in a higher proportion of large, early-stage projects in the Plan. The Department's Cost Assurance and Analysis Service reported that the costs in the 2016 Plan were understated by £4.8 billion, without taking into account cost uncertainty inherent in the new commitments introduced by the Review.

   Recommendation: ***The Department must ensure that costings for the new projects introduced into the Plan by the Review are put on a firm footing as quickly as possible, with appropriate input from the Cost Assurance and Analysis Service (CASS), and incorporate any increase in cost into next year's Plan.***

3. **The Department is experiencing continuing problems in delivering the Astute submarine programme within budget.** There is a risk that these problems will be repeated with the Dreadnought submarine programme given that the estimated costs for this programme are already increasing. For a number of years the costs of the Astute and Dreadnought submarine programmes (collectively known as the 'Nuclear Enterprise') have continued to rise despite the general stability of Plan cost estimates. CAAS estimates that there could be further significant cost increases. To address problems of cost growth and poor performance by contractors, the Department is putting its faith in a number of structural changes, notably the appointment of a Director General Nuclear, and the creation of a separate Submarine Delivery Authority, with its own chief executive, to oversee the management of nuclear procurement. Under this umbrella, the Department plans to introduce

more rigorous contracting approaches based around incentives and penalties for future submarine procurement, together with the management of the Dreadnought programme through an alliance with industrial partners, as used with the Queen Elizabeth Carriers.

Recommendation: ***In addition to its ongoing commitment to provide Parliament with an annual update on the future nuclear deterrent, the Department should report on the progress made to finalise the structure for the management of nuclear programmes, and report how the new governance model is addressing the failures of the past.***

4. **Over a period of years the Department has failed to agree a workable way forward with the prime contractor on the procurement of the Type 26 warship, which has compromised maritime capability and placed further upward pressure on costs.** The Type 26 Global Combat Ship is the highest-value non-nuclear procurement in the Plan. The Review significantly changed the requirement for this equipment, reducing the number of Type 26 ships from 13 to eight, with the shortfall in ship numbers to be filled by the creation of a new class of general purpose frigate. The Department told us that the contractor will belatedly 'cut steel' on the project by the end of 2017, and the contract, when in place, will hold the contractor to challenging milestones linked to penalties and incentives. It also appears that the Department is considering a radical new approach to ensure competition in the procurement of the new class of general purpose frigate. However, any departure from traditional procurement practices may have major implications for the Department's relationship with key UK defence contractors and the Government's wider industrial strategy. The challenges in maintaining the balance between ensuring value for money and the wider industrial strategy are also evident in the decision to purchase equipment, such as the Poseidon Maritime Patrol Aircraft, from abroad.

Recommendation: ***As part of the development of the Government's industrial strategy, the Department should clarify how it will balance the potentially conflicting priorities of maintaining the UK industrial base with maximising value for money and long-term skills retention for the services and industry from major equipment procurement.***

5. **The recent fall in the value of the pound against the US dollar may lead to significant cost increases for equipment purchased in US dollars.** The pound is currently trading at more than 30 cents below the exchange rate used by the Department in its cost estimates for the 2016 Plan (US$1.55 to the pound). The Plan contains expenditure of 28.8 billion in US dollars over the next 10 years. While the Department has partly mitigated the risk of currency fluctuations by entering into forward purchase contracts, these will expire in the 2018–19 financial year. Consequently, if current exchange rates persist, the cost of the Plan will increase by approximately £5 billion pounds. The Department and the Treasury have not yet decided whether such additional costs would be met by the Treasury, or whether some projects would have to be curtailed to accommodate the increased costs.

Recommendation: ***Before the Department presents the next Equipment Plan to Parliament it should establish whether the Treasury will fill the funding gap created by exchange rate fluctuations, or whether the Department will have to***

find the money from its own budget. These discussions should also focus on the current forward purchase policy, and whether a three year window gives sufficient protection given the long-term nature of the Department's projects.

6. **There is no longer any scope in the Plan to cope with new equipment requirements resulting from emerging threats.** In previous years the Department maintained 'headroom' within the Plan to fund new projects should they be required to meet emerging threats or new requirements. However, in the 2016 Plan, all of the Department's £10.7 billion headroom has been used to contribute to the funding of the new commitments arising from the Review. The Department maintains that headroom was always intended for situations such as the new commitments in the Review, but accepts that there is now less scope for emerging requirements. We are very concerned that the Department can no longer accommodate new requirements to meet a change in the nature of threats without disrupting the existing equipment programme, meaning that any new capabilities that need to be included in the Plan in future years can only be funded at the expense of existing projects.

   Recommendation: ***Future Equipment Plans presented to Parliament should show the impact of accommodating any new requirements on existing plans. As well as indicating what capability has been changed, the Department should show the incremental costs associated with any decisions to re-scope, cancel or delay existing projects, even where these occur beyond the current Plan.***

1 The Department's approach to funding the Equipment Plan

1. On the basis of a report by the Comptroller and Auditor General, we took evidence from the Ministry of Defence (the Department) on the Department's Equipment Plan 2016 to 2026 (the Plan). The Department introduced the Equipment Plan in 2012 to generate greater stability in its equipment procurement activity. This was in response to a long-term imbalance that had arisen between the anticipated Defence budget and forecast expenditure, culminating in the 2010 Strategic Defence and Security Review, which re-scoped, cancelled or delayed a number of equipment procurements. The Plan covers forecast spend for ten years and is updated annually. For the period 2016 to 2026, the budget is £178 billion, made up of equipment (£82 billion) and support (£91 billion) budgets, and a central contingency reserve (£5 billion). The Plan is funded from the Department's overall budget, and makes up more than 40% of its planned spend.[1]

2. In November 2015 the Government published its latest Strategic Defence and Security Review (the Review). The Review set out an ambitious programme of additional equipment commitments (some of which addressed the consequences of the 2010 Review) which have been incorporated into the 2016 Plan. The Department has costed these additional commitments at £24.4 billion. Only £6.4 billion of this increase is to be met by additional funding from outside the Department. The rest has to come from within the Department's own resources.[2]

3. Some is to be funded by identifying £5.8 billion of cost reductions from projects which are already part of the Plan. The Department told us that it was still working to identify from which projects the £5.8 billion would come, some 16 months after the Review which made them necessary. The Department emphasised on several occasions how challenging a task this would be. If the savings cannot be achieved the only alternative would be to stop doing some things or ask the Treasury for more money. The Chief Executive of Defence Equipment & Support told us that he was confident that his share of the savings, £3.3 billion, would be met, partly by his organisation being able to increase its skills base while reducing the pay bill by £70 million per year.[3]

4. Savings from the operation of the Single Source Contracting Regulations, designed to improve the value for money secured from non-competitive contracts, are also due to deliver savings of £1.7 billion over the next 10 years. The Department is committed to all contracts that qualify for the regime being brought within its remit by 2019–20, and was confident that the savings target would be achieved. In addition to these new savings targets, the Department is already committed to existing savings programmes, with a further £2.5 billion of savings still to be identified. The Department said these savings are more likely to come towards the end of these programmes, around 2020. The Department has undertaken to provide the Committee with an annual update on the savings achieved.[4]

1 C&AG's Report, *The Equipment Plan 2016 to 2026*, Session 2016–17, HC 914, para 5
2 C&AG's Report, paras 6, 9
3 Qq4, 8, 19, 20–25, 37–38, 52–53
4 Qq17, 26–31, 35–36, 72

5. We asked the Department how it balances taking into account its continuing obligations to maintain key sectors of the UK industrial base with the need to maintain the Plan's affordability. International purchases, such as the P-8 Poseidon Maritime Patrol Aircraft, are outside the remit of the single source contract regulations, which are intended to protect value for money when buying non-competitively. The Department told us that in such circumstances it ensures value for money through the use of benchmarking and reference cost data, and that it seeks to maximise the contribution of UK suppliers. As an example, the Department noted that UK business receive 11% of the value of every F-35 Lightning airframe.[5]

5 Qq113–114, 115–136

2 The quality of costing assumptions within the Plan

6. The 2016 Defence Equipment Plan (the Plan) contains a number of new projects introduced as a result of the Strategic Defence and Security Review (the Review). These projects are inevitably immature so their cost estimates contain a high degree of uncertainty. The Ministry of Defence (the Department) costs all of its projects at the 50th percentile—that is, cost estimates which, in theory, have an equal chance of being too high or too low which is designed to balance out across the portfolio as a whole. The Department's own analysis shows that the Department has historically failed to contain costs within this envelope. Nevertheless the Department told us it was not planning to vary from this as their standard approach on the basis that customising estimates on a case-by-case basis would make it more difficult to manage the portfolio. The Department also noted that other departments cost on this basis and that it was used for Crossrail.[6]

7. The Department has a central contingency of £5.3 billion (3% of the value of the Plan) to cope with unexpected cost growth. CAAS considers that the cost of the Plan as a whole is likely to be under-estimated by £4.7 billion but noted that this was balanced by their central contingency. However, these estimates do not include the new projects which entered the Plan following the Review. The Department also told us that its current costing policy incorporates additional contingency within individual project costings equivalent to a further 6% of the value of the Plan.[7]

8. The Dreadnought and Astute nuclear submarine programmes are the most complex in the Plan. The Department has experienced problems with cost growth on these programmes over a number of years, including an increase in the forecast 10-year costs of £836 million in 2015–16. The Department told us that Astute was a cost-plus contract that was not incentivised on a hard end date, and that there had been many challenging quality-delivery related issues that had resulted in the end date being delayed with a corresponding impact on cost. The Department said it was planning to exert greater cost control over the Dreadnought programme and the remaining Astute boats 6 and 7 by introducing a more rigorous contracting strategy which would penalise contractors for failing to meet time and cost milestones. The Department was satisfied that the Dreadnought programme was underpinned by a single, transparent cost model which could be independently assured, and would allow it to hold the contractors to account for their performance.[8]

9. The Department told us that it was in the process of appointing a Director General Nuclear who would be responsible for running all aspects of both programmes, as well as the Atomic Weapons Establishment, the decommissioning of older classes of submarine, and for managing the relationship with the United States. The person would also be expected to play a broader role in the management of the Department. The Department expected to announce its choice in the Spring.[9]

6 C&AG's Report, para 17; Q56
7 C&AG's Report, para 19; Qq47, 58
8 C&AG's Report, para 16; Qq75, 88
9 Q76–80

10. The Department is also strengthening delivery of these programmes by setting up a submarine delivery authority, which will take over responsibility for managing the delivery of the programmes from the Defence Equipment & Support organisation. The Department told us that it would draw on lessons learned from the Nuclear Decommissioning Authority and Crossrail. The Department noted that it had signed heads of terms to create an 'alliance', sitting underneath the authority, bringing together the key contractors and the customer around a shared cost model. It would learn lessons from the alliance which is building the Queen Elizabeth carriers.[10]

11. The largest non-nuclear procurement project in the Plan is the Type 26 Global Combat Ship. The Review significantly changed the requirement for this equipment, reducing the number of Type 26 ships from 13 to eight, the shortfall in numbers to be filled by the creation of a new class of general purpose frigate. But it is unclear how much it will cost to fund the new requirement, or from where the money will come. The Department told us that 'this was not an example of a programme we would want to replicate' and that cost growth during the design phase meant that the project became unaffordable in its original form. Problems with the project were exacerbated by the business arrangement with the contractor which requires them to be paid whether or not any ships are being built.[11]

12. Construction of the first Type 26 is planned to begin before the end of 2017. As with the submarine programmes the Department maintained that the contracting arrangements would drive improved contractor performance by linking payments to the achievement of clear milestones, with consequences for failure. For the new general purpose frigate, the Department emphasised exportability which would require the ability to offer the design to other countries at a keen price. The Department told us that its approach would be to go to the market to compete the procurement, in contrast to the non-competitive procurement of the Type 26.[12]

10 Qq81–82, 90–93

11 Qq60, 63, 65

12 Qq65–66, 137

3 Flexibility within the Plan to cope with the unexpected

13. In previous years the Ministry of Defence (the Department) maintained "headroom" to fund extra projects beyond the core programme according to its military priorities. In the 2016 Equipment Plan (the Plan) all £10.7 billion of this headroom has been used to fund commitments in the Strategic Defence and Security Review (the Review) and other projects within the core programme. While the Review has attempted to anticipate future requirements, at least for the next five years, funding for any emerging requirements in the future will have to be found from within existing budgets.[13]

14. The Department told us that projects had been held back in the run up to the Review with their funding held within the headroom provision to avoid nugatory expenditure on projects that would be invalidated by the Review. The Department noted that the next Review in 2020 would offer an opportunity to rethink priorities. The Department admitted that there was no longer as much room in the Department's budget to look at new and different programmes. If there was a sudden and very marked additional financial pressure there were only two things the Department could do. Either stop doing something it had previously committed to doing or approach the Treasury for additional funds.[14]

15. There is the expectation that some compromises will be necessary as the portfolio matures but the Department was confident that it had anticipated all the major threats facing the country in the near future, and did not expect to have to bring forward any new capabilities.[15]

16. The need to cope with the unexpected is not simply about changing equipment requirements. The significant fall in the value of the pound against the dollar since June 2016 means that the exchange rate is more than 20% below that mandated by the Department for use by project teams when costing the 2016 Equipment Plan. This potentially exposes the Department to billions of pounds of additional costs over the next 10 years.[16]

17. There are some mitigating factors. In some cases, such as the nuclear programme, much of the contract is priced in pounds, so is insulated from the effect of the fall in the value of the pound. The Department has used the Bank of England to hedge against changes in rates which offers some protection until part of the way through the 2018–19 financial year. Beyond that, the options will be either: to secure the agreement of the Treasury to bail the Department out; to remove equipment from the programme; or to carry on hedging. However, if the exchange rate were to recover the Department might potentially lose substantial sums from hedging activity.[17]

18. The Department told us that it was now discussing with the Treasury which route to take and that these discussions were driven by two projects which are particularly vulnerable to exchange rate fluctuations—the P-8 Poseidon Maritime Patrol Aircraft and the F-35 Lightning fighter aircraft. Their impact on the Plan will begin to bite in 2019–20.[18]

13 C&AG's Report, para 2.8
14 Q51–53
15 Q112
16 C&AG's Report, para 3.17–3.19
17 Qq83–86, 93–95
18 Qq99–100, 105–106

Formal Minutes

Monday 24 April 2017

Members present:

Meg Hillier, in the Chair

Mr Richard Bacon
Charlie Elphicke
Kwasi Kwarteng
Nigel Mills
Anne Marie Morris
Bridget Phillipson
Karin Smyth

Draft Report (*The Defence Equipment Plan*), proposed by the Chair, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 18 read and agreed to.

Introduction agreed to.

Conclusions and recommendations agreed to.

Summary agreed to.

Resolved, That the Report be the Fifty-sixth of the Committee to the House.

Ordered, That the Chair make the Report to the House.

[The Committee adjourned.

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the inquiry publications page of the Committee's website.

Wednesday 1 March 2017

Question number

Stephen Lovegrove, Permanent Secretary, **Louise Tulett CBE**, Director General Finance, **Tony Douglas**, Chief Executive, Defence Equipment and Support, and **Lieutenant General Mark Poffley OBE**, Deputy Chief of the Defence Staff, Ministry of Defence — Q1–137

Published written evidence

The following written evidence was received and can be viewed on the inquiry publications page of the Committee's website.

DEP numbers are generated by the evidence processing system and so may not be complete.

1 Ministry of Defence (DEP0005)

2 Unite (DEP0003)

List of Reports from the Committee during the current session

All publications from the Committee are available on the publications page of the Committee's website. The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2016–17

First Report	Efficiency in the criminal justice system	HC 72 (Cm 9351)
Second Report	Personal budgets in social care	HC 74 (Cm 9351)
Third Report	Training new teachers	HC 73 (Cm 9351)
Fourth Report	Entitlement to free early education and childcare	HC 224 (Cm 9351)
Fifth Report	Capital investment in science projects	HC 126 (Cm 9351)
Sixth Report	Cities and local growth	HC 296 (Cm 9351)
Seventh Report	Confiscations orders: progress review	HC 124 (Cm 9351)
Eighth Report	BBC critical projects	HC 75 (Cm 9351)
Ninth Report	Service Family Accommodation	HC 77 (Cm 9351)
Tenth Report	NHS specialised services	HC 387 (Cm 9351)
Eleventh Report	Household energy efficiency measures	HC 125 (Cm 9351)
Twelfth Report	Discharging older people from acute hospitals	HC 76 (Cm 9351)
Thirteenth Report	Quality of service to personal taxpayers and replacing the Aspire contract	HC 78 (Cm 9351)
Fourteenth Report	Progress with preparations for High Speed 2	HC 486 (Cm 9389)
Fifteenth Report	BBC World Service	HC 298 (Cm 9389)
Sixteenth Report	Improving access to mental health services	HC 80 (Cm 9389)
Seventeenth Report	Transforming rehabilitation	HC 484 (Cm 9389)
Eighteenth Report	Better Regulation	HC 487 (Cm 9389)

Nineteenth Report	The Government Balance Sheet	HC 485 (Cm 9389)
Twentieth Report	Shared service centres	HC 297 (Cm 9389)
Twenty-first Report	Departments' oversight of arm's-length bodies	HC 488 (Cm 9389)
Twenty-second Report	Progress with the disposal of public land for new homes	HC 634 (Cm 9413)
Twenty-third Report	Universal Credit and fraud and error: progress review	HC 489 (Cm 9413)
Twenty-fourth Report	The sale of former Northern Rock assets	HC 632 (Cm 9413)
Twenty-fifth Report	UnitingCare Partnership contract	HC 633 (Cm 9413)
Twenty-sixth Report	Financial sustainability of local authorities	HC 708 (Cm 9429)
Twenty-seventh Report	Managing government spending and performance	HC 710 (Cm 9429)
Twenty-eighth Report	The apprenticeships programme	HC 709 (Cm 9413)
Twenty-ninth Report	HM Revenue & Customs performance in 2015–16	HC 712 (Cm 9429)
Thirtieth Report	St Helena Airport	HC 767 (Cm 9429)
Thirty-first Report	Child protection	HC 713 (Cm 9429)
Thirty-second Report	Devolution in England: governance, financial accountability and following the taxpayer pound	HC 866 (Cm 9429)
Thirty-third Report	Troubled families: progress review	HC 711 (Cm 9429)
Thirty-fourth Report	The Syrian Vulnerable Persons Resettlement programme	HC 768 (Cm 9429)
Thirty-fifth Report	Upgrading emergency service communications	HC 770 (Cm 9433)
Thirty-sixth Report	Collecting tax from high net worth individuals	HC 774 (Cm 9433)
Thirty-seventh Report	NHS treatment for overseas patients	HC 771 (Cm 9433)
Thirty-eighth Report	Protecting information across government	HC 769 (Cm 9433)
Thirty-ninth Report	Consumer-funded energy policies	HC 773 (Cm 9433)
Fortieth Report	Progress on the Common Agricultural Policy Delivery Programme	HC 766 (Cm 9433)

Forty-first Report	Excess Votes 2015–16	HC 954 (Cm 9433)
Forty-second Report	Benefit sanctions	HC 775
Forty-third Report	Financial sustainability of the NHS	HC 887
Forty-fourth Report	Modernising the Great Western Railway	HC 776
Forty-fifth Report	Delivering Restoration and Renewal	HC 1005
Forty-sixth Report	National Citizen Service	HC 955
Forty-seventh Report	Delivering the defence estate	HC 888
Forty-eighth Report	The Crown Commercial Service	HC 889
Forty-ninth Report	Financial Sustainability of Schools	HC 890
Fiftieth Report	UKTI and the contract with PA Consulting	HC 772
Fifty-first Report	HMRC's contract with Concentrix	HC 998
Fifty-second Report	Upgrading emergency service communications	HC 997
Fifty-third Report	The HMRC Estate	HC 891
Fifty-fourth Report	Department for International Development: investing through CDC	HC 956
Fifty-fifth Report	Tackling overseas expenditure	HC 1034
First Special Report	Protecting the Public's Money: First Annual Report from Chair of Committee of Public Accounts	HC 835

Public Accounts Committee

Oral evidence: The Defence Equipment Plan, HC 957

Wednesday 1st March 2017

Ordered by the House of Commons to be published on 1st March 2017

Watch the meeting: http://www.parliamentlive.tv/Event/Index/5517cafb-954e-49f6-afcb-51072895d451

Members present: Meg Hillier (Chair); Philip Boswell; Kwasi Kwarteng; Nigel Mills; Anne Marie Morris, Mrs Anne-Marie Trevelyan.

Sir Amyas Morse, Comptroller and Auditor General, Adrian Jenner, Director of Parliamentary Relations, and Keith Lloyd, Director, National Audit Office, and Marius Gallaher, Alternate Treasury Officer of Accounts, were in attendance.

Witnesses: Stephen Lovegrove, Permanent Secretary, Ministry of Defence (MoD), Louise Tulett CBE, Director General Finance, MoD, Tony Douglas, Chief Executive, Defence Equipment and Support (MoD), and Lieutenant General Mark Poffley, Deputy Chief of the Defence Staff, MoD, gave evidence.

Q1 **Chair:** Welcome to the Public Accounts Committee on Wednesday 1 March 2017. We are here today to look at the Defence Equipment Plan, on the back of the National Audit Office's investigation. Our witnesses today are Lieutenant General Mark Poffley, Deputy Chief of the Defence Staff at the Ministry of Defence, Stephen Lovegrove, Permanent Secretary at the Ministry of Defence, Louise Tulett, the director general finance at the Ministry of Defence and Tony Douglas, chief executive of Defence Equipment and Support. Our hashtag today is #defence—we are ever-imaginative.

Q1 Before we start though, Mr Lovegrove, I wondered if you have had any calls about moving post. Are you going to remain Permanent Secretary at the Ministry of Defence, given that there is a bit of a reshuffle going on?

Stephen Lovegrove: You may be better informed than I am, Chair—

Chair: No, no—don't get alarmed! I haven't heard anything.

Stephen Lovegrove: As far as I know, I am in post for at least another couple of weeks.

Chair: Couple of weeks?! *[Laughter.]*

Stephen Lovegrove: No. I haven't heard anything.

Chair: That's a big announcement there—it depends how you do today, perhaps.

Stephen Lovegrove: Perhaps it does.

Q2 **Chair:** Okay. It is just that we know there have been moves at the Home Office, so there is a gap somewhere. But you are not being reshuffled round.

Stephen Lovegrove: No; I am not being reshuffled.

Q3 **Chair:** That's a relief; you are going to be accountable for the things you are saying today for some time to come.

Stephen Lovegrove: I certainly am.

Chair: That helps us hone our questioning. I mentioned that we are looking at the Defence Equipment Plan, relating to spend on defence equipment and the support for that equipment over the next decade.

It is a very ambitious programme. You have a number of new commitments, but not as much funding as those commitments might demand, which means that you have to deliver some very demanding efficiency targets. We will want to look at that a bit. We are also concerned about the exchange rate costs, so I will be asking questions about that, as well as about the fact that there is now really no headroom—there is very limited flexibility for any changes. Before your time, Mr Lovegrove, when I was first a member of the Committee—some of you may well remember—there were some big concerns about the feasibility of delivering the contract management. There is now a much more rigorous regime in the Ministry of Defence, and we are quite concerned that this plan gives you so little capacity for flexibility and managing risk. There are a lot of questions to be asked and that is where we wanted to focus. I am going to ask Anne Marie Trevelyan to kick off.

Q4 **Mrs Trevelyan:** As a new member of the Committee, it is always good to see an equipment plan. My pre-political career was peppered with newspaper reports that indicated that it was not under control. The 2012 start of this plan indicated a really strong direction of travel from the Ministry to get that right and to have something that would work rolling forward. However, that is only any good if it is realistic and can have some chance of staying within budget.

Q2 The NAO Report is very clear that, in the last year since the SDSR 15 vision has started to be put into the equipment plan, we have swallowed up all the budgeted headroom—about £10.7 billion—and still have not met the full £7 billion of savings that have been committed to before that. We have added about £24 billion of extra commitments, in terms of the MPA, the mechanised infantry vehicle, extensions to the Typhoon and bringing the F-35 forward. This last year seems to have had a wave of new and exciting toys for our command to bring out into the field, but also no financial backing to give it any stability. There is a 7% growth from last year in terms of costs with, as far as I can see, inadequate additional funding. Given the level of the commitments, how can you be sure that the Equipment Plan is still affordable? How is it that you are content with a plan that now has no headroom? Perhaps you could kick off, Mr Lovegrove.

Stephen Lovegrove: Starting with the headroom, I want to be clear about the characterisation of that. It is headroom, as opposed to contingency. It was money that was provided for the 2015 SDSR with a view to being spent on new equipment. Exactly what that new equipment was going to be appeared only in the outturn of the SDSR, and indeed it did use up that money. I absolutely accept that the headroom has come away from the Equipment Plan, but in a sense it has been earmarked for the kinds of thing it was meant to be earmarked for. It is not a reduction in the contingency itself.

In terms of contingency, at least held centrally over and above the base cost of the Equipment Plan, we have slightly—not enormously—more contingency now than we had before. I think it is about 5.3%, as opposed to about 4.3%, so we are up at about 3% centrally held. On top of that, there is blended—the various projects and programmes hold contingency of about 6%. All in all, we have 9% contingency there. I am sure colleagues, in particular Mr Douglas, will happily talk you through that.

The other thing I would say is that we have a very substantial efficiency programme in train from 2013, which the NAO rightly identifies as not being complete. It is a 10-year efficiency programme, and we are four years into it. We have made some serious progress, but that is not to say it is going to be a complete walk in the park to get to the end of that previously existing efficiency programme, but we are committed to doing so.

That said, the equipment programme is going to be affordable only if we can make good on the efficiency challenges that were laid upon us in SDSR 15. There is no question about that. Those substantial efficiency challenges are going to be over a 10-year period, and we are working very hard at the moment to identify where those efficiencies are going to be coming from. We know that there are certain areas that are going to be within DE&S itself, and there are certain areas that are going to be within the rest of the Department, particularly around the future—

Q5 **Chair:** You say you are given certain areas. Have you got any concrete examples of things you are looking at?

Stephen Lovegrove: Yes. £3.3 billion is going to be coming out of the DE&S programmes, which are being led by the managed services providers. I am sure Mr Douglas can talk about that later. Identifiable sums of money are going to be coming out of the future defence civilian programme, which is where we lose 30% of our civilians within the Department. Many of them will continue to work for defence, but they will maybe be doing so in an outsourced way. £1.7 billion has been identified in the period coming out of the single-service contract obligation.

Q6 **Chair:** That sounds like a lot of people.

Stephen Lovegrove: The FDCP—the future defence civilian programme—is a lot of people. We have 58,000 civilians working in defence at the moment. The SDSR, the Government's manifesto and the last Budget committed us to seeing 30% of those 58,000 leave the Ministry of Defence. They did not commit to those people leaving and working for defence—in fact, I think three quarters of them will probably continue to work for defence, as it happens.

Q7 **Mrs Trevelyan:** There is always a question whether that will actually bring down the overall bill in reality. We see that in other Departments.

Stephen Lovegrove: Any decision in that area is going to have to pass a value-for-money test, so absolutely right. What I would—

Q8 **Chair:** This must be a last quick point. We have given you a good opening statement, so relieved we are that you are not moving.

Stephen Lovegrove: I am conscious of that. These are very challenging targets. I do not believe that an approach that will slice it up, hand it all down to the frontline commands and tell them to get on with it and with the expectation that we will see their returns at the end of 10 years and it will all add up, will probably work. We will need to exercise a degree of central co-ordination and control, which at the moment we are developing. I am not pretending that we are not, but we are at the beginning of this process. SDSR 2015 was 14 months ago. We have got another eight or nine years to run. A lot of this is going to fall on the frontline commands but a lot of it will need to be developed over the coming months—indeed years—with a degree of central direction and thoughtfulness that we are in the process of developing. They are challenging targets but we are committed to achieving them.

Q3 Chair: We have given you a good long run there. We are going to have quick-fire questions and answers now.

Q9 **Mrs Trevelyan:** Your honesty in talking about the reality of the financial tension with command is commendable. You are telling me that there was £10 billion headroom put in with a view to SDSR 2015. I am very comfortable with that, but you have added £24 billion effectively.

Q4 Perhaps, General Poffley, you could give me an idea of how the commands, when feeding into SDSR 2015, gave consideration to affordability. Did somebody say, "There is £10 billion to spend, guys. Here you go. That's where it can go."? Or, did the whole list come in and now you are going, as you are, "It's £24 billion. Let's find £5.8 billion out of the equipment plan. Let's find £1.5 billion out of estates."? And then, in brackets, "Does that mean the housing bill as well as the £10 billion that we knew we had planned for?" Where is the relationship between commands' wish, indeed needs, list—replacement of ships and so on—and the reality of the Department's budget?

Lieutenant General Mark Poffley: It is absolutely the case that if you were to ask each of the commands, they will have a shopping list of enhancements.

Q10 **Mrs Trevelyan:** Of course, much longer than we could ever meet.

Lieutenant General Mark Poffley: That headroom, as you previously called it, of unallocated provision was assigned to attend to that on a rolling basis. There was always every year a constant tension between that that was affordable and not. The delegation of the budgets down to the commands, of course, has given them far more flexibility to trade across the portfolio of their responsibilities—manpower, activity and so forth—to make good those judgments.

Of course, if you accept that the strategic defence review recalibrated the Department and articulated a head mark that was aimed at 2025—Joint Force 2025 is the head mark—quite clearly during the first 10 years you are going to see some enhancements made in the course by spending that headroom but by then potentially being able to draw off other sources of funding.

Incidentally, infrastructure was not one of them. That was held centrally and remains so at the moment, inside the centre of the Ministry of Defence. That is precisely because it had been used as a regulator in the past.

So, they did have more flexibility and they absolutely recognise that the limits of the funding became an important factor in defining their requirements. There was always going to be an element of design to cost in taking forward the SDSR head mark of 2025. That is a constant theme.

Q11 **Mrs Trevelyan:** Let's pick something specific of what has come out of SDSR 2015 and match it to the free money that was waiting to be used? Feel free to pick any one you like.

Lieutenant General Mark Poffley: Of those that we were investing in?

Q12 **Mrs Trevelyan:** The mechanised infantry vehicle.

Lieutenant General Mark Poffley: The mechanised infantry vehicle sits there as a programme. It is inside what we call a pipeline at the moment of armoured vehicles. As a platform it has been put together with other platforms for the Army to make some choices about how many other mechanised infantry vehicles it would like, and be able to offset that against other programmes such as the Ajax reconnaissance vehicle and the programme known as the multi-role vehicle-protected, which looks to provide some command and control vehicles.

The Army has some opportunity to trade across those requirements and veer and haul, to see what is an optimum solution in terms of funding and requirement.

Q13 **Mrs Trevelyan:** And you will leave that with the commands to determine within this equipment plan envelope?

Lieutenant General Mark Poffley: Absolutely. They have a mandate to design to cost. They had the opportunity to veer and haul on the requirement. Quite clearly, that is supervised by my staff and the Ministry of Defence to make sure that we do not prejudice any of the policy aspirations that we set out in the SDSR.

Q14 **Mrs Trevelyan:** If we look at the Royal Navy, we will see that a lot of the investment for them is replacement; other than complex weapons on the ships, a lot of it is replacement of very old ships. That is a very different counter-balance of need, perhaps, than fancier new kit. The air power is a massive part of the extra £24 billion, but the RAF cannot be expected to carry all of that responsibility, in terms of making decisions to not have the Typhoon extension or whatever it might be, if it doesn't balance out. How is that balance between the commands and the centre going to work in practice if this equipment plan just doesn't hold together?

Lieutenant General Mark Poffley: On an annual basis, we review all of the capabilities in Defence against an assessment criteria that is run through my staff. That is brought to the Defence Board annually, and we adjust the programme on the basis of where we are prepared to accept risk or otherwise against the contemporary security environment.

Quite clearly, as you rightly said, there is an element of life-cycle replacement about some of the equipment programme. It is therefore a balance between introducing new capability to maintain operational advantage and maintaining sufficient volume and credibility with the extant equipment.

Q15 **Mrs Trevelyan:** The question that springs up, on the basis that all of these things become and are necessary just to maintain that minimum capability, is whether the budget we have is in any way adequate.

Lieutenant General Mark Poffley: Our judgment is that there is sufficient funding in the proposition that we have for the programme at the moment to be able to achieve what we set out in the Strategic Defence and Spending Review in 2015.

Q16 **Mrs Trevelyan:** Miss Tulett, could we perhaps look in a bit more detail at the £7.1 billion of savings that have already been committed to, but that we still have not got to? Could you talk through exactly why that is, and where you are comfortable that the £2 billion that we still haven't found is going to come from?

Louise Tulett: They were actually set around 2010, with a 10-year trail on them. We have scored about £4.6 billion against the £7.1 billion thus far, which is where we expected to be at this stage, as we go through those 10 years. We have got a few more years to run.

Q17 **Mrs Trevelyan:** So what else are we expecting to see coming through within that savings programme?

Louise Tulett: The complex weapons are geared towards the back end of the programme, in particular, because the complex weapons pipeline is predicated on reuse of early years research into the missile classes that will come along in the back end of that programme. That is why we have put the missiles into a pipeline, so that we aren't reinventing but we are exploiting technology that has been developed for the early items in the complex weapons pipeline towards the back end. We are expecting a vast majority of the delta, which is about £2.5 billion, to actually come out of savings made in the back end of the complex weapons pipeline.

Q18 **Mrs Trevelyan:** So we are seeing a long-term improvement in value for money in our complex weapons investment programme as a result?

Louise Tulett: Absolutely.

Q19 **Mrs Trevelyan:** So that is a multiplier effect, in theory, if we keep following that same line. That is helpful, thank you.

Mr Douglas, can we look at the DE&S transformation saving? You are charged with finding £3.3 billion. Can you explain to us how that is going to happen and where it is coming from?

Tony Douglas: First, if I can just make the connection to the point that the PS made earlier: we have a challenging programme and I think we acknowledge that. It is appropriately challenging, and we would all acknowledge that it is important and in everybody's interest to have a taut programme.

Consequently, within DE&S, it requires us to get better with regards to delivery and the efficiency of that delivery. To that end, there is a transformation programme that is well into the second year of its implementation. Not only is it very disciplined around upskilling the capability of DE&S—particularly in the areas of project control, project execution and delivery—but it has enabled us to implement a balanced matrix organisational chart and function, which is all a kind of driven organisation.

From 14 April this year, it will also enable us to step outside of the civil service pay structure, and we will therefore compete in the open market to make sure that we have the right capability in this place. There are £3.3 billion of savings attributed at a project-by-project level, as a result of those kind of enablers. We are in year two of 10 and we are absolutely on track. We are confident that everything we see ahead of us allows us to stand by those commitments.

Q20 **Mrs Trevelyan:** What you are saying is that we haven't had the right people in that area in order to really drive through the very best value for money on contracts and project roll-out.

Tony Douglas: We have some incredible people working within DE&S. It is equally fair to reflect that, comparing our bench strengths with that of industry, we have not always been punching pound for pound at the equivalent rate. As a consequence of that, this transformation programme has very much been around hard skill delivery, but it is also allowing us to put an employee attraction and retention proposition together so that we can have the right capability working in this complex space. We have more than 1,200 projects on the go; they range from nuclear-powered submarines all the way through to boots, and everything in between. It is absolutely as good as it gets, but over the last two decades we have got ourselves away from the market rate in some crucial skills, particularly in the commercial space and the project delivery space. That is what the programme has been designed to resolve.

Q21 **Mrs Trevelyan:** The anecdotal evidence is often that the same people do not stay on a project; we get a lot of wasted time and therefore cost on project delivery, because people move. Will paying more for the best people give us the chance of a much better holistic outcome for project delivery?

Tony Douglas: We believe it is the only sustainable way to deliver complex projects of this nature. We have to build the capability that has a commercial skill set and a programme delivery skill set to manage things tightly on budget and to administer contracts that are deeply complex.

Q22 **Mrs Trevelyan:** What is the increase in your wage bill that will have that beneficial impact? Have you got some idea?

Tony Douglas: That is a question that I have been almost praying that you ask me—it is actually going to allow me to reduce my pay bill. A big part of the savings is predicated on me reducing the over-reliance on public sector support and consultants. Upskilling our own capability allows us to significantly reduce where we are paying sizeable margins for somebody else to help us.

Q23 **Mrs Trevelyan:** So the impact on your wage bill?

Tony Douglas: Is a significant part of the £3.3 billion of savings.

Q24 **Mrs Trevelyan:** Give me a number. Go on. You know you want to, Mr Douglas.

Tony Douglas: I will give you one year: in terms of next year, it will save us about £70 million.

Q25 **Chair:** Sorry. Will it save you or cost you £70 million?

Tony Douglas: On our pay bill, it would save us £70 million next year.

Q26 **Mrs Trevelyan:** Within this £5.8 billion of savings, there are also £1.7 billion attributed to the single-source contract regulations improvements. I think it is safe to say that we are all still learning how this is going to work. Perhaps you could help us to better understand what it means and what you will actually do to save that £1.7 billion.

Louise Tulett: The single-source contract regulations effectively control those contracts where we don't go through a competitive process. Therefore, in order to secure value for money and evidence that the taxpayer is getting value for money, there are two things that we wish to control. We wish to control the profit rate and the costs that are allowable to be charged to us under those contract terms. They are now enshrined in the regulations and in the legislation. The ambition is that 100% of those contracts that qualify to be dealt with under that regime will come under by 2019-20. It is important to remember that we can only bring the contract under at the point when we have a contract event, generally speaking.

Q27 **Mrs Trevelyan:** So any historical contract that is sitting in the system is still outwith it.

Louise Tulett: Correct. Generally speaking, you can't do legacy contracts until you get a contract event, which is generally when you are at re-let. There is an ability under a voluntary arrangement for contracts that are being amended to come under the regime, providing that we and the supplier agree. We have been successful in getting eight contracts amended.

Q28 **Mrs Trevelyan:** Which are those?

Louise Tulett: I haven't got the list; I can provide that.

Q29 **Mrs Trevelyan:** If you could, that would be helpful. Thank you.

Louise Tulett: That is a huge bonus, because clearly if we hadn't got the suppliers to volunteer to allow them to come under the regime, they would have carried on under the old regime.

Q30 **Mrs Trevelyan:** Do you have an idea of the savings you think you will be making just for those eight that have come inside the system?

Louise Tulett: Again, I can let you have a note with the detail. I have not brought the full stats with me.

Stephen Lovegrove: I have in my mind £50 million savings so far.

Q31 **Mrs Trevelyan:** On those that are rolled into the new framework?

Stephen Lovegrove: Yes, so far; but we will check.

Q32 **Nigel Mills:** Can I ask about the profit margin on the single-source contracts, because obviously there have been a couple of rounds of consultation and I think the first one was stopped—by the Secretary of State's instruction, from memory? Have you now got the lower profit agreed and signed off and being ratified?

Louise Tulett: The profit rate was set last year and we are at the moment putting up advice to the Secretary of State for the profit rate that will be applicable from 1 April forward. The methodology has stabilised. Last year was a bit of a learning curve. We have been working very closely with the Single Source Regulations Office and it has consulted industry as to how we will reset the profit rate for this year—or the recommendation going to the Secretary of State—and the methodology has undergone some improvement during that period. So the advice is with Ministers at the moment.

Q33 **Nigel Mills:** Is this an annual reassessment of the profit rate, or are you expecting to be able to land a methodology that just works automatically after that?

Louise Tulett: We indicate where we would expect the profit rate to be over a slightly extended period, and then we take the average blend as we move forward, and we do expect that the methodology will settle down. Obviously we do not want to be presenting large surprises into the market, either for the suppliers or for their investors.

Q34 **Nigel Mills:** Roughly what is the reduction in the profit rate to be made? Is it down by 5%? I am trying to remember what the margin was before. It was somewhere over 10%, the margin they were allowed before, wasn't it?

Louise Tulett: Yes, and it is not a single point, so the profit rate has some variability around it to reward capital investment, but also to look at risk. So it is not appropriate to give a single point number, and I clearly would not want to speak to the advice that is currently sitting with Ministers at the moment as to how it will shift from last year.

Q35 **Mrs Trevelyan:** Just coming back to this £1.7 billion as a whole; where in particular do you see that being a real future cash saving for your plan?

Louise Tulett: We have 72 contracts—I spoke to the eight that have been done under the regime and there are a further 72 that have gone through either as a qualifying defence contract or a subcontract since the regime has been in operation. We are on track to deliver the £1.7 billion over the 10-year profile at the moment, as I say, with 100% of contracts that can qualify coming into the regime from 2019-20 onwards, just under that in 2018-19, and moving on through.

Q36 **Mrs Trevelyan:** What about the assessment? It is a new regime and therefore a saving. Some of those were not well-advanced projects in 2012, when you set the plan in place. How is that saving actually calculated? Your contract development is slow at 2012, whereas you are talking about a contract that will kick in in 2019-20.

Louise Tulett: It is done on an assessment of two areas. It is done on an assessment of the costs that would have been allowable under the previous contracting arrangement, which are now no longer allowable, and that quantum. It is also done on the point that your colleague made with regard to the delta on the profit rate. We work closely with DE&S, who monitor the majority but not all of these contracts for us to ensure that that is being scored through application of the single-source regulation, and not being scored elsewhere. We are confident that once we have seen the renewal of the legacy contracts, we will deliver the full £1.7 billion.

Stephen Lovegrove: Perhaps it is worth saying that, consistent with the stabilisation of the regime—and it does need to settle down, as you mentioned earlier on—I think we would expect to see some of the thinking behind it evolve. One of the parts of the legislation was that it was there not only to produce value for money for the taxpayer, but to provide a fair return for the industry. We are very conscious of the fact that the profit rate is a small part of the ultimate cost of any given project, and most of the cost is actually in the cost that isn't profit. We are conscious of wanting to make sure that the contract regime is incentivising the right types of behaviours in the supply chain. You can, I think, expect to see a degree of evolution in the regime, consistent with trying to let it become as stable as possible, so that the shareholders of the companies and the suppliers can rely on it.

Q37 **Mrs Trevelyan:** We will come on to look at that balance, which obviously is the risk-sharing you are asking of your contractors as well. I will finish on this amazing group of savings that you need to achieve across the board in order for this plan to even begin to hold water. You also have the £1.5 billion out of Defence Estates, which I know lands, again, on General Poffley's shoulders to a point. Having looked at that with you a few weeks ago, we are all very nervous that that number could take 20 or 30 years to achieve, not the next few years. Are you confident that that £1.5 billion is a real saving that will help to buy kit, which is what it involves?

Lieutenant General Mark Poffley: As we dealt with in a previous hearing, the reality is that it, similarly, is a very challenging target, but my judgment is that it is a legitimate target that we should be aiming at. If your measure is confidence that the Defence Infrastructure Organisation in particular is starting to get aboard on how to release that funding, and particularly do so in an accelerated fashion rather than wait until the target date that you suggested, I can assure you that that is exactly where the DIO board is. Indeed, we were in Sutton Coldfield having exactly that conversation on Monday. My judgment is that it is not unreasonable to suggest that that money should be releasable. Quite clearly, that is then for us collectively in defence to work out how best to utilise it.

Q38 **Mrs Trevelyan:** Do you have the confidence of your generals, Mr Lovegrove?

Stephen Lovegrove: I would absolutely concur with what General Poffley said. It is a challenging target—there is no question about that. It is a target that over a period of time we are going to have to change elements of. We talked a little bit about some of the things in the plan at the moment that patently do not work and that we are going to have to look at again and try to make sure do work. We will be doing our damnedest to get to where we need to get to. I don't look upon it as an illegitimate or impossible target at all, but do I think it is going to happen without a great deal of work? No, I don't.

Q39 **Mrs Trevelyan:** What happens if there are RAF bases that just will not sell because the covenants on country houses gifted to the nation after world war two just cannot be shifted, and you are still carrying a cost and not generating that profit? What do we do? Who takes the hit? Would we not have Typhoons?

Lieutenant General Mark Poffley: Clearly, as part of our annual planning process, we are making constant adjustments as to how best to rebalance the budget in the round, including any deficiencies in areas such as that. That will be taken forward on an annual basis. I would not expect to see a catastrophic dislocation of that expectation. It is going to take a little while for us to roll that analysis through, and we have lots of opportunities to make those tactical adjustments against that strategic plan.

Stephen Lovegrove: This is one of the areas where it is important that there is a competent and properly resourced central capability, rather than assuming that the delegated model is going to solve everything for you. There are going to be trade-offs between the various verticals, as it were, in defence. This is, as you know well, a big and very complicated interlinking system, and there needs to be capability in the centre to make the kind of constant trade-offs that General Poffley has been talking about.

Q40 **Mrs Trevelyan:** Before we move on to the quality of some of the assumptions, in the round—perhaps you could help me, Ms Tulett—do you have financial management tools that allow you to look holistically at this? You are, as you have described, balancing constantly, but what financial management tools do you have? At the end of the day, if this doesn't stack up—there is a real risk that the numbers will not hold together—how is the Treasury going to take you seriously in a request for more money, either in an emergency situation or because the budget should be 3% and not 2%, without that clear presentation of an intelligently thought through holistic perception of the whole defence piece?

Louise Tulett: We have three key areas where we exercise control. We have the planning process—General Poffley has touched on some of that—where finance staff work very closely with military capability coherence staff in head office to aggregate the proposals from the individual TLBs and check the feasibility of their delivery, but also check their affordability. We do that on a rolling 10-year planning programming cycle. The decisions within that trade space are informed by the defence capability risk assessment, so we are constantly trying to target the money at where the risk is and where we have the greatest capability requirement.

In addition to that, we have a regime of approvals, which includes Ministers as well as Treasury Minister approvals, with various thresholds. The more material investment decisions are scrutinised by a committee that I chair in advance of going to the Ministers. We look very carefully at the affordability, the value for money and the feasibility of the delivery. We also expect that we are buying the right thing to satisfy whatever the specification or the capability requirement is. That work is strongly supported by work from the finance function within DE&S, who also review that and assure those costs, including the activity of the independent CAAS function.

The third mechanism we have is: if, having got a programme and started a new financial year, it all begins to look like it is going slightly wrong, we are very agile in-year at taking decisions in-flight that actually focus us in on landing within that year's control total. That certainty and that mechanism are maturing as we get better quality data and more certainty around the costings, particularly as a result of the DE&S reforms and the developments within DIO. So we have quite a lot of checks and balances. Making that agile—

Chair: Forgive us if we are a bit cynical, but we are a Committee that looks at accounts rather a lot, and we are still scarred by the Department of Health's attempt to balance their budget in-year and take interesting decisions. How close to the wire do you get on some of those decisions? We have seen decisions in the past that mean that we have aircraft carriers with no aircraft—you can spend billions on something and then delay it or pull the plug. These can contribute to costs that are shoved to the right. How subtle and sophisticated is your model? Can you be candid with us about what is not yet worked through and working and where you need to be with that?

Louise Tulett: We try to avoid stop-go in-year—that is value destructive—and we try to aim at areas where we can squeeze better efficiency out, but they key thing is not to start the year with an optimism—

Q41 **Chair:** Squeeze better efficiencies out from the contractor? Once you get the contract, you do not have much room to manoeuvre there.

Louise Tulett: Indeed, but a lot of our cost drivers aren't through contracts. There is more to Defence than the equipment programme, so we do have other opportunities to control costs in-year by making sensible decisions. That is part of how the delegated model works—aside from the equipment programme, those who take the decisions that drive the cost are actually the individuals who will take decisions around where to train, how to train, recruitment, and so on. However, the key to not having to do those in-year interventions is to have a robust plan and programme at the beginning of the year and not to allow optimism or over-programming to creep in at the beginning of the year. That is very much how we try to run the planning cycle.

Q42 **Chair:** And you are confident—we have had this discussion before about the estate—that the commands will be able to hold back on that optimism bias. If you are responsible for your men and women going out—you can see the temptation, surely, General Poffley. Perhaps I will ask Louise Tulett first and then you can come in from the commands' point of view.

Louise Tulett: At the end of the day, that is how the TLB structure works. Whereas before perhaps we delegated control over the activity but not over the finance to the TLBs, they are now accountable for the financial consequences of the activity that they undertake. We have strengthened that through the Levene model. A clear challenge for head office is to be able to be sufficiently intelligent and have sufficient transparency over those decisions to ensure that we are keeping an equilibrium at the centre without trying to micro-manage what the commands are doing. That is in the normal tension that you would expect in an organisation that is running a devolved activity such as—

Q43 **Chair:** You don't micro-manage, but do you do swoop audits on commands?

Louise Tulett: Yes, we can deep-dive into particular areas. We have some capacity. The finance directors who work within each of the commands have a dotted-line responsibility to me and to the accounting officer. We hold the individual TLB holders to account: the Chief of the Defence Staff and the Permanent Secretary. They come in once a quarter, and we review where they are in the programme and the plan and ask those difficult questions.

Lieutenant General Mark Poffley: I would add a couple of thoughts. First, I think this is a maturing model, from the point of view of the commands. They are a year or so into the Levene reforms. What I can absolutely assure this Committee is that their ability to scrutinise individually their own requirements is now far greater than it was previously, when they would rely on the Ministry of Defence to do that.

Because they are living within their own means, they have all established bespoke committees which will look to drive down a requirement to cost and design accordingly. It also includes all the supporting functions that might support that one piece of equipment, so you are not seeing, as we might have done in the past, the buying of a piece of equipment without necessarily the support architectures to be able to operate it effectively. It is becoming a far more nuanced business, and the expertise is growing. Inevitably, it is not at its full capacity yet, I assess, but it is certainly 80% of the way there.

Q44 **Mrs Trevelyan:** You draw me on to exactly that question. I am not convinced that you have any high-level tools to be really comfortable that you are making holistically sound decisions that are both value for money for the taxpayer and will ensure the most effective capability options that the commands will need. We could look at the housing piece, for instance, which is causing so much stress that your retention risk is going through the roof.

Q5 I am really concerned that you do not have the tools you need to be able to look much longer-term than in-year, as is clearly required. We lost so many of our engineers in the great sweep-out 10 years ago. It was a tragically bad decision to allow them to go. You should have offered them something to stay. What tools have you got to oversee our long-term decisions? How are we going to make sure that we do not lose the middle tier of all our naval officers who need to train the next 10 years because they are walking away now? What financial management tools do you have at your disposal—or don't you; maybe you don't—to really be able to look at that in the round? Your Department is relatively unique in that sense, and I am continually concerned that you do not really have the tools you need to be able to look at that.

Lieutenant General Mark Poffley: Let me perhaps give you a view from the capability point of view, so that we can then roll that back into the financial considerations. As I mentioned earlier, we operate a document known as the "Defence Capability Assessment Register". That runs out two decades, and it assesses a capability aspiration against what we call lines of development. It deals with everything from its organisation, the doctrine, the people, the infrastructure and the training that might be needed to support it to, of course, in the context of today's discussions, the equipment. We make judgments there as to where we need to balance our spending ambitions into that 20-year horizon. We then map that back depending on the area that we are discussing. For example, in the equipment programme, we are looking at 10 years and programming our 10 years. Quite clearly, that is accommodated well inside that temporal envelope.

That is then taken into our financial considerations of the annual budgetary cycle, and indeed into the discussions that we might take into the Treasury on the comprehensive spending review settlement. It is a pretty candid document. It is inevitably classified, but it shows absolutely where we are carrying significant risk, and it then makes us, at Defence Board level, truly assess whether we are prepared to treat that risk or tolerate it going forward. Therefore, judgment is applied to that on an annual basis.

Q45 **Mrs Trevelyan:** Do you look back and decide whether you have got it right?

Lieutenant General Mark Poffley: We certainly review what we have not judged to be correct. Again, this is a document that has been in existence for about three years, and therefore we are living off our history from three years, rather than, ideally, 10 or 20. But in terms of the processes in place, again, I assure the Committee that I think there is a pretty robust assessment now of where we are carrying risk, and therefore of our ability to push that understanding into our financial calculations.

Stephen Lovegrove: The crucial process, which happens annually, is the annual budgetary cycle—it is called ABC 17, and it is coming to the end of discussion in the Department. Against the assessment of geostrategic risk, which obviously changes over the months and years, and against the background of the DCAR, which General Poffley was just referring to, the ABC process looks at capability and the financing available over the next 10-year period. It is a rolling 10-year exercise. It is signed off by the Defence Board, and it is something that the Chief of the Defence Staff, the Secretary of State and I pay absolutely intense attention to. It will set the marching orders for that period, but it will be looked at again in 12 months' time. The balancing act here is to ensure that the decisions are taken for the long term and remain stable, but at the same time that there is enough flexibility to be able to adjust when circumstances around you adjust. I haven't been in the Department long enough to say one way or another. I think it would be implausible not to say that occasionally mistakes and misjudgments are made.

Chair: That is an understatement.

Stephen Lovegrove: Well, every job I have ever done, both in the private and the public sector, has had that characteristic. We need to recognise that. Nobody has a perfect crystal ball, but is there a process that is designed to draw down from the much longer-range assessment of risk and capability to a medium-range assessment and then a much shorter-range assessment? Yes, there is.

Q46 **Mrs Trevelyan:** Can we look at one small example before we look at a wider area? For instance, the naval support that the carriers need full cruise has been evident for much longer than you have been looking at your new capability register, and yet we are having to park up ships to meet that capability need. That's okay if that's the balance, but the best use of our capital ships is in question if we are unbalancing the two. Is that the best value for money that we can achieve? You have been looking at it for years, and my concern is that we have not thought about it as closely as we might, in terms of increasing those numbers to make sure we can meet the needs that the Navy requires.

Lieutenant General Mark Poffley: I can give you the assurance that we are not parking up ships to man the two carriers. On the broader issue of how you distribute manpower across any of the three services at any one time, you have absolutely got to keep a very close eye on some of those specialist trade groups. I think the maritime sector is particularly stressed in this particular area of marine engineering and some other specialist engineers. That is not unique to the military or indeed defence in the round; it is a wider malaise across the UK and elsewhere.

We look at where there are pinch-point areas that we need to pay particular attention to. Again, I think it would be crass to suggest that we are going to get this right absolutely all the time. The key is to ensure that you have identified the critical skills and the critical people, who become really definitive for the delivery of that capability. The capability assessment register really brings that to life. It highlights where there are specific trade groups. There is then an issue about the volume of people inside the services and the civil service. If that became a factor, such that it meant you could not deliver your outputs in capability terms, the register is equipped to flag that up.

Has that gone wrong in the past? I think it is obvious to say that there are areas where it might not have gone as well as it should have. Do I think we are working hard to correct those anomalies? Yes, I do, and I think, by and large, we are in the right space.

Q47 **Philip Boswell:** I should first state an interest: a long time ago, I was an estimator for military vessel refits at Rosyth, so I have a little bit of insight into this type of thing. Not surprisingly, I am interested in the quality of costing assumptions within the plan, and I have a few specific questions. Much of the NAO Report lends itself to this issue, and before I go to each question, I will go through a specific paragraph. For example, paragraph 14 on page 8 says: "New commitments in the Review have considerably increased cost uncertainty in the Plan, with the number of immature cost estimates increasing. The stability of the costs in the Plan in recent years has reflected"—and it goes on to talk about project portfolio's relative maturity. It continues: "the Mechanised Infantry Vehicle have immature cost estimates, which"—not surprisingly—"reflect their early stage of development" and design. It also says: "Of the £24.4 billion of additional commitments in this year's Plan, £3.9 billion (15%) has yet to go through detailed costing at project level". Now, we all understand that that is a much higher risk and is much harder to estimate. Mr Douglas, what steps have you taken to ensure that the cost estimates of new and immature projects are not already falling prey to optimism bias, as has happened so often on projects in the past, such as the Astute submarines?

Tony Douglas: First, to reassure the Committee on optimism bias, the CAAS team—the independent cost-assurance service—is forecasting about £4.7 billion more than what is in the cost plan. It is important to note that that is balanced off by central contingency, which is in excess of £5.2 billion. I think, in many ways, that kind of reassures me that the independent cost assurance service is not coming up with a number that is south of an estimating line in that regard.

In terms of the commentary in the NAO Report, I fully recognise it and concur with the fact that there are a number of less mature projects at the moment that are not fully costed. Of course, that is the nature of any portfolio in which you have projects. They all have a start, middle and end, and at the moment, the profile of what is going through the machine, so to speak, has a disproportionate number of projects that are starting, as opposed to—

Chair: Yes, we get that. Mr Boswell asked how you are making sure you are watching.

Tony Douglas: In terms of how we watch it, CAAS publish monthly reports. They do it in the aggregate and the individual. That is the reason why I know that we are currently £4.7 billion above what we estimated in the budget. For me, that is a healthy tension that forces the process—because it is taut—to actually challenge down both contractual execution and the managing thereof. If we cannot, it is currently covered by central contingency.

Q48 **Philip Boswell:** That’s one point. Going back to what my colleague mentioned earlier, we talked about one issue and it has eaten up almost all of your contingency at this stage. The whole point is the removal of that headroom and flexibility that there was previously in the last budget. We understand the difference between contingency and headroom; none the less, wriggle room is wriggle room, and it seems to be reduced while highly cost-significant projects are still in the early define stage, in which there is an extremely high probability and risk of a high-impact cost increase; it almost never goes down in price.

Chair: I’m not sure we can think of a Defence project that’s gone down in price.

Tony Douglas: I know Louise wants to make a point, but for the avoidance of doubt, and back to the commentary within the NAO Report, which I concur with, this is a far tighter programme. Of that there is no question. That is acknowledged but also embraced, and it is important that it is a tighter Defence programme for that very reason.

Q49 ***Louise Tulett:*** I would suggest that there are certain mechanisms that recognise the immaturity of the costings we have, because of the immaturity of the programme. We have various decision point gates that we go through. At those points, we set a not-to-exceed price, and we are now getting into the process of actually trying to get the specification to be designed more pointed towards a price point, rather than we fund whatever the specification comes up with. We couple that with some more mature contract forms, which Tony in particular is working on, where we have pain share/gain share, so we are not on just a cost-plus contract. We are trying to mature the actual mechanisms and ensure that we are eyes on all the time, and then putting constraints around—

Q50 **Chair:** Do you have a benchmarking process? How do you benchmark big projects like this in defence? It is not the same as measuring something else.

Louise Tulett: Tony will speak better to this than I, but there will be reference cost data that is used to come up with a “should cost” as a benchmark against which we can then evaluate whatever industry is coming in with.

When programmes have gone through their main gate and therefore are into their manufacture stage, we also have quarterly reviews of the costing. The budget holder, the SRO for the programme and Tony’s project team leads will sit down and constantly look at that. Throwing more money at a problem when a problem starts to arise is not always the answer, as you fully appreciate, so we will look at whether we are carrying the right level of risk, but we will also look at whether we have actually over-specified in some areas and whether we can tune down.

Chair: Mr Douglas, do you want to add something? I also want to bring in Stephen Lovegrove. Which one of you wants to go first? Then we’ll go back to Mr Boswell. Mr Douglas, it seems to fit you best.

Tony Douglas: To pick up the point Louise mentioned, in terms of contractual form, we have for many years operated on many of our complex projects with a cost-plus commercial construct. We have been reforming that quite significantly. In terms of the major projects that are under contract at the moment, those are nearly all performance-based constructs, which have a target cost and an incentive structure, which is around a pain-gain formula. Once we have established the target cost, people are incentivised to beat it in terms of programme and cost performance, but they also wear the pain of it if they don't achieve the target in terms of time and cost. We believe this is particularly important in the maritime space. I concur with Mr Boswell, who has been an estimator in that environment. It is an environment that does not lend itself to project discipline that means it is as driven on schedule as it ought to be, and we are disproportionately resetting the clocks around that.

The final point in that regard is that there is a programme we will go to the market with this year where it will be quite clear that the primary selection criteria will be around price point and exportability. I use that simply as an example. All the other parameters that flow in terms of the technical requirements are of course essential, but right at the top will be the price point and exportability, as opposed to what was maybe the model in the past, where we would have got quite mature in the project lifecycle before we actually got to a hard estimate—to go back to the earlier question.

Chair: Mr Lovegrove wanted to add something.

Stephen Lovegrove: Just on the wriggle room point, I don't wish to labour it, but the headroom was not available to be spent on cost increases; it was there in order to be able to fund projects that were coming in the SDSR. That's one thing. The other point, which I think it is worth marginally expanding on, is that of course the NAO is absolutely right to say that there is greater uncertainty in early-stage projects, which are of less maturity. The 6% contingency that is held within the 1,000 programme is an average. It is the case that early-stage projects typically tend to have a lower estimated base cost, and therefore a greater level of contingency is held against them. As they go through identification, scoping, development and delivery, the base cost tends to go up a bit, because people have better information, and as a result the contingency level comes down a bit, so it is not, by any stretch of the imagination, a one-size-fits-all type of approach across these many different types of programme, at many different levels of maturity.

Q51 **Chair:** On that point, I want to bring in the Comptroller and Auditor General.

Sir Amyas Morse: I just want to raise the question of where you are on headroom and so on compared with, if I can generalise it, the recent, previous approach. I just want to be careful that we do not start trying to suggest that it is just the same level of prudence. I don't think you are trying to say that, are you? In other words, if I understand it rightly, and this Committee has heard a lot of detail about the past, there was an unallocated reserve, there was a whiteboard and projects did not go forward unless the funding was available—there was in fact a very prudent approach. This is not wrong, but inherently a step down from that, particularly as it is dependent on what you constantly described as very ambitious savings programmes, which to some extent—they are so undetailed at this point—sound quite like balancing figures rather than savings programmes at this stage. The question is: how soon will that stop being the case?

Stephen Lovegrove: Let me take those two quickly and then ask colleagues to comment. There is a difference, in that there is not as much room in the departmental budgets to look at new and different programmes. I don't think that anyone could pretend that that is not the case. The SDSR was very ambitious in terms of equipping our forces for the challenges for the coming decades. Is there less room for new kit? There certainly is.

I would not go along with the characterisation of the balancing item, but what I would say is that we have some very, very ambitious targets here, and we do not right now—admittedly at a relatively early stage of the 10-year programme during which they have to emerge—know exactly in all instances where we are going to get the savings, or exactly how or in what sequence we will get them. No, I don't think we do know that, and I want to be completely open about it. That would be my initial reaction, but others will have views as well.

Louise Tulett: I want to reassure the Committee that we do not allow projects to go forward unless we know that they are affordable. While the whiteboard mechanism existed to look at how we prioritised projects against the available funding, we still do that through our portfolio management techniques. The whiteboard mechanism predated the current maturity of the delegated model, where portfolios are managed within each of the frontline commands. We will not allow an investment to go forward if it is not affordable.

The headroom mechanism was particularly designed in anticipation of the spending review 2015 so that we did not silt up the future decisions space by taking some decisions on kit and equipment a couple of years into the lead-up to the spending review, which would have meant that the spending review—had it wanted to continue with those priorities that were eventually stated—switched off some programmes that were in flight. So it was deliberately there as a place marker, to prevent stop-go.

Now, obviously, we face a fairly silted up programme going into 2020, but the inevitability of the programmes that we have is that they are not ones that can turn on a sixpence—they are long-term programmes anyway. Unless something externally manifests itself so that 2020 is a complete about turn, then 2020 will be a way point and a refining point on a sense of direction that was set in 2015 to get us to the 2020s in the ambition for military capability.

Q52 **Mrs Trevelyan:** This is a stupid question in a way, but SDSR 2015 was set by the Department and agreed by Treasury on the basis that you were going to have to find these huge savings that you all say are "challenging"—the word keeps coming out of your mouths. So if something dramatic happens, God forbid, does the Treasury just shell out and give you what you need? Because you are right up against the buffers at the moment.

Stephen Lovegrove: We can always dream—

Q6 Mrs Trevelyan: But you're not the health service; you are the Ministry of Defence. If something happens, you really have got nowhere to go here. Is that what happens?

Stephen Lovegrove: If there is a sudden and very marked additional financial pressure laid on the Ministry of Defence, there are broadly only a couple of things that can happen. Either the Department takes a decision to stop doing something that it had previously committed to doing because it seems to have fallen down the priority list and everybody collectively decides that that is no longer going to be done, or there is a conversation with the Treasury to say, "Nobody could have foreseen this; we will have to see whether or not there are provisions that need to be made at a pan-governmental level that will allow for this to be made." Those are really the only two ways.

Q53 **Chair:** I'll turn to the Alternate Treasury Officer of Accounts. The Treasury is there as the backstop to bail out the MoD if anything big happens.

Marius Gallaher: I agree with what the Permanent Secretary has said. In that event, obviously they would have to talk to the Chancellor and the Prime Minister. We would hope that that would be rare and that the Ministry of Defence could live within the budget it has at the moment. That situation is exceptional.

Q54 **Kwasi Kwarteng:** Is there any reason in particular why you looked at a 10-year timeframe? Is that something that has always happened? Is there any rationale behind that?

Lieutenant General Mark Poffley: I am not aware of any bespoke reason. It has been ten years for as long as I can remember. It is not an inappropriate timeframe, although quite clearly there are some areas of capability development in which you genuinely have to look out 20 years if you are to see the investment decisions taken in a sensible timeframe. Nuclear submarines are the most extreme of those cases, where we are looking at a 2035-40 head mark.

The 10-year programme comes back in part to your previous question; it is appropriate because it is around about the three-to-five-year period before you could see material changes to the force structure of defence if you make a significant change in a strategic defence review, so there is always a lag in our ability to reconfigure the forces. It is an interesting timeframe because it allows us to do the proper amount of assessment and concept work—improving work—before going to a contractual commitment.

Q55 **Chair:** So 10 years seem to work.

Lieutenant General Mark Poffley: Ten years tend to work but that doesn't preclude us from looking out further where we need to.

Q56 **Philip Boswell:** There is one point I would like to make first in relation to something Ms Tulett said earlier about tightening up on the tools and monitoring that are used, in reference to CAAS.

Q7 On page 32, paragraph 3.22 and figure 11 show that CAAS did not look at all the early projects. In fact, it looked at 71% of the procurement projects in 2015 and even less, 60%, in 2016. So even in the safety net, there is a reduced certainty and reduced coverage. I will come on to something else about order of magnitude, drilling down to how you manage to get 6%—because it is quite admirable, if you will pardon the pun—when we go on to the T-26s.

Q8 I would like to follow through with the question on paragraphs 3.11 and 3.12 on page 29. Paragraph 3.11 says: "Costing a portfolio at the 50th percentile irrespective of complexity and level of maturity may not always be appropriate. This approach is not followed universally across government. For example, Network Rail costs its project portfolio at the 80th percentile." Paragraph 3.12 goes on to say that CAAS "does not consider it appropriate to cost all projects at the 50th percentile" and talks about specific issues. On that, Mr Lovegrove and Ms Tulett, doubts about the Department's costing of all projects on the same basis, irrespective of the level of risk and uncertainty, have been raised in previous NAO Reports. Why do you persist in it, despite the fact that the Cost Assurance and Analysis Service does not do so in a number of cases?

Louise Tulett: I will pick up on that 50th percentile point. It is the standard that we are currently still deploying. Given the nature of the programme, it is one where there are a lot of independent risks around that percentile point. It is deemed to be the most appropriate methodology. We are not alone in using it—I think Crossrail has used it and the Department for Transport and the Highways Agency use it. It is a statistical method that has served us fairly well in the past. It is clearly not perfect, but at least if we have that as the central tenet and standard that is used and if through the deep dives that we do on individual programmes we need to vary from that, we have a consistent baseline. If the alternative were that individual projects be done on a random selection of percentile points, clearly when we got into portfolio management we would have quite a lot of volatility that we would not understand. So we have adopted it as our policy, and at the moment we intend to stick to it.

The interesting point around that is how you then manage risks that begin to manifest themselves. A conversation that we are currently maturing internally is the best use of control and access to the risk inside costing and the risk outside costing through controls and access to the contingency pots, and how that manifests itself in this portfolio management, which is maturing under the Levene model.

Philip Boswell: Okay.

Louise Tulett: Can I turn to the 71% versus 60% issue? You are absolutely right, and ideally we would have liked CAAS to have assured a higher percentage of the programmes. If we look at what happened around the spending review 2015—we have a lot of immature programmes and that means many of them have fairly speculative costs attached to them at the moment. As we engage through the assessment phases and get deeper into the specifics of the specification and requirements for the capability, CAAS will have something more tangible that they can begin to assure. As we come out of the looser estimates—if I can use that expression—that we have at the moment, and into the tighter estimates, we would expect CAAS's penetration through that work to increase back upwards.

Q57 **Philip Boswell:** Before we go on to that, in paragraph 3.13 there might be a contradiction, so perhaps you can clear it up. There is a 3% overall contingency and a 6% built-in contingency.

Louise Tulett: Yes.

Philip Boswell: Can you explain the difference?

Chair: Which paragraph are you referring to?

Philip Boswell: It's paragraph 3.13.

Louise Tulett: Sorry, can you repeat your question? I couldn't quite hear it.

Philip Boswell: Can you tell us something about the two and explain the relationship between the 3% overall contingency and the 6% built-in contingency?

Louise Tulett: So, risk inside costing is the 6% and risk outside costing, which is what we hold as contingency, is the additional 3%. Collectively we have 9% held outside of the core costs.

Stephen Lovegrove: I believe the 6% effectively reflects the P50 number, so the extra 3% will take it further up to a higher P level.

Q58 **Philip Boswell:** Getting to the estimates themselves, you talk about a capital value process where you are going through the various stage gates and you have to get levels of certainty—you assuage all concerns, you move on and you have an order of magnitude at the early defined stage or select stage plus or minus 40%. As definition increases you increase certainty, reduce risk, mitigate against risk and close in on a potentially more accurate figure. But to get a 6% contingency on this type of spend? If it is an off-the-shelf procurement, contracts have variations, certainly in the services contract or anything to do with support, so I would expect a higher contingency than that—10% per cent would be as low as I would go. I want to know how you can get a 6% average on projects with an order of magnitude plus or minus 40%. Even if we got the definition as tight as we can on off-the-shelf products, I would always have 5% in there. How did you manage to get 6% and expect us to be comfortable with that?

Louise Tulett: I get the point. It is because we have an ambitious portfolio and what we are trying to do is insert fairly reliable price points in there, but we are also trying to—

Philip Boswell: Fairly reliable price—?

Louise Tulett: Price points. We are couching a costing envelope around each of the programmes. Clearly, in managing the development of the programme there are other places you could go in order to control the costs.

Philip Boswell: Ah, so is there contingency elsewhere?

Louise Tulett: No, not a financial contingency. You can begin to negotiate a lower spec and you can also vary your schedules. We should not see funding as being the only mechanism available to control the portfolio performance—

Philip Boswell: Quality and time.

Louise Tulett: Yes.

Stephen Lovegrove: Though that, of course, comes at a cost. Mr Douglas has done some analysis on how disruptive, occasionally, contract variation can be if it is not built in to the original contract structure, which is dangerous.

Louise Tulett: That was why we set the cost envelope very early and then tried to give that stability so that all expectations around how much funding was available were managed from the outset. During the assessment phase, as Tony articulated earlier, the price point was seen as quite firm so we could drive the behaviours within affordability.

Tony Douglas: I completely get your point, having, like you, lived in that world for some time. It is important to look at it from a P3M point of view: project, programme and portfolio. If it was just at the project level, on average 6%, like you, I would be worried. But when you come up in terms of programmes, with the overall portfolio of over 1,000 with 6% risk as an average, some are at the beginning and some are at the end—blah, blah, blah—plus another 3% to 9%, we are comfortable with that. When you then go all the way back down to the project level, some of them are into serious double digits because of the risk profile that they have got. Others are now in the ones and twos, because it has been retired. They are less complex and at the end of their project life cycle. For project level average 6%, I would be concerned. Portfolio level 6% plus 3% is appropriately challenging, which is a good thing.

Q59 **Philip Boswell:** I have a question to the end user and to General Poffley. How confident are the commands that these costings are realistic, especially since several billion pounds of review commitments are still rough estimates?

Lieutenant General Mark Poffley: Again, they are intimately involved. Indeed, they sit in on every one of the quarterly reviews that the DE&S goes through, so they see the figure work at source and they have an opportunity to challenge the project teams and the financiers in the DE&S on a three-monthly basis. So they are aware of them and of course they are then engaged proactively in the context of, "What do you need to do to adjust either the project or the programme more broadly?" on a routine basis. So I am confident they understand the risks they carry.

Q60 **Philip Boswell:** Thank you. The last point I want to make on this relates to NAO paragraph 3.5 on page 27, which is about the Type 26 global combat ship, which is the highest value non-nuclear procurement element in the plan. The NAO Report states: "The Review significantly changed the requirement, reducing the number of Type 26s from 13 to eight, the shortfall in ship numbers to be filled by the creation of a new class of frigate." It goes on to talk about two additional patrol vessels, and it states, "The forecast in the 2016 Plan could not fully reflect this change...due to the need for further refinement of the costings". One of the questions to be resolved is how the new class of frigate will be funded and the profile of costs of delivering the revised number of the Type 26s. Stephen Lovegrove and Louise Tulett, how is it that the costings for something as crucial to the affordability of the T26 frigate programme are so uncertain?

Louise Tulett: I can start off, but Tony might be closer to the actual detail on this at the moment. The Type 26 is perhaps not an example of a programme that we would want to replicate. We have learnt many lessons from that. One of the reasons that we have had to reduce the number of holds of the T26s is precisely in order to stay within a reasonable price point. That decision was not taken lightly. There have been delays through the programme, which have clearly driven price increases into the programme. That is exactly the sort of thing we are trying to avoid in future. Tony is absolutely in the throes at the moment of trying to secure the end game of the Type 26 in order that it displays all the good things that we would want and not the bad things of its history.

Q61 **Philip Boswell:** What is the cost of delay?

Louise Tulett: I have not analysed it in precisely that way. It will be quite material.

Q62 **Philip Boswell:** It is important. That is why we are here.

Louise Tulett: It is important, and we might be able to give you a note on that. It is just a very complex analysis. We have not just delayed it from one date to another. In that delay, we have the opportunity lost by also decreasing the number of vessels from 13 down to eight. Because of the delay in the programme, the OPVs were generated out of the same budget line. So there are quite a lot of moving parts.

Chair: For people watching, what are OPVs?

Stephen Lovegrove: Ocean-going patrol vessels.

Q63 **Mrs Trevelyan:** Was that because you had to pay a bill anyway to keep the yards open so thought you would use them?

Louise Tulett: That is because we had obligations under the terms of business arrangement with the supply chain, which meant we would have had liabilities if we had not done that.

Q9 Mrs Trevelyan: So in layman's terms, you were paying out money regardless of whether they were making something, so you got them to make something else.

Chair: I think Mr Boswell was making a good point. We would like to know how you broke down those costs, in terms of the delays and opportunity costs and the overall cost of having fewer vessels. The fact that the supply chain needed to be kept going regardless of whether we were getting the Type 26 is really crucial. In the note, if you could also say what you have now done to nail down those problems so that you are confident—which I assume you are—that it will not happen again, that would be helpful.

Q64 **Mrs Trevelyan:** And there is the benefit of mitigation of the OPVs, which otherwise would not have been built. There is a capability mitigation there, which is a good thing, in the round.

Louise Tulett: Absolutely.

Q65 **Philip Boswell:** Who is responsible for these delays? Is this decision entirely political?

Louise Tulett: Not to my knowledge. The delays have been driven by the contracting and costing dynamic that has been working.

Philip Boswell: Contracting and costing dynamic.

Louise Tulett: Yes. As we have gone through cost growth that has been experienced and reported back to the Department from the supply chain, where that has broken the affordability profile we have had to go back and put some specification changes in, in order to drive the schedule to an affordable level. That iteration has been more the mechanic of that dynamic of the funding and the contracting.

Philip Boswell: We talked earlier about the cost-quality-time triangle, economies of scale—you talked about the reduction from 13 to eight—and other potential buyers. I am familiar with the FPSO market. Brazil and India are potentially interested in this vessel too. One option that occurred to me, because of the facilities available in Brazil, is for the steel to be cut and the hulls to be constructed with two partners. Is that what will happen? Are we just going to get the refit in BAE Systems for the high-end weapon systems and the top-level fit-out, and the rest of it will be done elsewhere? Is that opportunity being looked at? Is that why we are waiting?

Tony Douglas: We are in a very advanced stage of contractual close-out with BAE Systems. We are forecasting to cut steel on the first Type 26 later on this year. As a consequence, as you will understand, I will not go into detail on that commercial close-out, but it will not be, as historically we have had, a cost-plus contract. It will be a target cost for each of the first three ships, which is batch 1. It will have a structured incentive programme that has a pain-gain formula, as I explained earlier on. That will give absolute clarity as to when certain things will happen against a hard target and how the cost is linked to it. The supply chain will, by definition of the construct I mentioned, be incentivised to try to beat that, as opposed to a cost-plus model; if I was on the other side of that, I would almost have incentivised myself to play it as long as I could.

That is a seismic change in commercial strategy. We are, as I mentioned, at the final stages of closing that out. It is consistent with the logic contained within Sir John Parker's national shipbuilding strategy, where it captures the benefits of economic and skills gain within the United Kingdom on Type 26. It will also act as a bridge in terms of our thinking for Type 31 and how we make that a more price-sensitive, exportable proposition.

Q66 **Philip Boswell:** From everything you have said, and by breaking it into a three-vessel procurement stage, this is a considerably higher item cost procurement strategy for the first three. Obviously you are reducing the risk or taking all the risks in country, if it is done here in the UK, but everything you have said on optimisation of risk, opportunity, equality and time mean that there would be the potential to look at alternative construction opportunities in the future, or why else would you go for the three?

Tony Douglas: In terms of a national shipbuilding strategy and Type 31, perhaps that would not be ruled out. For the avoidance of any doubt from the manner in which I have explained it, we have committed to a Type 26 build of which the first batch release would be three. There is a pricing logic that would have target costs for all of them. It is important that I qualify that for the avoidance of doubt. That is why we get the benefit, as you rightly point out, of managing risk over them all, getting hard and fast over the ones that are closest on the build sequence and managing the opportunity out of incentivising them to beat target.

Q67 **Philip Boswell:** Risk and opportunity. Understood.

Tony Douglas: Yes.

Q68 **Philip Boswell:** That takes care of most of my questions, other than this one, to Mr Lovegrove and Ms Tulett: will the revised costings put even more pressure on the affordability of the plan?

Louise Tulett: If they come within the current profile, no.

Philip Boswell: Simple question, simple answer. Thank you.

Q69 **Chair:** Can I ask you this, Ms Tulett? You talked about the planned savings. If you had a problem with the cost, there would be in-year cost reductions. If you are not meeting the planned savings, there should by corollary be an increase in cost reduction in-year. Would that be a fair way of measuring?

Louise Tulett: I am not quite sure I understand the point you are making.

Q70 **Chair:** You have got a big savings target. If those savings are not materialising, you said that you would manage in-year.

Louise Tulett: Yes.

Q71 **Chair:** You have this mechanism and all these things. The heightened level of cost reduction in-year would be a way of helping to keep the finances in balance. Presumably you are monitoring that.

Louise Tulett: Yes, we are. We dynamically manage the contribution that the efficiency programme, which is a cash-releasing efficiency programme, makes to the funding chain going into the new programme. If we do not make the efficiencies, we have to take fewer investment decisions, because there will be a shortfall of funding.

Q72 **Chair:** If you are doing that monitoring, will you be able to provide for us those cost savings annually, so that we can use it as a proxy to see how on track you are? One of the concerns that we have as a Committee is that in the past, we always looked at big defence projects when they have gone badly wrong and spent billions of pounds. We are trying to look at things much earlier. If you could provide us with some way of seeing those figures annually—

Louise Tulett: Yes, we certainly could.

Chair: An annual report to this Committee would be very helpful. That is great, thank you.

Q73 **Mrs Trevelyan:** Before I move on to the nuclear programme, perhaps you could clarify something for us, General Poffley. Colleagues have been concerned this week, following the grand statement in *The Sunday Times* that the Type 26s have got no weapons, it is all a disaster and there will be nothing on them. It is several years out, and I have no doubt that that is not the case—

Chair: We hope it is not the case.

Mrs Trevelyan: Indeed. It would be helpful for colleagues and the wider audience if you could explain what the real situation is.

Lieutenant General Mark Poffley: I, too, read the article, and I was surprised to see it written in the form it was, because it is not my understanding of where we are. Late last year, we chose to select what is known as a Mark 41 missile launcher for the Type 26 programme. That has been included in the design that we will cut steel on later on this year.

It is absolutely not the case that the Type 26 will be introduced with no weapons on it. It is already equipped with a Mark 41 launcher. It will of course come with a weapons system called Sea Ceptor, which is already programmed into the ship, so, again, I was surprised not to have that acknowledged. That can indeed launch from a Mark 41 launcher. It similarly has a 5-inch gun on the front, which as a soldier, I would not want to be on the receiving end of, for sure. It is already programmed to have both Merlin and Wildcat capability in terms of supporting those aircraft. We anticipate both those aircraft having a heavy and a light air-to-surface guided weapon as part of their inventory. With the Mark 41 launcher, we took a specific choice because it gave us a significant range of weapon systems that we could fire from it, including weapon systems that are already extant in our inventory, such as the Tomahawk land attack missile.

We have got a number in our complex weapons pipeline of programmed missiles that we will be looking to develop, such that they can be fired from the Mark 41 launcher. We will not select the weapons system that we will fire from that launcher until much closer to the point of its in-service date, which I remind the Committee is in 2026.

Q74 **Chair:** So, you are saying that that story was just completely wrong.

Lieutenant General Mark Poffley: I was surprised to see that story written in the form it was; I consider it to be wrong.

Q75 **Mrs Trevelyan:** That is very helpful. Moving to the nuclear programme, which is obviously a huge part of the Equipment Plan. We have discussed that there seems to be already the beginnings of a programme. In the past year it has gone up, according to the NAO Report, by £836 million already for the Dreadnought and Astute 10-year costings. That is already a slippage to the right in cost terms.

Q10 CAS are also saying that that is still an underestimate of something like £1.3 billion. You said to us that you have got a fair handle on the costs, but what we hoped does not seem to happening.

Q11 My first question is to Mr Douglas. Do you think you are going to have enough control over contractor performance and your pricing framework, so that that is not going to keep going as the programme becomes tighter and tighter in its development?

Chair: I would just alert members and witnesses that we are hoping to finish in the next half hour or so. If we could bear that in mind with questions and answers, that would be helpful. Mr Douglas.

Tony Douglas: I don't think there can be any doubt that the nuclear submarine programme is by far and away the most complex in our portfolio. At the risk of stating the obvious—*[Interruption.]*

Q12 Chair: Oh, Sir Amyas Morse! I have to name you.

Sir Amyas Morse: I am really sorry about that.

Tony Douglas: We will have to get out the charity box. We have Astute in the here and now and Dreadnought, importantly, going forward. Astute is a cost-plus model and is not one that is incentivised on a hard end date. It is fair to say that, given the complexity of the Astute programme, there have been many challenging quality-delivery related issues over its duration. Those that have impacted the critical path have, therefore, meant that the end date has moved out with the corresponding impact on cost, of which the overhead build-up of that is far and away the biggest number.

In some ways it plays back to the very good question Mr Boswell asked earlier about CAS estimating accuracy. You can price in risk but you can't price in unknown unknowns. To take Astute boat for example, the number that had it delivered to the original schedule was a reasonable number. Having seen things emerge over time, however, given the impact on lead time, that has clearly led to the sort of outturns that we now see. For me, the key question is: so what are we going to do about it?

Chair: Absolutely.

Tony Douglas: That is the question I pose myself almost, I guess.

Mrs Trevelyan: We like that. It is a very good way to run a Committee. Carry on.

Tony Douglas: There are two very important parts to my answer. One, if I just step forward to Dreadnought, we do not intend to let the Dreadnought programme with a cost-plus model. It will be consistent with the methodology that I have already described. It will be a hard target cost incentive programme. It will be fixed to time as much as cost.

We are involved in re-establishing that contracting methodology for boat 6 and boat 7, the last two within the Astute class. For that reason, we have got greater confidence, albeit it is important to restate the earlier point that this is a seriously complex programme environment and were unpredicted major quality-related issues to occur, there is not an awful lot of latitude in very small boat volumes in a particular class. That is our approach, and we believe it is absolutely the right one to adopt.

Q76 **Mrs Trevelyan:** That is helpful. You have got an acting DG Nuclear in post, and presumably you are in the process of recruiting a permanent person for that. I would be grateful to know how that is going.

Chair: Perhaps we can ask Mr Lovegrove.

Stephen Lovegrove: Yes, we are. In fact, we have been having interviews over the last couple of days on that. I am hopeful that once we have gone the appropriate approvals—No. 10 and so on—we will make an appointment in a very small number of weeks.

Q77 **Chair:** When you talk about appropriate approvals, is the Director General Nuclear paid above the threshold for which you have to get approval from the Treasury?

Stephen Lovegrove: We have already got permission from the Treasury to pay up to £200,000, which is above that number. Depending on the candidate, the expectations and all the rest of it, we may not have to use all that.

Q78 **Chair:** We would expect that they would be above the threshold, frankly. I do not want to go into who you have been interviewing, but when we were discussing this in advance, we wondered who would be qualified to be a Director General Nuclear, and how small a pool you are fishing in. Is it an international pool? I do not want you to reveal candidates, but how hard is it to get the right skills to do that very complex job?

Stephen Lovegrove: It is not an international pool, because the nature of the job is not merely to oversee the Government's financial interest in this, although to a certain extent that is the case. There are policy and security issues that could be fulfilled only by a British national.

Q79 **Chair:** And there were enough people to have a good list of candidates?

Stephen Lovegrove: We are confident of getting a good candidate. It may be worth just saying what is in the job, if you will bear with me for a very short period of time. Clearly, Dreadnought is in the job. Clearly, the Astute class and the successor to the Astute class is in the job. The decommissioning of the old nuclear boats is in the job. The atomic weapons establishment and the issues around the warhead are in the job. That, in its own right, is a very substantial set of projects. Plus there is the interaction with the other parts of the conventional force and the interaction with the Americans, because as you know we effectively operate our nuclear deterrent in a very holistic way with them.

It is a broad-ranging job. I should say that I expect the successful candidate to play an extremely active role in the general management of the MoD more broadly. It is not a stovepipe job; they are a member of the senior leadership team of the MoD. It is a broad job. There are a range of qualities that we will be looking for. It is a bit unlikely, frankly, that any single person is going to be able to tick 10 boxes out of 10.

Q80 **Chair:** But you are confident that it will be a matter of weeks.

Stephen Lovegrove: It will be a very small number of weeks, I hope.

Q81 **Mrs Trevelyan:** And once you have that person signed up, you can roll out the new submarine authority, which is effectively taking it out of DE&S and creating its own new framework.

Stephen Lovegrove: Certainly that will provide additional impetus to that process. In fact, we are doing that in parallel anyway. We have an interim chair in the form of Rob Holden, who has lots of relevant experience, some of which is from the Nuclear Decommissioning Authority—he used to sit on the board. We are looking with headhunters at some candidates for the CEO. Although the Dreadnought programme is going to last 35 years, I personally feel a real imperative to set up the institutions we are hoping to take it forward as soon as possible and as robustly as possible, as does Mr Douglas, to get us to where we need to be. We are trying to take them all at the same time.

Q82 **Chair:** What will it change, though? Will it be just structures changing, or will it actually change the way things are delivered?

Stephen Lovegrove: I think it is extremely unlikely that the kinds of approach that Mr Douglas has been outlining are all going to be thrown up in the air and reinvented by the submarine delivery authority. We are in a good starting position for this. The additional capability that it will bring will be a degree of focus on a set of projects which, if they were not to be managed very tightly, would have the ability to knock an awful lot of other things in defence out of shape, and we simply cannot afford for that to happen. So, in a sense, it has emerged from a series of conversations that we have been having with Treasury over a number of years, using some of the learning from the Nuclear Decommissioning Authority and some of the learning from Crossrail: all of those more bespoke entities that have been created for very, very, very large national projects.

Mrs Trevelyan: That is helpful.

Chair: I think Phil Boswell wants to come in on this point.

Q83 **Philip Boswell:** Specifically on cost, and exposure to the exchange rate, which we will be coming on to in the not-too-distant future, with the US dollar exposure, is it Lockheed Martin missiles again? Is it maintenance by the Americans? What are they doing? More importantly, what is the cost of the exposure in US dollars for the nuclear programme? That is the first question.

Chair: Shall we take that one first?

Stephen Lovegrove: I am afraid I cannot answer that question directly. I will pass over to Mr Douglas.

Chair: You are always going down the line. We cannot go any further than you, Mr Douglas.

Tony Douglas: I think—forgive me—there might have been two questions in one. One was specific to the nuclear programme and one was a broader forex point.

Chair: We will come on to the forex point.

Tony Douglas: In terms of forex on the nuclear programme and Lockheed Martin, it is all priced in sterling.

Q84 **Philip Boswell:** It is all priced in pounds?

Tony Douglas: Pounds sterling, yes.

Q85 **Philip Boswell:** How does that work? I won't go into the details.

Stephen Lovegrove: They take the risk.

Philip Boswell: They take all the risk.

Chair: Well done.

Q86 **Philip Boswell:** Let's go into that. Risk is never free. Has that inflated—

Tony Douglas: The price was set before Brexit. So the fact that they took the risk before we were devalued means that the risk is with them. It is a UK division of Lockheed Martin, so in terms of the way in which it operates when it translates and transacts back to a corporate set of accounts, it is only for a small proportion of the American nationals that that risk even crystallises. So in that sense it is a non-issue.

Q87 **Philip Boswell:** Fair enough. But I know that they are very early defined in any project; there are plenty of opportunities to recover in other areas.

Tony Douglas: It may not be explicit in the Report in terms of the Lockheed Martin part. That is in regard to the atomic weapons establishment. It is not on the Dreadnought programme. That is why there might be a bit of a—

Q88 **Philip Boswell:** Specifically, paragraph 3.8 talked about the accuracy of contractor-supplied data. We have heard how complex the project is. Several of the issues around the costings in nuclear enterprise involve the attitude and performance of the contractors. What can you do to exercise greater control over them? Earlier you mentioned incentives: plus and minus and fixed-price. How does that work, how are you tying it in, and what are you doing to mitigate the risks or your concerns of contractor-supplied data being inaccurate?

Tony Douglas: I will attempt to be brief, given that obviously it is an uber-complex programme and there are many mechanisms at play. On Dreadnought, we have a unified cost model. There is not a series of different cost models; there is one, and it is unified and an open book. So it could be independently assured by a number of different parties. That allows us to get into a conversation based on precise and specific sets of assumptions.

Of course, that cost model has evolved and matured over recent years. So, at a point in time we will fix the target cost for the first boat back to the target cost from which the incentive profile was struck. That will be against a cost model that will have not only that degree of maturity but that degree of transparency. There will be a series of subdivides then in terms of key milestones that are on the critical path, with a subdivide on the incentive. Again, you are incentivised to beat it, and if you do not, you actually bear a proportion of the risk. As was mentioned earlier, we are talking about a 30-year-plus programme and you cannot leverage it all to the end, because that will be a long time in coming.

Q89 **Philip Boswell:** You won't see it—it is staged time, because time is critical.

Tony Douglas: You got it.

Q90 **Mrs Trevelyan:** To wrap up on that, with the Dreadnought programme, do you intend to set up an alliance, in the same way as you have done for the Queen Elizabeth class, because it proved to be a very successful financial envelope? As well as an output.

Stephen Lovegrove: Yes.

Q91 **Mrs Trevelyan:** So who is likely to lead—BAE Systems presumably—in terms of the proportions of responsibility?

Tony Douglas: As PUS mentioned, the simple answer is yes. We have signed heads of agreement for an alliance that would sit under the direction of the submarine delivery authority, as a body that would govern an alliance. The alliance has a number of parties included in it, with that common cost model—that is a really important point. The learning from carrier is encouraging and it does show that where there is clarity on cost and, more importantly, on schedule, and that is incentivised, it can create a different behavioural pattern, as well as the hard commercial focus that comes from it.

Chair: The different behavioural pattern on the submarine.

Q92 **Mrs Trevelyan:** Will that take long to set up? Heads of agreement through to rolling it forwards can be a painful process.

Tony Douglas: We are in good shape with regard to the alliance.

Q93 **Mrs Trevelyan:** That is very encouraging. Just looking at the issues of currency risk, which the Report highlights fairly starkly, obviously buying in dollars is something that the Department had clearly got used to, so pricing in at 1.55—

Chair: To be clear, that is $1.55 to the pound.

Q94 **Mrs Trevelyan:** In 2012, when you started, that was your marker. The Report indicates that you have got 28 billion of US dollar spend and 3 billion of euro spend, and that the fluctuation is a dramatic leap and potential impact. Taking into account the hedging that is still with you, what do you estimate will be the actual level of the financial exposure that you will have? Both the F-35 and the P-8 are at a relatively early stage of development, so are you just hoping that the currency will settle? Can you increase your hedging on that position before you have to shell out on the bill?

Louise Tulett: We have choices, and you have highlighted two of them. We are protected; the reason why we forward buy, through the Bank of England and the Treasury mechanism, is to get budget certainty so that we do not have volatility in the forthcoming 24 months if we get forex fluctuation. At the moment we are in discussion with the Treasury about what we ought to be doing beyond our existing protection, which will expire during the ’18-19 financial year. So as we go into ’19-20 we will have to have done a range of things—come to some agreement with the Treasury whereby it will help—

Chair: Bail out.

Louise Tulett: Yes. Treasury would effectively fund for us any detrimental impact of forex should this current exchange be sustained through that period. The second option is for us, during the ABC 18 planning round—the one that we will get into quite shortly—to take programming action to remove equipment from the programme, effectively to remove the cost pressure to provide ourselves with the headspace in order to pay forex at the higher rates. Depending on the prioritisation of the equipment programme, that may or may not mean that we would reduce some of the programmes that are in forex; it might mean that we would reduce other programmes in order to afford the forex.

The third choice is that we could now decide—this is part of what we need to agree with Treasury—to continue the forward buy. Obviously, if we continue to forward buy for budget stability purposes at the current rate at some point, if sterling recovers, we will get caught with a loss. Given the volumes here, this would obviously be quite a material impact. It is something we are very proactively in discussion with the Treasury about, and we want to make sure that whatever mitigation is agreed is recognised and agreed with Treasury, as well as being something that MoD does. Clearly from a Government perspective, we drive quite a lot of the forex exposure for public spending in the round.

Q95 **Mrs Trevelyan:** There is a question as to whether the Department and/or the Treasury were negligent in not planning for what was likely to be an impact of Brexit. Rumour has it that No. 10 said, “Don’t worry; nothing will happen. Nobody do anything.” Regardless of whether that is true, a Department like yours, which has this big currency exposure—particularly US dollar—would surely be looking to pre-empt and mitigate risk before the instability that could be caused by such a big change happens.

Louise Tulett: We have not yet passed the point at which we can sensibly mitigate these risks. That is why we have the forward-buy mechanism. We are in that zone now where we need to take the risks around that, but effectively we are also trying to predict what the currency forex stability will be in the future. Have we plateaued, or will there be a recovery? That is the conversation we are in. I don't believe we have yet lost the opportunity to have a sensible, controlled programme, but we are in that zone right now where we need to do that for ABC 18.

Q96 **Mrs Trevelyan:** As new programmes come in—you have put the numbers in for 2012 and they are rolling forward—do you monitor currency exchanges? It went up to 1.70 in 2014. Are you continually monitoring your FX impact and taking advantage of those increases in relation to your 1.55 base level, or does the Treasury not really allow you to do that?

Louise Tulett: No, we don't speculate on forex. We only take out forward buys for budget certainty. We do not speculate with taxpayers' money on the foreign exchange market.

Chair: I know "Managing Public Money" doesn't allow the Department to speculate, but the Treasury can sanction some purchasing of dollars.

Marius Gallaher: I think the room for the Treasury to allow Departments to do such a thing is limited, and we would not want to go down that route, as much as possible.

Chair: It is in the "Managing Public Money" document. It is quite constrained.

Marius Gallaher: Yes.

Q97 **Chair:** But is a big-ticket Department like the Ministry of Defence not the one Department that it might be worth looking at?

Marius Gallaher: It is still early to make a judgment on what has happened since June.

Chair: Going back to the 2014 figure of 1.70 dollars to the pound—

Q98 **Mrs Trevelyan:** If you have big contracts based on 1.55 and you are seeing currency exchange going advantageously, does the Treasury not consider it worth thinking about that at that point?

Marius Gallaher: We don't want to speculate with taxpayers' money, and we take a very cautious view about doing so. If we did something like that and then it went the other way, we would be criticised. We take a very cautious view about speculating with taxpayers' money.

Q99 **Chair:** Does the Treasury ever do it, under the "Managing Public Money" arrangements? Can you think of an example?

Marius Gallaher: I am not aware of whether we have done so recently, but I think we would be naturally—

Chair: Cautious.

Marius Gallaher: Cautious about it.

Chair: There you go; there speaks the Treasury official.

Stephen Lovegrove: The fall in sterling since Brexit has obviously been sharp, and it may well fall into the category of event that Mr Boswell mentioned earlier. What happens if there is that kind of event? What do you do then? The debate is with the Treasury as to whether or not some form of relief or action can be taken at that central Treasury level, whether it is something for the Department to manage and whether it can do so without deleterious impacts on outputs? That is the conversation we are having.

Q100 **Mrs Trevelyan:** So you are in that conversation.

Stephen Lovegrove: We are in that conversation at the moment.

Q101 **Philip Boswell:** I have two quick points. First, it is not just Brexit, which we may as well touch on. It is the American situation and the Trump factor. Are we too reliant on the Americans at the minute? He talked about cutting the NATO budget from 70% down to 50%. He has now increased his NATO budget, but is it for the South China sea or Europe—all those questions and variables are in there, but the real one for me is this. He said that the F-35s were too expensive, and the US order was cut. Conversely, he accelerated the order and has asked Boeing to compete on one version of the Lockheed Martin F-35. But if that results in an order reduction—we have 40-odd of the envisaged 138 to further buy. Our version—even if it does not change in spec and we do not do anything about it—will have to go up in price, according to economies of scale. Are we too reliant on the Americans?

Lieutenant General Mark Poffley: If I were to make a comment from a capability point of view, I do not believe we are. We have a symbiotic relationship in many areas with our American colleagues. We share, and they value what we bring into their capability portfolio, almost in equal measure. Indeed, I would say we are probably on the right end of that transaction, if you think of it in those terms, inasmuch as what we provide is so valued that they give us an awful lot more in return. We have significant leverage into the American system. We need to be careful not to overstate it, but it is in niche areas which they value very highly. When you come to discussions about F-35, we have seen nothing that has materially changed our position as a result of the last five weeks or so.

Q102 **Philip Boswell:** Okay, on Brexit, we are already seeing an impact just from talking about it or agreeing to go out. What are the key big issues in Brexit: trade tariffs, skilled workforce, EU exchange rates? Is there anything beyond that? What are your big-ticket worries once we Brexit?

Stephen Lovegrove: Clearly, currency issues are important. I think the Ministry of Defence takes very seriously its role of supporting important sovereign capability in British industry, and the Government is very clear that industrial strategies will be a bigger feature of the future. We very much welcome that, and I think Brexit sharpens that requirement. We are working hard on it at the moment and putting quite a lot of effort into it.

Beyond that, for us and colleagues who may not be around this table, the biggest issues are in areas of policy: European capability, common security policy in Europe, where NATO fits in against more specifically European structures and so on. Those are quite profound issues. President Trump has talked about how he would like to see NATO develop and so on. That is the cluster of issues which, in terms of Brexit, probably occupy more of the departmental conversation than some of the other financial ones.

Q103 **Philip Boswell:** Would anyone like to add to that, or give us some take on the “America first” philosophy; on the volatility of decisions such as “Let’s cut this too-expensive F-35” and the impact that they can have? There will be other decisions. How does “America first” affect our relationship?

Stephen Lovegrove: Again, this is where we need to be careful not to become too binary in our analysis. Looking at many of our major programmes on both sides of the Atlantic and into Europe, it would be wrong to suggest that any one nation had primacy without being impacted by others. What do I mean by that? If you take many of our systems, such as the F-35, significant parts of that aircraft are built in this country. Many of the subsystems inside that aircraft have a British, and indeed a European and wider global, connection.

So there is a danger of trying to categorise most of these capability areas as purely one nation or another. The reality is that it is a far more complicated series of dynamics. This is where—dare I say it—the expertise of the DE&S comes to bear in making sure that we extract as much leverage out of our investment as we possibly can in the interests of the United Kingdom.

Q104 **Philip Boswell:** Yes, $28 billion spent is $28 billion spent, no matter how we look at it.

Stephen Lovegrove: Again, I think this is about how you ascribe value. Do I get $28 billion in return in a different way? I would be very surprised if we did not.

Philip Boswell: So it is about risk management.

Q105 **Mrs Trevelyan:** Can you help us on a technical matter, Ms Tulett? In terms of the foreign exchange risk, where will the bulge in spend be, both for the P-8 and the F-35, in terms of the time scale of risk that they are all having to plan for?

Louise Tulett: The impact will begin to bite in 2019-20, and then the programme, which has many variables—not just the F-35—will ramp up beyond that. The fact that that impact hits then is not only because of the maturity of the F-35 and some of the other programmes that we are doing with the Americans, but also because that is when the forward buy begins to decline. Back in the shop, I have charts that tell me where this is going to begin to bite, and therefore we know that we are getting towards the last safe moment at which we need to have a strategy to handle it.

Q106 **Mrs Trevelyan:** It would be helpful, if it is possible, to have a note to see that cash flow impact, so that we can be mindful of it and any support that we need to give the Treasury.

Q13 Just one more question. A lot of the US bill is air power stuff. If there is an FX hit to be taken, we cannot necessarily ask the RAF commands to take the whole bill. How do we share that bill out, if we end up having one?

Stephen Lovegrove: You are absolutely right. Foreign exchange risk is absolutely paradigmatically one of those things that is held at treasury level in the corporate sector. Obviously it is going be managed, to the extent it can be managed, at head office. To the extent it can’t be managed, there is obviously a level above that, which we mentioned earlier on.

Louise Tulett: We do not expect the RAF to handle that. The forex stability is provided from head office and we attribute the funding to them in order to keep their risk stable around this area.

Chair: I think the point has been well made to the Treasury, who are here listening avidly. We have covered quite a bit about coping with the unexpected, but Mr Boswell wants to cover off a couple of points on that.

Q107 **Philip Boswell:** Just a couple of quick-fire questions on the flexibility in the plan to cope with the unexpected. We have covered quite a lot of it in detail. The first one is to General Poffley. Given the instability in many places in the world, how realistic is it to plan on the basis that new requirements will not arise over the next 10 years?

Lieutenant General Mark Poffley: Quite clearly, we keep a very close eye on the shifts in the security environment, and I work very closely with our operational colleagues to make sure that we are looking not just into that longer term but at the short term. The key to this is making sure that we make a judgment about what threats are likely to appear in generic form, and then it is for the operational staff to make some judgments about how we apply the full structure.

Q108 **Philip Boswell:** So why did the command buy into a programme with such apparent lack of flexibility, given the nature of your business?

Lieutenant General Mark Poffley: If you were to look back at the Strategic Defence Review and the major headmarks of that review—principally the re-establishment of our ability to conduct maritime power projection and the return to a hard power capability as well as soft power—you could apply that force structure to most of the security scenarios you see in front of us today in equal measure as you could five years ago.

Q109 **Philip Boswell:** Thank you. Stephen Lovegrove and Louise Tulett, how do you know whether the contingency is adequate when the new commitments in the Strategic Defence and Security Review do not have a current CAAS estimate? This is going back to a point we covered earlier, but in terms of future—

Stephen Lovegrove: The point that Sir Amyas brought up earlier is relevant. Clearly, if we are to use the £9.5 billion headroom, it is not going to be available for new capabilities and new force. We have to recognise that, and it is understood. In terms of the contingency that we have, at least at central level—Mr Douglas has talked about the contingency that is held within the programmes—the contingency that we hold within the head office has been assessed by CAAS as being more than adequate to what they can see at the moment. Clearly, as I have said before, some of these projects are at a much higher maturity than some others, and over a period of time some of those assessments may change. As I have said, we will have to adjust depending on those cost assessments, the security environment—lots of different factors. This is a dynamic situation.

Q110 **Philip Boswell:** General Poffley, given the lack of flexibility that we see in the plan, its reliance on generating challenging cost savings and the numerous instances of cost pressure, how likely do you think it is that the Department will have to delay or reduce the scope of planned projects?

Lieutenant General Mark Poffley: Given that we have set a programme out and assigned some funding to it, I think there are inevitably going to be some areas where we have to make compromises. Do I think that is a profound problem throughout the Department? At this stage, no—but as I said, we keep that under an annual review. Inevitably, as the pressures that we have been discussing during the last hour or so demonstrate, you can’t rule that out going forward.

Q111 **Philip Boswell:** On that point, to Louise Tulett and Mark Poffley, do you have in place robust processes for re-prioritising projects?

Lieutenant General Mark Poffley: If I can start, the second major artefact that I look after is a thing called an output map, which absolutely sets down in precise terms what we expect each of the three services and the Joint Forces Command to deliver. We prioritise that, such that we don’t start a conversation about the highest priority item when we need to make some compromises in the programme. Again, that is refreshed annually.

Q112 **Philip Boswell:** Of course, and monitored. There is a lot to commend in what has worked well. The Department’s portfolio approach to managing its equipment, procurement and support plans provides assurance that its overall plans are affordable. So there is a lot to be commended in what is done. The recent NAO Report on the equipment plan has indicated overall stability. We are saying that, yes, things were not unknown and things became better known—we are just fearful that with this year's revision there is an inherent risk that the headroom is lost and the flexibility is lost to a degree, and that consequently it would be more likely that we will be seeing you again with supplementary estimates. If that is the result, how would the perceived lack of or removal of headroom sway our position on approving or otherwise the supplementary estimate? That would remain to be seen, but I don't think we would be positive.

Stephen Lovegrove: I would very much hope that we would not put you in that position. The SDSR 2015 set out a coherent capability and Equipment Programme to meet the challenges that the Prime Minister and the rest of the Government identified at that point. Those challenges have slightly shifted in balance, but they are still the same ones. They are the re-emergence of state-based threats; the prevalence of violent transnational extremism; threats such as cyber, where the blurring between state and non-state actors has become very problematic; and lastly the general undermining of the international rules-based order. All those things are still in play, all those things are still threats to this country and all those things were what the SDSR 2015 was designed to deal with. We do not have masses of extra headroom to be able to bring forward entirely new capabilities; we don't feel we need to bring forward entirely new capabilities. That assessment holds true. It is our job to manage this very complex programme within an adequate envelope and that is what we are committed to trying to do.

Philip Boswell: Thank you.

Q113 **Chair:** I wanted to touch on the wider issues of linking what you do at the MoD with the wider UK industrial strategy, particularly some of the recent programmes. I received a letter from the Secretary of State on 6 December 2016, in which he talks about the Government being committed to maintaining the UK's position as a leading aerospace nation. He highlights the fact that the Department for Business, Energy and Industrial Strategy is currently working on the UK's industrial strategy and assures me that the MoD is providing input into that work, along with Government Departments. Given what you have been telling us for the last couple of hours about the challenges in the budget, how high a priority is it to retain sovereign capacity and jobs in the UK as part of that wider UK capacity?

Stephen Lovegrove: It is a very high priority. Defence does not live in a bubble. We are very conscious of our responsibilities to the industrial base and many of the key issues that rely on that industrial base. So it is a very high priority—

Q114 **Chair:** But if it costs more and you think you can procure cheaper somewhere else?

Stephen Lovegrove: We will always feel that a cost-effective and cost-conscious British industrial base will be better positioned for international success. These are typically international businesses. We don't see a tension there. We are in intensive discussion with our colleagues in BEIS as to which spots we really want to pick on. Aerospace is a very obvious one. I do not think there is any doubt about that.

I personally have a concern, which I think I have expressed to the Committee before, that we need to think more pan-governmentally about nuclear skills. We have a civil issue as well as a military issue there. That is something that we need to think about. Clearly, we need to come forward quite soon with the Government's response to Sir John Parker's review on shipbuilding. There are a whole bunch of areas where we are intimately engaged and keen to get the right answers.

Lieutenant General Mark Poffley: Again, from my side of things, I think you can be reassured. In Sir John Parker's work, we were intimately involved in providing commentary. Indeed, we are now looking to try to shape the response of the Department. It is increasingly the case that we look at the industrial implications. If you think of that being the source of our lead times to deliver a piece of capability, then if we do not understand our supply base, we are in for a shock at some point in the future. For me, it is about retaining sovereign choice and operational advantage, such that we never enter a fair fight. You can probably see a uniform in the last bit of that; the first two bits of it will almost certainly be commercial and civilian colleagues right the way through our industrial base.

Q115 **Chair:** That brings me to the P-8 Poseidon aircraft, which was bought from the US under a Government-to-Government contract. What is interesting is that the Single Source Regulations Office does not deal with those contracts. How can you be sure, first of all, that you are getting value for money in a contract that is not going through the Single Source Regulations Office?

Louise Tulett: We would look very carefully at reference costs around that. Clearly one of the advantages of buying from some of the supply chain that is not sovereign is that we are not going for bespoke capability. If we are buying off a production line, we get economies of scale. It is not necessarily bad news if we do that.

Q116 **Chair:** So you basically do some sort of benchmarking?

Louise Tulett: We would do some benchmarking and reference cost data, and we would expect DE&S colleagues to be bringing that forward as part of the approval process.

Q117 **Chair:** One of the key things is that this effectively replaced the Nimrod, which had been decommissioned before the P-8 came in. When you were looking at that procurement, did you look at the British capability that could be built on to that, both in support and in weapons used, so that the British supply chain had some protection while the major part of it—the aircraft—was being built in the US?

Tony Douglas: To go back to Louise's earlier point, we had—it was through, as you rightly say, US foreign military sales—access through other nations at every price point on pretty much every aircraft that has ever been delivered. Consequently, the transparency of that was of the highest order. We entered into an agreement where we club-bought a batch with the US and the Norwegians. We got leverage as a consequence of volume that ordinarily we would not have been able to achieve on our own. That is why we know we have got absolute best possible value on that particular platform, which is, after all, based on a commercial 737-800 airframe, which is the most voluminous in the skies today. All the economics that benefit from that solution, particularly in the operational space, were available to us.

Without going into unnecessary detail, there is significant UK content on the aircraft that we have bought. That will also move into the way that the infrastructure is provided at Lossiemouth, which has got a rather sizeable component to the overall investment in it.

Q118 **Chair:** You say that, but when the Secretary of State wrote to me, he said: "The value of this investment in the UK supply chain is estimated by Boeing to be in the region of $4 million per aircraft." I think I am right in saying that the aircraft cost about $150 million apiece. Is that right?

Tony Douglas: I think the first number is appropriate but on the low side. The second number is inappropriately high.

Q119 **Chair:** All right. So it is less. Okay. But still, even if it is less than $150 million—can you give us an idea of the cost?

Tony Douglas: I wouldn't be prepared to go into commercial detail.

Q120 **Chair:** Okay, but £4 million for an aircraft that is costing many more millions is still a relatively small percentage for the UK supply chain.

Tony Douglas: Indeed. It is a Boeing 737-800 as a base airframe.

Q121 **Chair:** I understand that when the Indians bought P-8s, they got 30% of business in India. Is that right? Have you benchmarked that?

Tony Douglas: I have absolutely no idea what the Indians got by way of work share.

Q122 **Chair:** Okay. Perhaps we might even find a way of checking that. The question is, do you aim for a percentage of UK content when you are buying Government-to-Government? On this Committee and elsewhere, we often see that when another country buys something, they manage to retain a lot of capability in their own country, even if they have bought overseas. How can we be sure that you are really working to do what Mr Lovegrove has said is a mission of the Department—to make sure we are preserving that sovereign capability and the skills that might well be applicable in other areas of our industrial strategy?

Tony Douglas: It is a key procurement parameter. It is absolutely at the top of the list in terms of selection criteria, particularly given the forex exposure we were talking about before, which promotes it higher than it ever was in the past. There are a number of really good examples of that. We were talking about F-35s earlier—there is 11% of that particular airframe. In October last year, we won for the UK the maintenance, repair and overhaul facility for the whole of Europe for the avionics suite, which is a massive high-end technology win for the UK. That will be carried out in north Wales. It is a big part of the agenda. It goes without saying, however, that if we are at the small volume end of pre-existing developed programmes, it is very difficult to go in and say, "Do a redesign in order for us to be able to get a slice of the work share." It simply isn't economic in that fashion.

Q123 **Philip Boswell:** A very short point. We have heard that there is significant British interest in American equipment, but I would not say that 5% is significant; 30% is significant. I think there should be a careful use of language.

Tony Douglas: I would like to qualify my language, then. It is in a ratio of 138 aircraft, as the total forecasted build by Lockheed Martin.

Q124 **Philip Boswell:** So a small amount of a lot of planes.

Tony Douglas: We have got a small percentage of all of them. That is significant.

Q125 **Philip Boswell:** Including sales outside the UK?

Tony Douglas: The 11% we have got on the F-35 is on every F-35 built.

Q126 **Philip Boswell:** That's 11%?

Tony Douglas: Not just the 138 that we are procuring.

Philip Boswell: That's kind of significant.

Q127 **Chair:** Can we get back to the P-8? The UK's Sting Ray torpedo is not going to be incorporated into the P-8. Is that right?

Tony Douglas: That is correct.

Q128 **Chair:** And what about the sonar buoys? To people who don't know this, they are disposable sonars dropped into the sea to detect submarines, and they transit details back to the aircraft.

Lieutenant General Mark Poffley: We are still looking at what we are going to put on to the aircraft, in terms of both weapon fit and sonar buoys. It is absolutely the case that there will be sonar buoys. This country is a leading manufacturer of that sort of technology. I don't want to prejudice where we get to in terms of those negotiations.

Q129 **Chair:** Storm Shadow cruise missiles?

Lieutenant General Mark Poffley: We are certainly looking at a series of weapons to go on to them.

Q130 **Chair:** We are not technical experts, Mr Boswell excluded, but if I am manufacturing the Sting Ray, the aircraft—the P-8—is manufactured by the Americans, and the UK Government buys it off the shelf, how easy is it for the supply chain to change what it needs to change to ensure the British-manufactured existing weaponry will fit the new off-the-shelf aircraft? Is there a risk there?

Lieutenant General Mark Poffley: There is clearly a technical solution that would be required to make sure you have integrated a weapon to a platform.

Q131 **Chair:** And the MoD will have to pay for that adaptation.

Lieutenant General Mark Poffley: That would quite clearly be included in the discussion about whether it was a good value-for-money proposition.

Q132 **Chair:** Right. So, on the face of it—as a laywoman in this—it would be cheaper and easier to buy what the Americans provide to go on as their weaponry for the aircraft that is designed to fit the P-8 originally.

Lieutenant General Mark Poffley: It may well be that some of their technologies might not necessarily be the highest end and might not necessarily service our requirement. May I also make the point that there are many countries around the world that use the United Kingdom as a reference customer? That therefore offers significant opportunities for us in broader export campaigns depending on the choices we make. All of that comes to play into these sorts of discussions.

Stephen Lovegrove: Indeed, as well as what constitutes sovereign capability. Clearly, not all military kit is important.

Q133 **Chair:** No, but equally you have bought this without the Single Source Regulations Office looking at it because it is Government-to-Government, so there is a cost-saving. Then you may need to buy British-manufactured weaponry to fit to it, but the refit—the joiner—will potentially cost more money. So do you then go back and look at the cost-effectiveness of buying off-the-shelf?

Lieutenant General Mark Poffley: Again, there is a real danger that we'll look at one platform. If you look at our complex weapons pipeline, for example, you see that we are looking for an ability to take one weapon and apply it to lots of different systems through the capability inventory. That is really the heart of the complex weapons pipeline, and therefore when we procure we are looking to, wherever possible, have things called open architectures where you can plug in and play in an appropriate—

Chair: Similar to IT.

Stephen Lovegrove: Clearly, there is a balance of different things that one needs to weigh up. There is sovereign capability—do we need it? There is cost—can we drive it down? Perhaps most importantly of all, is this the best kit that our forces need to be able to do the job? If the sonar buoy is not capable of picking up the things we want it to pick up, that is not a good investment for us. In all these cases we are trying to work out what the right answer is against those and a range of other criteria.

Q134 **Chair:** Going back to the wider industrial strategy and jobs in the UK, in his letter to me the Secretary of State talked about an in principle agreement with Boeing Defence UK that will see Boeing invest in Poseidon infrastructure at RAF Lossiemouth. It goes into a bit more detail and says that this on its own will create in the region of 100 new jobs, but it is still an in principle agreement. I understand that when the Scout vehicle contract—an older contract—was let, General Dynamics promised 10,500 UK jobs. How rigorous are you about ensuring that when these agreements and decisions are made you push for the right number—hopefully the maximum number—of UK jobs where that is possible, and that we are not being rolled over by the Government or organisation you are purchasing from?

Lieutenant General Mark Poffley: It is certainly a factor in our conversation about a particular investment decision. Let us just take the conversation about Scout as it was, or Ajax as we know it today. There was a strong conversation with General Dynamics as to whether the contract would be let, and there were certain conditions that there needed to be a degree of onshore work. That work is now being conducted—programmed to be—down at Merthyr Tydfil. Absolutely, it is part of the conversation, because inevitably this is where we rely on the commercial experts in the DE&S to apply the greatest leverage we can on price and in terms of advantage to the United Kingdom more broadly.

Q135 **Chair:** Perhaps this is not for Mr Douglas but for Mr Lovegrove, as Permanent Secretary and one of the accounting officers across the whole of Government. Do you look at the tax take from the jobs that are created? Defence and aerospace jobs are generally well paid and there is a good tax take. Is there any calculation of that as you try to argue the case within the Department and Government?

Stephen Lovegrove: Impact assessments do typically take account of tax take, though in this particular Department there are many others things at play, so that may be trumped at the end of day. But yes, the impact is—

Q136 **Chair:** We have sat in this Committee room in the past and had an acknowledgment that occasionally the Cabinet has decided, when it is on the margins, to go with a decision that creates jobs in the UK. I assume that would be a political decision that would override you as an accounting officer.

Stephen Lovegrove: That would be a policy decision, which we would obviously recognise. The impact assessments obviously take account of a range of factors and are not as narrowly limited as some commercial decisions that might be taken in the private sector; they try to capture broader

Q137 **Chair:** Thank you. The Comptroller and Auditor General wanted to come economic effects. We go along with the rules in that.in.

Sir Amyas Morse: Just on exports. I thought I heard you say about the Type 26, Mr Douglas, that one of your priorities was exporting. Did I hear that correctly; did I hear that comment?

Tony Douglas: That was in reference to the fact that after Type 26, the parameters that we would set around the next platform would be price point and exportability at the top of the list.

Sir Amyas Morse: I just wanted to check where you were on that as far as Treasury whole costing rules are concerned. If you manage the cost of a programme by cutting whole numbers, that drives cost into the remaining halves, doesn't it? Does that make it difficult for you then to export at a reasonably competitive price, or do you have some new way of dealing with that?

Louise Tulett: We are looking at a class of five on the 31s, but what we are trying to do at the beginning is to design exportability in at the outset. What financial arrangement would come around the IP and so on, we have not yet bottomed out.

Sir Amyas Morse: Okay, but if you are forced to recover a proportion of the full design cost and you have cut back on the size of the class, that makes it difficult to be competitive in world markets, doesn't it?

Louise Tulett: It will make it difficult, and that's part of the challenge that we are taking on.

Tony Douglas: There is clearly a challenge there. The balance to that position, though, is this. If the initial brief was researched around an international price point and the initial brief, therefore, was about looking at a potentially bigger market—so you're designing to an exportable position—you have the opportunity to mitigate the problem that you quite rightly describe. It is for that very reason that we are intending to go to the market with a competition, which will be headlined by providing technical and commercial responses to not only the functional requirement set, but the price point and the exportable profile that it would generate in order to give an option for a larger batch size.

Chair: Thank you very much indeed. I think Mr Boswell summed it all up in his comment earlier about how things had gone badly wrong in the past. We have seen some major improvements in how the MoD manages its equipment plan, but we have a nervousness, which I think the NAO reflect in their Report, which is an agreed report. But you are on top of what you are doing, so the question will be whether you are there long enough, Mr Lovegrove, to reap the reward or take the blame if something goes wrong. We're glad you're not going in the next couple of weeks at least. No such luck!

Stephen Lovegrove: No, I'm here for the duration, I hope.

Chair: Thank you for your time. The transcript will be up on the website in the next couple of days. Our report on this will not be out now till after the Easter recess. I can't give you a precise time, but of course we will send you copies of both. Thank you very much for your time.