



Ministry
of Defence

The Defence Equipment Plan 2015



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List of abbreviations

ABC – Annual Budget Cycle
ABSV – Armoured Battlefield Support Vehicle
CMM – Common Anti-Air Modular Missile
CAAS – Cost Assurance and Analysis Service
CBRN – Chemical, Biological, Radiological and Nuclear
DE&S – Defence Equipment and Support
EPP - Equipment Procurement Plan
ESP - Equipment Support Plan
FASGW – Future Anti-Surface Guided Weapon
FLAADS – Future Local Area Air Defence System
FLC – Front Line Command
GMPP – Government Major Projects Portfolio
ICE – Independent Cost Estimate
ISS – Information Systems and Services
ISTAR – Intelligence, Surveillance, Target Acquisition and Reconnaissance
JFC – Joint Forces Command
MMCM – Maritime Mine Counter Measures
MOD – Ministry of Defence
MPA – Major Projects Authority
MPR – Major Projects Report
NAO – National Audit Office
PR 12 – Planning Round 12 (financial year 12/13)
PDG – Programme Delivery Group
QRPC – Quarterly Review of Programme Cost
SEPP – Submarine Enterprise Performance Programme
SSPR – Single Source Procurement Reform
SSRO – Single Source Regulations Office
WCSP – Warrior Capability Sustainment Programme

The Defence Equipment Plan 2015

Foreword

I am pleased to place in the library of the House the annual publication of the Defence Equipment Plan. Building on the progress outlined in the previous three equipment plans, we again have a stable and realistic programme of work that sets out a strong foundation on which to shape the future construct of the Armed Forces in the forthcoming Strategic Defence and Security Review.

We continue to plan for the future with confidence. The summer budget announcement outlined the Government's commitment to grow the Defence budget by 0.5% above inflation. This will enable us to fulfil the commitment to grow the equipment budget by 1% above inflation year on year and to invest more than £160bn on defence equipment and support over the next ten years. This document sets out our plan, pre-SDSR, to spend £166bn on capabilities the Armed Forces need over the ten-year planning period out to 2024-25.

The equipment plan will be published in parallel with the NAO's independent assessment into both the Equipment Plan and also 17 of the MODs largest projects known as the Major Projects Report. I welcome the NAO's view that there are indications that the Equipment Plan will remain affordable for the rest of the Parliament if financial stability is maintained. Supporting this, the Major Project Report saw a fall in the reported cost of the projects for the second consecutive year. There are still improvements to be made in the ways that Defence procures and supports equipment, which the Defence Equipment and Support transformation programme and the establishment of the Single Source Regulations Office are seeking to address, but it is reassuring that the NAO acknowledge the continued progress we have been making.

Throughout Annual Budget Cycle 2015 the focus was on ensuring the continued stability of the Equipment Plan, and ensuring that the levels of capability and financial risk were balanced. The Equipment Plan demonstrates that we achieved this, giving a stable baseline as we enter the Spending Review and SDSR.



22 October 2015

Philip Dunne MP
Minister for Defence Procurement

Section A: Defence Equipment Plan 2015

Summary

1. This is the fourth annual published summary of the defence equipment plan. It sets out the defence equipment budget and forecast expenditure plans to deliver and support the equipment the Armed Forces require to meet the objectives set out in the 2010 National Security Strategy and the Security Defence and Security Review (SDSR). It covers the period from 1 April 2015 to 31 March 2025. In line with our commitment to transparency and assurance, the National Audit Office (NAO) has again reviewed our plans in detail. They have carried out an independent assessment of the robustness of our financial data and affordability of the forward equipment plan, as they have done for the previous three equipment plan statements. In Section A we describe the overall equipment plan; Section B sets out the areas in which we are continuing to improve our processes; and Section C sets out the areas where we currently plan to spend the equipment budget over the next 10 years.

Equipment Budget

2. The data summarised in this report, and reviewed by the NAO, is correct as of the end of the Department's Annual Budget Cycle 2015 (ABC 15). This was finalised in April 2015 and covers the ten year period from Financial Year 2015/16 to 2024/25. It does not take into account the conclusions from the SDSR or the Spending Review 2015. The Defence budget has been agreed with the Treasury up until 2015/16 as part of the Spending Review settlement in 2013. The Government has committed to continuing to fund the equipment budget at 1% above inflation until the end of this Parliament. For internal planning purposes we have assumed that the budget will continue to increase at this rate for the remaining years of ABC 15. Any change in inflation or foreign exchange assumptions will be managed centrally.

3. The total ten year budget for the equipment plan at ABC 15 is £166bn. The table below shows a comparison of the budgets at Planning Round 12 (PR 12), ABC 13 and ABC 14.

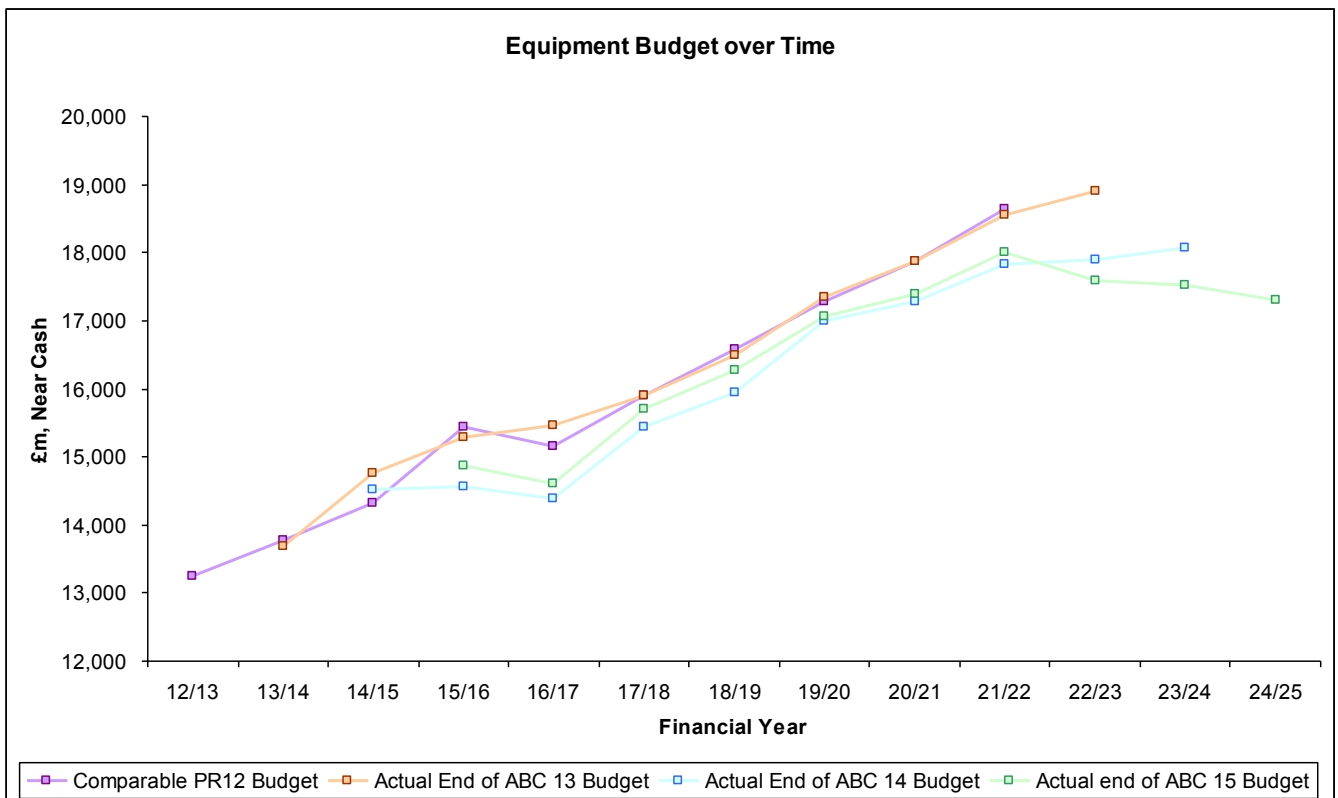
Figure 1 – Equipment budget over time

EP Budget	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	Total
PR12	13,240	13,779	14,324	15,431	15,157	15,898	16,575	17,273	17,884	18,633				158,194
ABC 13		13,688	14,758	15,295	15,472	15,897	16,501	17,348	17,884	18,559	18,914			164,297
ABC 14			14,511	14,566	14,381	15,434	15,939	16,987	17,283	17,822	17,887	18,074		162,885
ABC 15				14,880	14,600	15,714	16,277	17,059	17,397	17,996	17,582	17,532	17,314	166,352

4. There has been a small increase in the overall size of the equipment budget, driven in the main by the effect of the roll forward. The roll-forward is the movement of the ten year window by one year to the right; the new year in the plan (2024/25 in ABC 15) is generally significantly higher than the year that drops out (2014/15) because of the impact of inflation assumptions across the planning period.

5. A like for like comparison of the planned budget for the equipment plan at the end of PR 12, ABC 13, ABC 14 and ABC 15 is shown in the graph below. This illustrates the impact of the efficiencies the Department is delivering in the equipment support element of the budget that occurred during the ABC 14 process and the otherwise stable nature of the plan. The fall in the last three years of the plan is where we have chosen to hold funding centrally that has not yet been allocated to the equipment plan, allowing us to maintain as much financial flexibility as possible ahead of the Spending Review. Once the implications of the Spending Review outcomes are understood, the budget in those years will be amended to reflect a more realistic profile.

Figure 2 - Closing position of budget at PR 12, ABC 13, ABC 14 and ABC 15

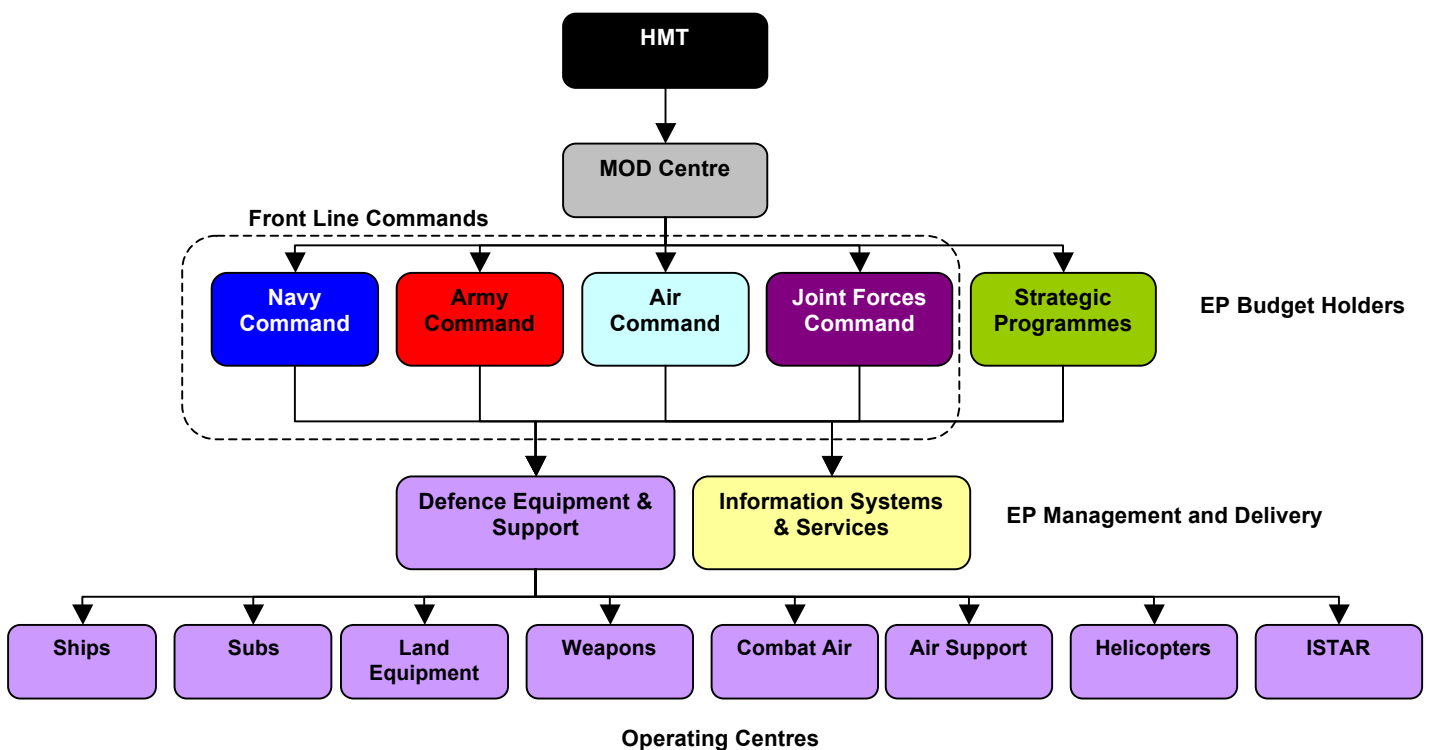


6. Whilst the defence budget is allocated from the Treasury to the Department, the introduction of the delegated model in April 2013 means responsibility for managing the bulk of the equipment budget has been disaggregated from the Head Office to the Front Line Commands (FLCs)¹, in line with the principles of the Levene Report. The delegated model gives the FLCs the flexibility to adjust spending priorities to the areas they consider most critical for the delivery of output needed to meet the requirements of Defence.

7. In ABC 15, Joint Forces Command (JFC) took on responsibility for delivery of Information Systems and Services (ISS). The diagram on the next page shows how the budget flows in the delegated model.

¹ For the purposes of this document, Front Line Commands includes the Royal Navy, Army, Royal Air Force, Joint Forces Command, and the Strategic Programmes directorate which is held within the MOD Head Office.

Figure 3 – Budget flow in delegated model



Equipment Costs

8. In contrast to the equipment budget, which is allocated top-down, the cost of the equipment plan is built up from cost forecasts generated by individual project teams who have responsibility for delivering the projects within approved time and cost parameters and delivering agreed performance criteria. Project teams produce these cost forecasts using quantitative risk analysis to model the range of cost outcomes for projects. The cost forecasts are made at the 50 percent confidence level, which means that there is estimated to be an equal chance of outturn costs being above or below the forecast amount. In the first instance, any variance between the forecast cost and issued budget is for the responsible Command to manage.

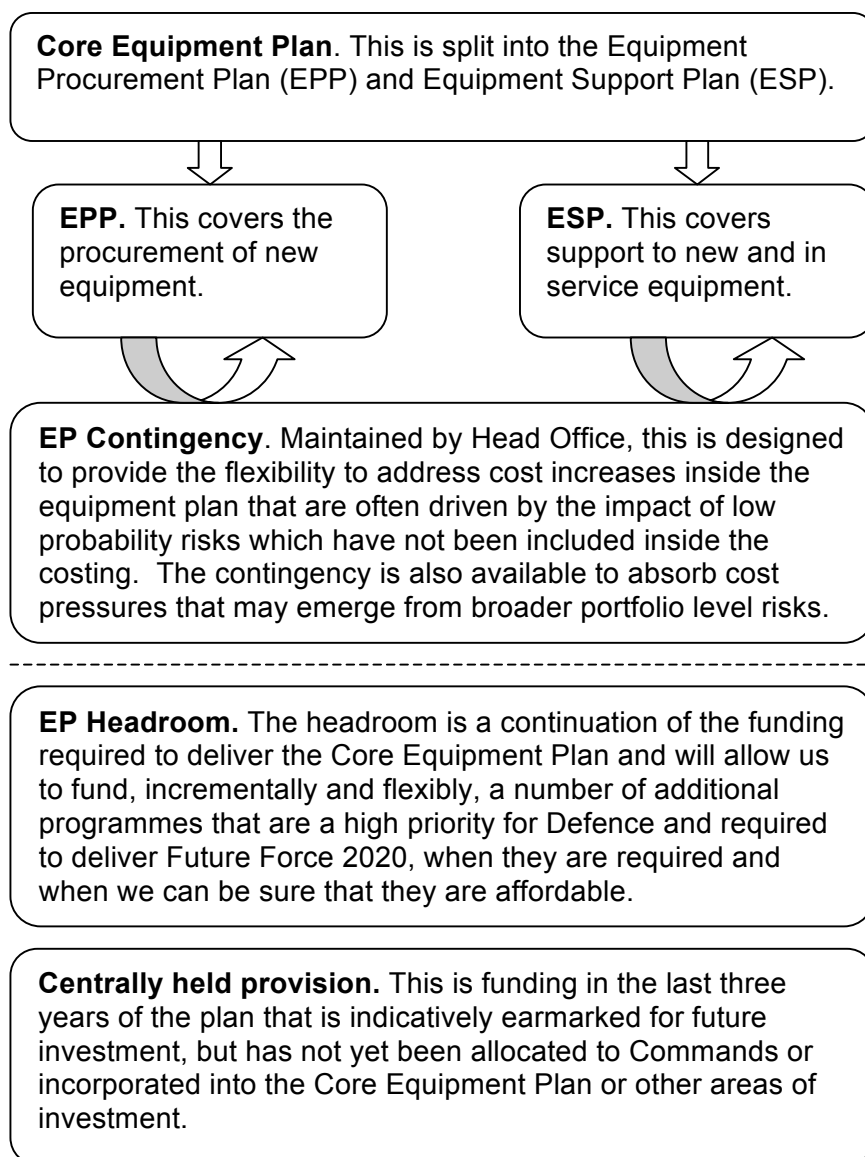
9. Defence Equipment & Support (DE&S) and ISS are continuing to run the Quarterly Review of Programme Cost (QRPC) processes, first introduced during ABC 13. These look at any significant cost movements in the equipment plan during the previous quarter to provide assurance that current costings are taut and realistic. Each QRPC is followed by a Quarterly Customer Review where FLCs have the opportunity to review programme performance and costs. This governance mechanism ensures that the cost of every

project in the equipment plan receives assessment and oversight at senior level. The Reviews include consideration of in-year spend to date and of the level and profile of risk funding held within the projects in the FLCs portfolio.

Equipment Plan

10. The Defence Equipment Plan is made up of a number of different elements, which are shown in the diagram below.

Figure 4 – Constituent elements of the equipment plan



11. **As of the close of ABC 15, over the next 10 years the Department plans to:**

- a. **spend £68.5bn on the procurement of new equipment.** This is broadly unchanged from last year's figure of £68.9bn. Currently the procurement

plan drops off in later years as programmes deliver, driving a small decrease. This will change as headroom is drawn down to fund additional programmes.

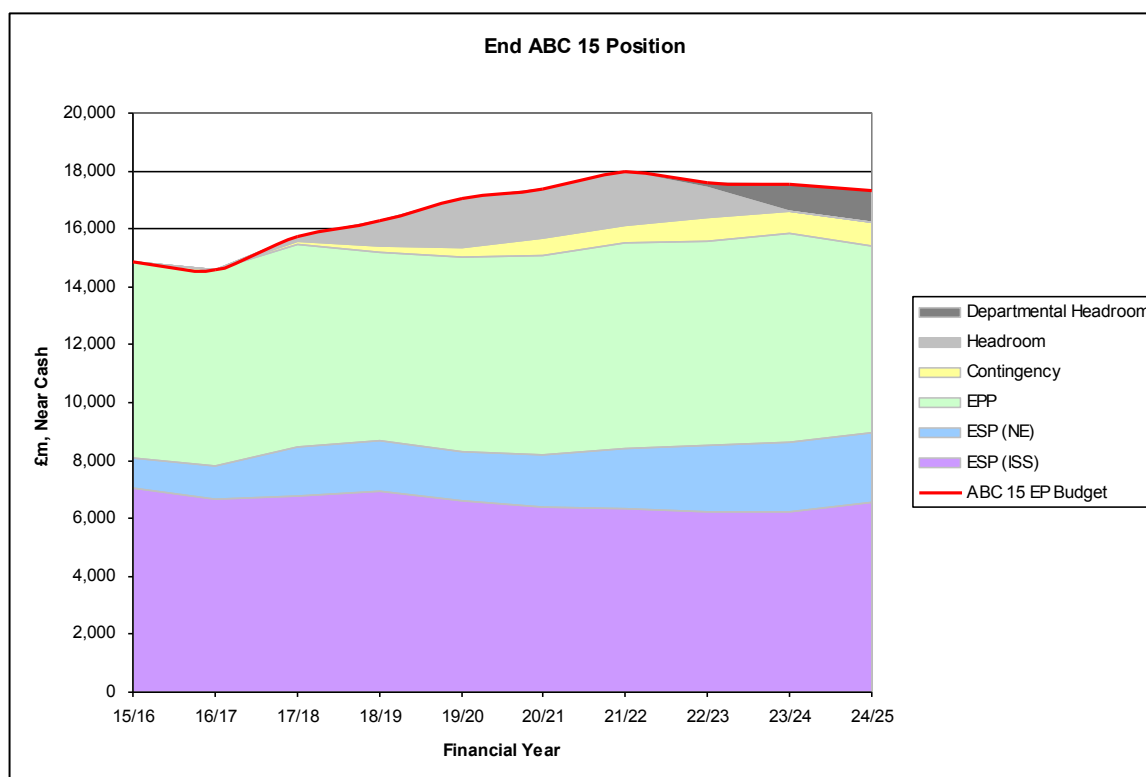
- b. **spend £18.3bn on support arrangements for new equipment.** This is an increase on last year's figure of £16.0bn, which is driven by the impact of the budget roll forward in 2024/25.
- c. **spend £65.8bn on support for existing, in-service equipment.** This is an increase on last year's figure of £64.1bn, which is driven by the impact of the budget roll forward in 2024/25.
- d. **hold a contingency provision of £4.3bn.** This is a minor decrease from last year's figure of £4.6bn, with contingency funding needed for the Rotary Wing Military Flying Training System project as a result of a change to the contracting strategy, and contingency funding drawn down to fund the contract for Ajax Vehicles.
- e. **retain unallocated headroom of £7.3bn.** This is a minor decrease from last year's figure of £8bn due to the drawdown to fully fund the Ajax and Warrior Capability Sustainment Programmes and to fund the purchase of further Tomahawk missiles. The headroom is notionally allocated by FLC but will only be drawn down when programmes are at a sufficient level of maturity.
- f. **retain a centrally held provision of £2.2bn.** This is an increase from last year's figure of £1.2bn, largely a result of the budget roll forward in 2024/25.

12. Within the individual project costings that make up the core equipment plan, there is specific risk provision that amounts to a total of £10.3bn over ten years. The overall level of funding held for risk inside costing at the end of ABC 15 is an increase on the previous year's figure of £10.1bn as a result of improvements in identifying the opportunities and risks in projects. The QRPC process continues to provide a significant focus on whether project teams are holding the right level of risk funding and to ensure that they are retiring risk appropriately. When considered alongside the £4.3bn contingency provision, we have £14.6bn set aside to cover emerging risks and potential cost growth in the equipment plan, totalling nearly 10% of the core programme.

13. The equipment plan also includes an adjustment for the programme fade likely to arise in each of the first three financial years of ABC 15. Fade occurs when planned financial expenditure fails to materialise in year, and is caused by a range of factors which are discussed in more detail later as part of the description of the work being undertaken to improve performance (see para 25).

14. At the end of ABC 15, the cost of the core programme matched the equipment budget when taking the contingency, unallocated headroom and early years programme fade into account. This can be seen in the table and graph on the next page.

Figure 5 – Equipment plan at the end of ABC 15



ABC 15 EP Budget	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	Total
Equipment Procurement Programme	6,784	6,779	6,992	6,497	6,723	6,876	7,132	7,077	7,222	6,426	68,506
Equipment Support Programme	8,096	7,821	8,483	8,698	8,299	8,209	8,396	8,512	8,608	8,988	84,110
Of which New Equipment	1,056	1,155	1,680	1,762	1,669	1,828	2,082	2,296	2,360	2,404	18,292
Of which In Service Support	7,040	6,666	6,802	6,936	6,630	6,382	6,314	6,215	6,248	6,584	65,818
Contingency	0	0	95	215	350	600	600	800	800	800	4,260
Headroom	0	0	145	868	1,686	1,712	1,869	1,043	0	0	7,324
Departmental Headroom	0	0	0	0	0	0	0	150	902	1,100	2,152
Total	14,880	14,600	15,714	16,277	17,059	17,397	17,996	17,582	17,532	17,314	166,352

Annual Budget Cycle 15

15. During ABC 15, the Department was focussed on ensuring the stability and affordability of the baseline equipment plan to ensure that we were on a stable footing going into the SDSR and Security Review. We invested further funding in Strategic Programmes and Navy Command to ensure the affordability of their programmes. This was funded through the generation of efficiency savings across the Defence budget as a whole.

16. During ABC 15 we also signed a manufacturing contract in September 14 worth £3.5bn for the delivery of the Ajax vehicle programme; placed a Firm Price contract for £348m with BAE Systems for the build and initial support of three new Offshore Patrol Vessels; and achieved first delivery of A400M in November 14.

17. To mitigate the risk of under spending caused by projects fading in-year, there was £729m of additional work planned for financial year 14/15 over and above the budgeted programme. This number included fade assumed by Operating Centres in the delivery of their projects and DE&S corporate level fade. A series of minor in year adjustments and transfers produced a net decrease in the budget and workplan of £38m. Once these were taken into account, there was a small net underspend of £3m against the planned equipment budget in 14/15 following the additional in-year adjustments.

Figure 6 – Financial Year 13/14 Cost and Budget

Financial Year 2014/15 Budget and Outturn		Near Cash, £m
Opening EP Budget		14,511
In Year adjustments		-38
Adjusted EP Budget		14,473
Outturn		14,470
Outturn against Budget		3

Budget and Workplan		Near Cash, £m
Opening EP Budget		14,511
Initial Fade Assumption		729
In Year adjustments		-38
Total Workplan for 2014/15		15,202

18. The level of contractual commitment in the core equipment plan has remained broadly similar to that at the end of ABC 14. Around 70% of the plan is contractually committed in 15/16, (compared to 69% contractually committed in 14/15) falling to around 16% at the end of the decade.

Figure 7 – Contractual Commitment in Core Equipment Plan at Close ABC 15

Contractual Commitment	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	Total
% Committed	70%	52%	40%	36%	31%	26%	25%	22%	19%	16%	33%

Section B: Improvements in Ministry of Defence (MOD) processes and functions

19. Following engagement with the NAO during their three previous reports into the MOD's forward equipment plan, we have continued to take forward a series of improvements in our data, cost, and risk management processes.

20. The DE&S Forecasting Improvement Programme closed in February 2015 with residual actions being transferred to the Materiel Strategy programme. Since then, a range of proposals for DE&S Transformation have been put forward with the key element being the creation of a new professional function on Project Controls. This will build an improved capability in the disciplines of Risk Management, Schedule Management, Cost Estimating and Cost Controls.

21. These were the key areas which were identified by the Forecasting Improvement Programme as needing improvement in the current DE&S operations. Work is progressing on defining the standards by which DE&S will operate in these areas, and the relevant staff will be trained as part of the transformation programme to achieve a "Match Fit" DE&S organisation in 2017.

22. The Cost Assurance and Analysis Service (CAAS) has continued to provide Independent Cost Estimates (ICEs) for Equipment Procurement Plan and Equipment Support Plan projects. During ABC 15 they increased their coverage of the ESP from 28% to 48% and used an extrapolation to model the rest of the ESP, adjusting for whether the equipment is new or in-service. This has allowed CAAS to provide an independent view of the cost of the entire equipment plan for the first time.

23. The CAAS ICE for the EPP is £2.2bn above that of the project teams and their ICE for the ESP is £2.8bn higher, producing an overall variance of £5bn. This gives the CAAS view of the extent to which project teams may be underestimating the financial risks within project budgets. This is a smaller variance than that projected last year for the overall EP when the coverage did not include the whole of the ESP. As a result, we have concluded that the EP contingency of £4.3bn is sufficient to deal with the likely level of cost growth within the equipment plan and broader risks that may emerge. This is reviewed regularly and will be reconsidered as we progress through, and understand the implications of, the Spending Review and SDSR.

24. We have also engaged private sector support to help identify cost savings across the largest ESP projects and develop enduring methodologies to reduce ESP costs while still delivering the required level of support. Having reviewed around 45% of the support programme, we already have savings plans in place to deliver around £2.5bn of savings against control total. We have also avoided a further £750m of future equipment support costs by identifying opportunities to reduce future costs to bring them in line with budget, and work continues with further savings expected to be delivered. The review has conducted several lessons learned exercises which will be taken forward by the MOD to support the Department's overall aim of delivering equipment support in a more cost-effective manner.

Efficiency savings in major programmes

25. As part of the Department’s drive to deliver continuous improvement in the equipment plan there are a number of large projects that are set to deliver efficiency targets. This includes the Complex Weapons pipeline and the Submarine Enterprise Performance Programme (SEPP).

26. The Complex Weapons pipeline is designed to meet the UK’s enduring requirement to have battle winning complex weapons capability. The approach meets the UK’s complex weapons requirements through an innovative approach based on the development of families of weapons which focuses on commonality, modularity and reuse. The Complex Weapons procurement approach estimated financial benefits of £1.2bn over 10 years from 2010. This represents the forecast net savings to be delivered through the current “partnered portfolio management” procurement approach compared to open competition. A review by the CAAS in September 2015 judged that the target remained achievable, albeit highly dependent on successful execution of its component projects and the value and sequencing of the programme being broadly maintained. The majority of benefits will be realised towards the end of the 10-year period due to the principle of technology development in early projects being re-used in subsequent projects.

27. Along with the three main prime contractors, SEPP is pursuing improvements in efficiency, performance and long term sustainability within the Enterprise, to support the acquisition and maintenance of submarines and deliver £900m of savings against the first 10 years of a stable submarine programme. To date, £584m of financial benefits have been delivered and there is a process continuing to identify and score additional efficiency savings across the range of submarine activity.

Figure 8 – Efficiency Savings in the Equipment Plan

£bn	Savings identified	Total Forecast Savings
Equipment Support Efficiencies	2.5	4.1
SEPP	0.58	1.05
Complex Weapons Pipeline	0.43 (gross) ²	2.1 (gross, 1.2 net)
Total	3.51	7.25

Defence Materiel Strategy

28. The Materiel Strategy programme is designed to make real and enduring changes to the way in which the MOD procures and supports the equipment used by our Armed Forces. As previous analysis has demonstrated, three root causes led to the cost and

² The complex weapons target is £2.1bn gross savings, which gives £1.2bn actual savings after netting off the notional additional cost of single-source procurement from the benefits of the extant procurement strategy.

schedule overruns: an over-heated equipment budget; an unhealthy relationship between the requestor and the deliverer; and insufficient skills and management freedoms within DE&S.

29. A number of operating models have been examined as part of looking at how DE&S can operate differently to become more effective and more efficient. In December 2013, the then Defence Secretary announced that DE&S would be established as a Bespoke Trading Entity, remaining wholly within the public sector, but with a number of unique freedoms to allow the organisation to operate in a more business-like manner.

30. DE&S was launched as a Bespoke Trading Entity on 1st April 2014 and is now operating as an Arm's Length Body from the rest of the MOD. It has a separate governance and oversight structure, including a Board led by an independent chairman and a Chief Executive who is responsible to Parliament for the performance of the organisation. DE&S has also secured a number of important freedoms and flexibilities with the Treasury and the Cabinet Office around how it operates, particularly in relation to the recruitment, retention, reward and management of its civilian staff.

31. The change in status and associated management freedoms marked the start of a three year timeline of transition and transformation. During the first transition year, DE&S established and embedded a new governance regime and recruited a highly experienced Chairman and Non-Executive Directors who are providing challenge and support to the DE&S Executive. DE&S has also put in place new Command Acquisition and Support Plans with each of its military Customers which capture formally what is required of DE&S and drive improved performance. A key aspect of DE&S transformation is the injection of highly specialised private sector expertise – the Managed Service Providers – who are helping DE&S with organisation design, development of business transformation plans and in driving the necessary organisational and cultural change to deliver enduring improvements in the delivery of the Equipment Procurement and Support plans. A core aspect of this is the design and development of the tools and processes required to upskill staff and transform the organisation.

32. The Materiel Strategy will continue to drive the transformation required to deliver significant improvements in DE&S, delivering incremental change over the next two years as part of the journey towards becoming “match fit”; that is, a best in class acquisition and support organisation, recognised for its ability to deliver results and the professionalism of its people.

Single Source Procurement Reform (SSPR)

33. Following Lord Currie's independent report (2011) into single source procurement, the MOD carried out a fundamental overhaul to the Department's approach to single source procurement. This has resulted in the establishment of a new framework, known as the Orange Book, which is based on greater transparency and standardised reporting, with stronger supplier efficiency incentives, underpinned by a stronger governance arrangement and the creation of an independent body – the Single Source Regulations Office (SSRO). The Orange Book is underpinned by statute through Part 2 of the Defence Reform Act 2014 which received Royal Assent in May 2014 and through secondary

legislation which came into force in December 2014. At the heart of the new approach is the principle that industry should receive a fair and reasonable price in exchange for providing the MOD with the protections needed to assure value for money.

34. These reforms represent a radical change to the way in which the MOD approaches single source procurement (which amounts to around 45% of the Department's overall procurement budget). There are already Qualifying Defence Contracts subject to the new regulations and a central MOD team has been set up to support project teams as the volume of work increases. A programme of training and guidance has been rolled out across the department to ensure the MOD achieves the maximum possible from the reforms. This training and guidance will be adapted in the light of lessons learned.

35. A key part of the reform lies in the creation of the SSRO as an independent, arms-length mediator between MOD and industry on single source contracts. The SSRO was set up in late 2014 and has been active in producing a range of statutory guidance for industry and MOD on how the reforms will work in practice. The SSRO is able to give opinions and make legally binding judgements on issues referred to it by either the MOD or industry. The MOD is committed to making full use of the SSRO's expertise and has already referred the Astute Boat 5 contract to the SSRO for an opinion on pricing.

36. The SSRO is currently undertaking a fundamental review of the methodology used to calculate the baseline profit rate (BPR), which is used as the basis for profit calculations on all single source contracts. The current BPR methodology has been broadly unchanged since it was introduced in 1968, when the nature of the UK defence industry was very different. The SSRO have proposed a number of changes in their public consultation on the review, a key part of which is the use of multiple BPRs for different types of contract. This will ensure that the MOD are not paying a high premium on low risk contracts, while still providing adequate reward to industry for work that holds more inherent risk.

The Government Major Projects Portfolio

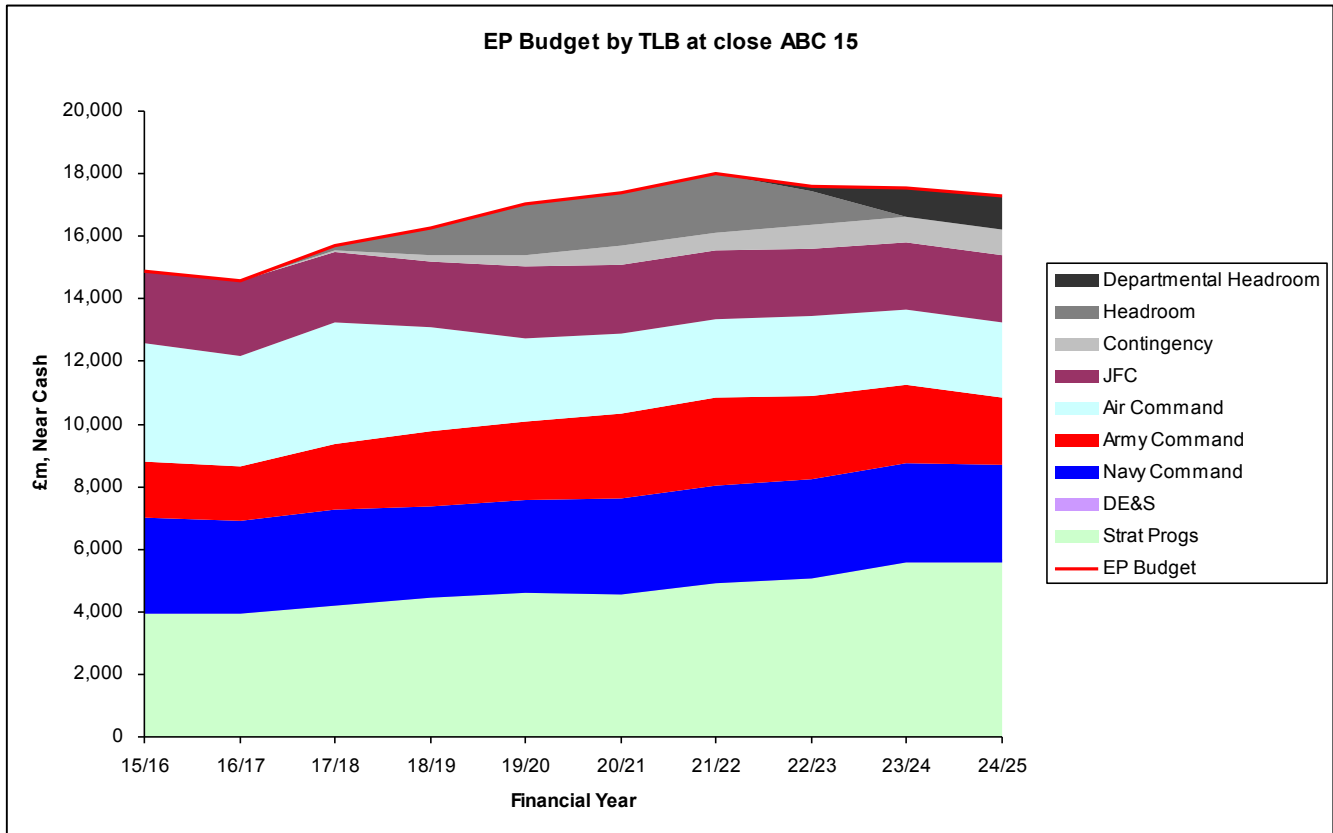
37. The most significant business change and capability change programmes in MOD are included within the Government Major Projects Portfolio (GMPP). The MOD reports on the performance of its GMPP programmes quarterly to the Major Projects Authority (MPA) and selected performance data is published with the MPA's annual report. Though a number of the capability change programmes in the GMPP include equipment procurement projects reported on through the MPR, the scope of GMPP and MPR reporting is different and the two are not directly comparable. The MPR focuses on equipment procurement only, whereas GMPP reporting includes all Lines of Development (i.e. equipment procurement plus infrastructure, training, manpower and other contributing areas).

38. Information on the GMPP, including detail from MOD's reports, is published by the Cabinet Office on the GOV.UK website.

Section C: Sector Analysis – Where does the money go?

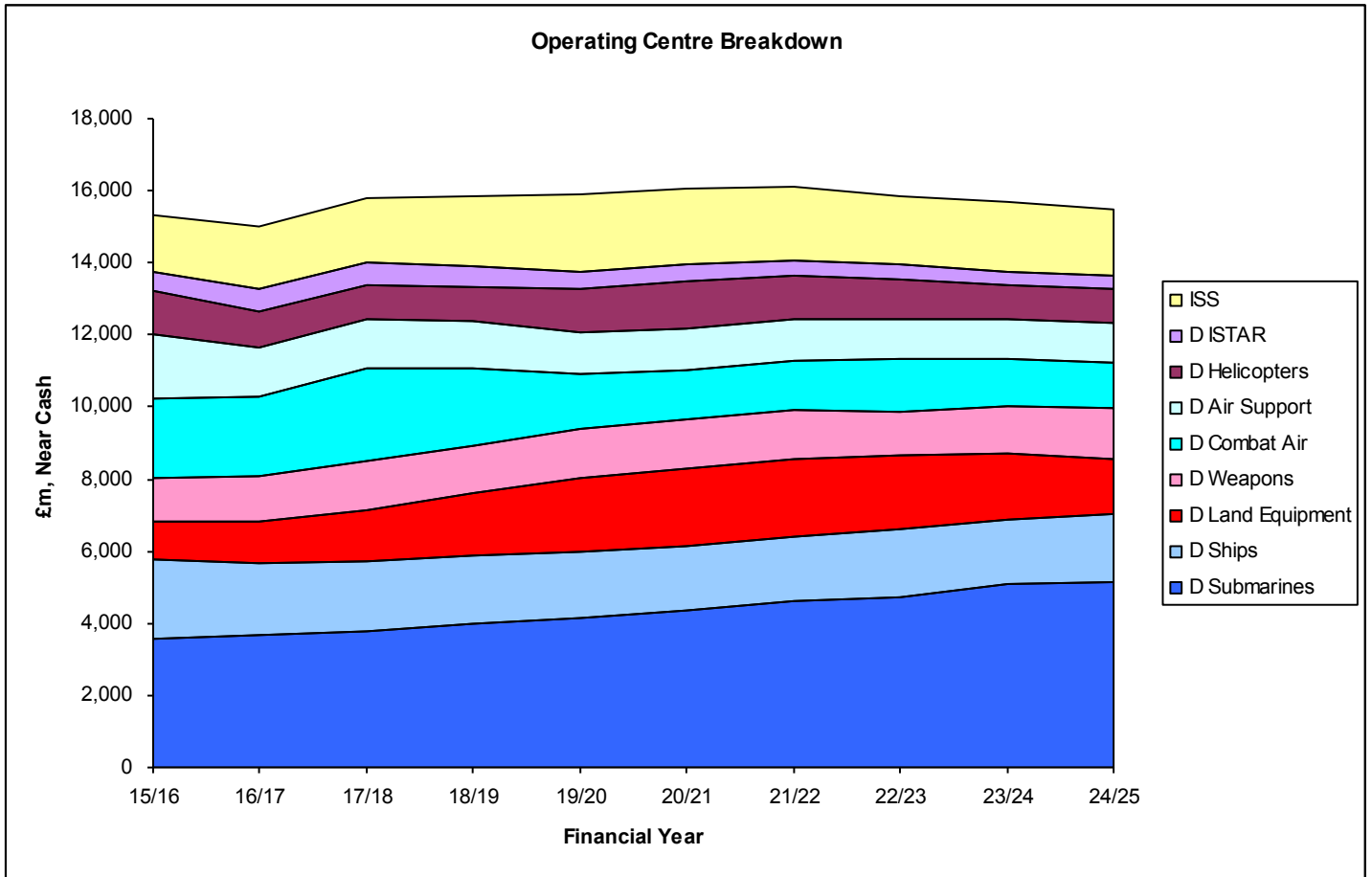
39. The breakdown of the equipment plan by FLC is shown in the graph below, along with contingency, headroom and centrally held provision.

Figure 9 – Equipment Plan by Command



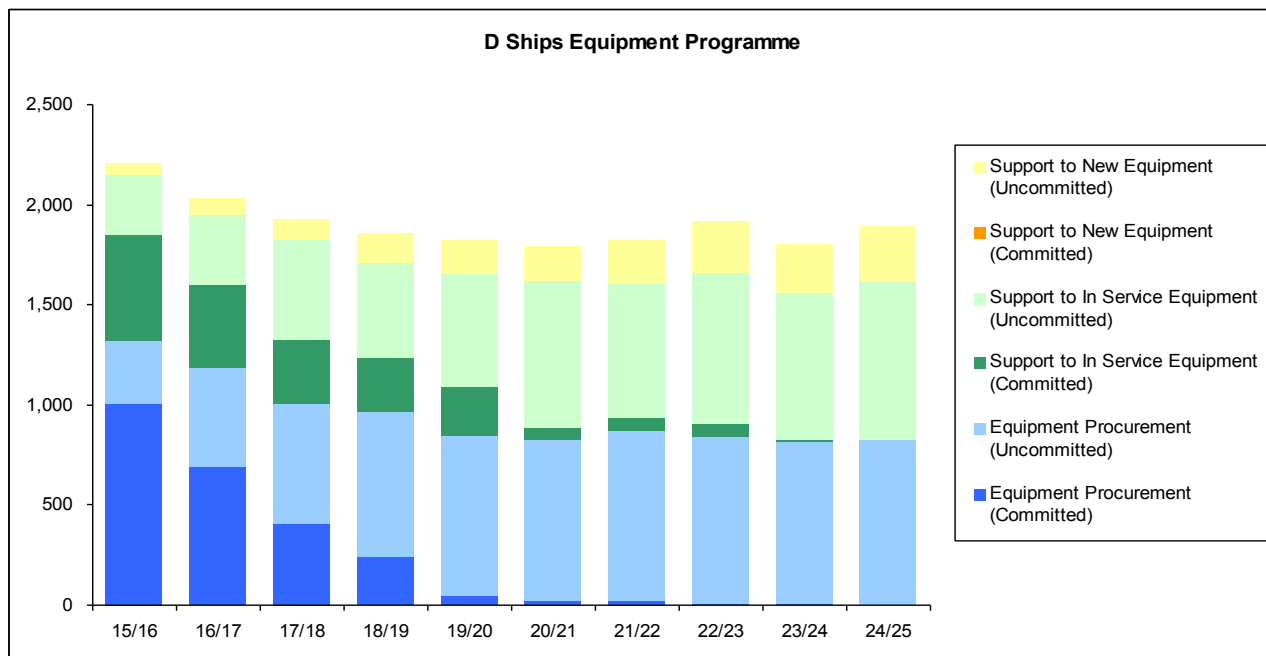
40. The FLCs manage and distribute their equipment budget to the individual DE&S and ISS teams that are responsible for delivering equipment and support projects. These project teams are grouped up by Operating Centres based on the type of equipment delivered. A breakdown of the budgets issued to the eight main Operating Centres (Submarines, Ships, Land Equipment, Weapons, Air Support, Combat Air, Helicopters and Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR)), along with the ISS equipment programme and the remaining equipment plan Budget Holders, is shown in the graph below. The sum of these budgets exceeds the total equipment budget in places. This is because the FLCs hold a number of adjustments (including the ESP efficiency savings) centrally. Figure 10 on the next page shows the breakdown of the equipment plan by Operating Centre.

Figure 10 – Equipment Plan by Operating Centre



Ships

41. We plan to spend around £19bn on surface ships over the next ten years, in comparison to £18.2bn at the end of the previous planning cycle.



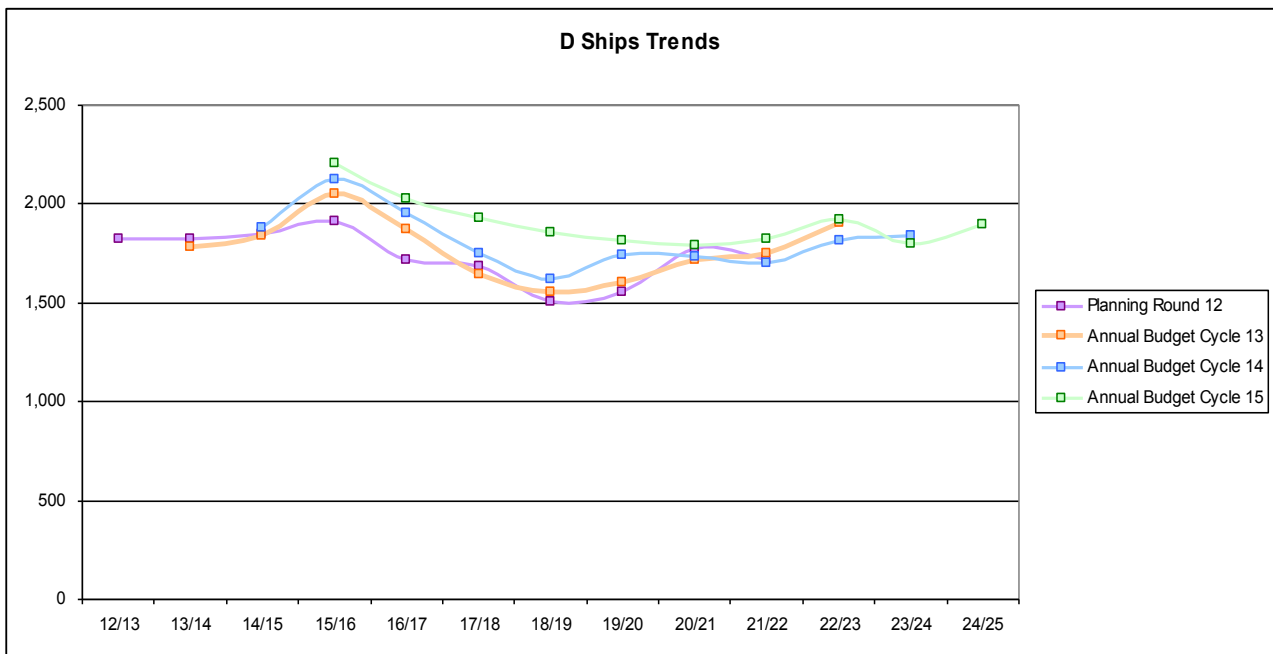
42. This sector covers spending on the design, build and maintenance of surface ships together with the supply and maintenance of the equipment onboard. This includes investment in:

- the completion of the two Queen Elizabeth Class aircraft carriers.
- the design and development of the Type 26 Global Combat Ship, which will replace the Type 23 Frigate.
- four new Tide Class Tankers, to provide modern ships for the Royal Fleet Auxiliary from 2016. The contract for all four vessels was placed in 2012 and the first will enter service from 2016.
- three new Offshore Patrol Vessels, for which a firm price contract has been awarded to BAE Systems. The first ship is planned to enter service in 2017.

43. During ABC 15 we:

- launched HMS Queen Elizabeth. The ship is undergoing fitting out as part of the test, integration and commissioning phase of her programme.
- commenced assembly of HMS Prince of Wales. All 25 blocks that make up HMS Prince of Wales are now either in assembly or production. Over 30,000 tonnes are already assembled in the dry dock at Rosyth.

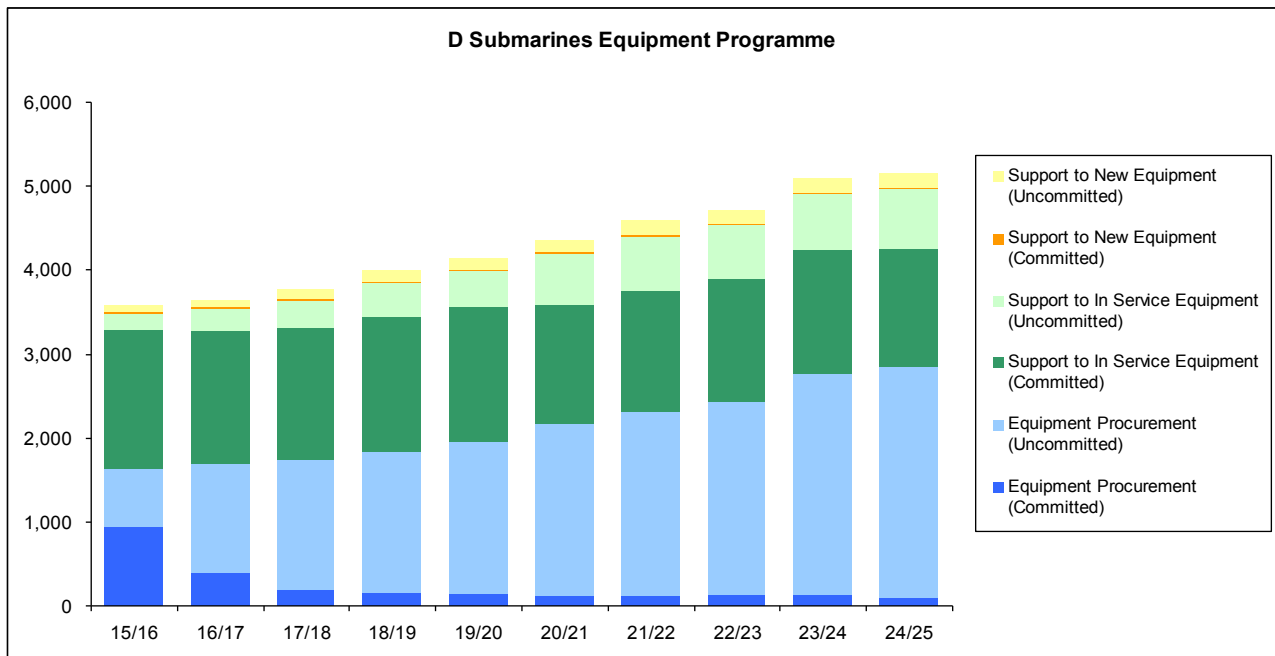
- concluded the Type 26 Global Combat Ship Assessment Phase. An £859m contract to progress to the Demonstration Phase was announced on 20 February 2015 by the Prime Minister and signed on 23 March 2015.
- placed a Firm Price contract for £348m with BAE Systems for the build and initial support of three new Offshore Patrol Vessels. The official steel cutting for the first ship was held on 10 October 2014.
- achieved Initial Gate for Mine Counter Measures and Hydrographic Capability and awarded contracts for two demonstrator programmes (FR/UK Maritime Mine Counter Measures (MMCM) and UK Sweep Demonstrator).
- cut steel and conducted Keel lay events for the first Tide Class Tanker (Tidespring) and cut steel for the second (Tiderace).



44. The planned spend profile over the next 10 years for the Ships Operating Centre has increased slightly because of many small changes across what is a wide and diverse portfolio of programmes and projects. The peak in the early years reflects the current level of Surface Ships acquisition programmes, which spans the Queen Elizabeth Carriers, Type 26 Frigates, Offshore Patrol Vessels and Mars Tankers.

Submarines

45. We plan to spend around £43bn on Submarines over the next decade in comparison to £40bn at the end of the last planning cycle. This increase reflects the budget roll-forward in 2024/25 which includes a proportionately higher element of the Successor programme.

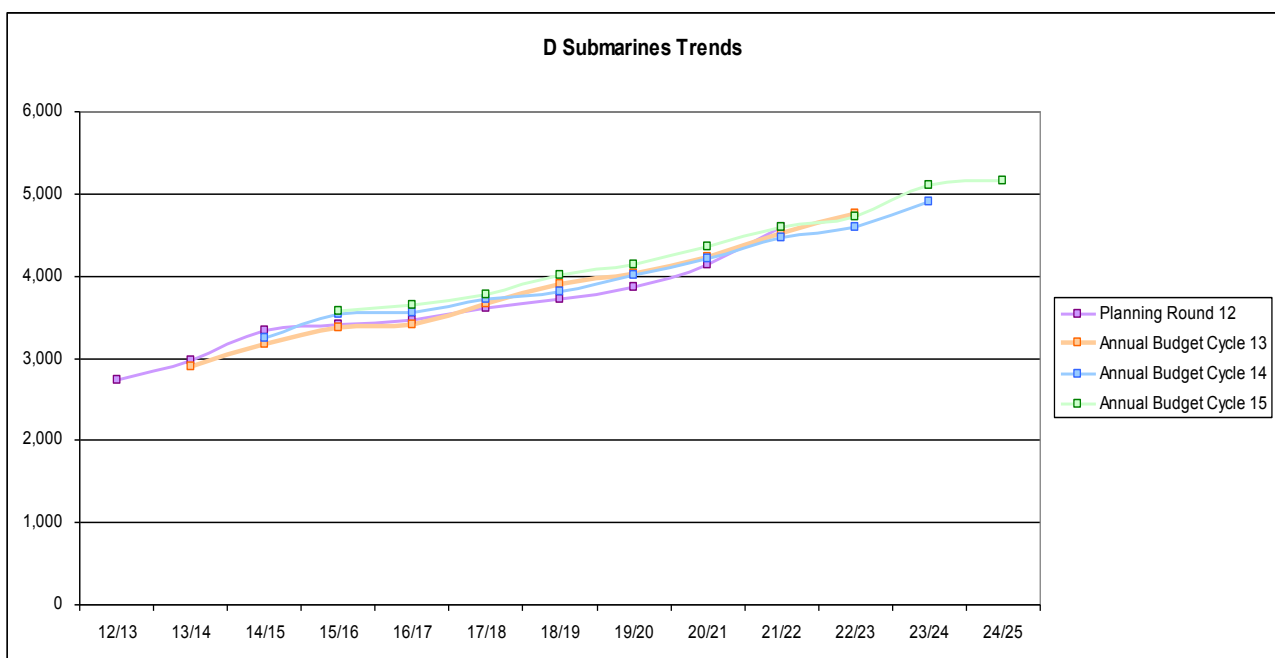


46. This sector covers spending on all Submarine procurement and support. This includes investment in:

- support to In-Service Submarines, including the provision of engineering and design authority support to the UK Submarine flotilla to ensure that they remain safe, available and capable.
- the delivery of 7 Astute Class Submarines, the initial support and training, as well as the delivery of the Astute Capability Sustainment Programme.
- the Successor submarine design and build activities at Barrow; the common missile compartment arrangements with the US; the command and control and naval base infrastructure upgrades required.
- the support, procurement and design of naval nuclear propulsion systems.
- the nuclear weapons capability sustainment programme, which covers the operation, maintenance and updating of the Atomic Weapons Establishment; the Trident missile system with the US; the UK/French collaborative Teutates project, and the provision of other services and activities across the Strategic Weapons System.

47. During ABC 15 we:

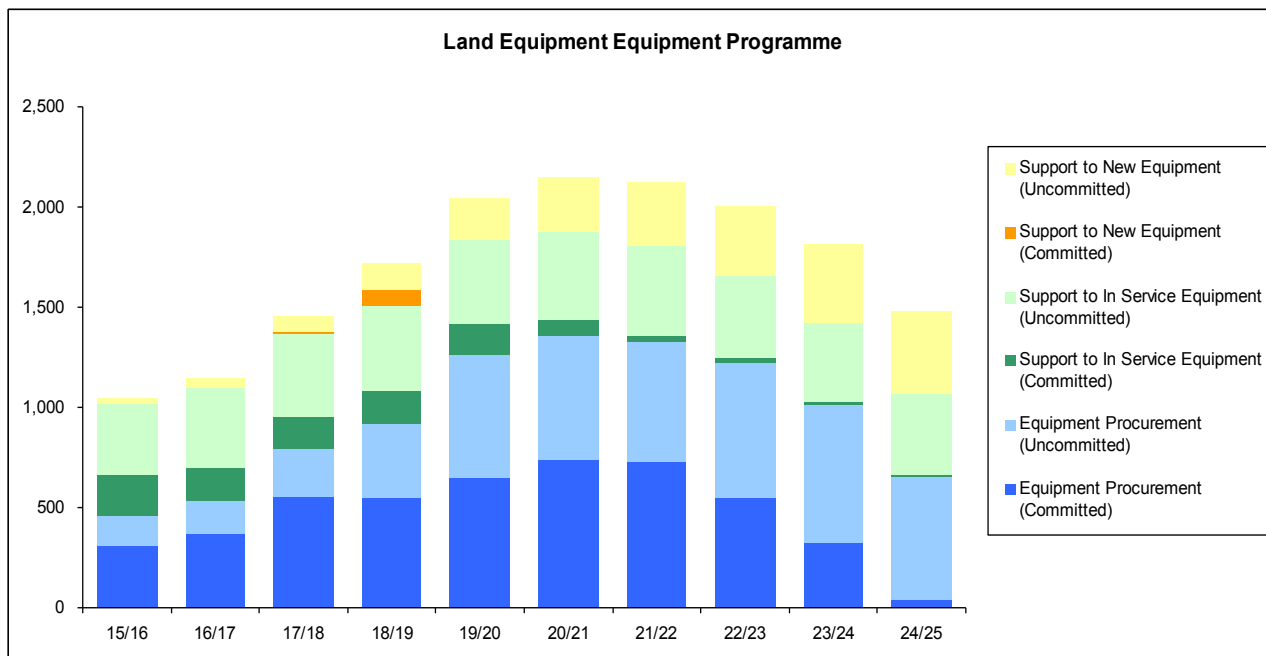
- maintained Continuous At Sea Deterrence with the Vanguard class submarines and provided Trafalgar and Astute class submarines to support Fleet operations. This included ensuring that our plans for the ongoing operation of the submarines were robust.
- increased the design maturity of the Successor submarine and its nuclear propulsion plant. This work is de-risking the programme ahead of any investment decision and incorporates lessons learned from other programmes.



48. The increase in the planned spend profile over this period is mainly due to the effect of the roll-forward at the end of ABC 14 with higher spend planned in financial year 24/25. In addition, there is significant infrastructure investment for Her Majesty's Naval Base Clyde as part of a planned programme of work in order to update the facilities required to support all submarines. There is also the impact of new Successor submarine infrastructure and production, the final stages of Astute class production, and the cost of supporting Vanguard class submarines as they approach end-of-life.

Land Equipment

49. We plan to spend around £17bn on Land Equipment over the next decade in comparison to £15.4bn at the end of the previous planning cycle.

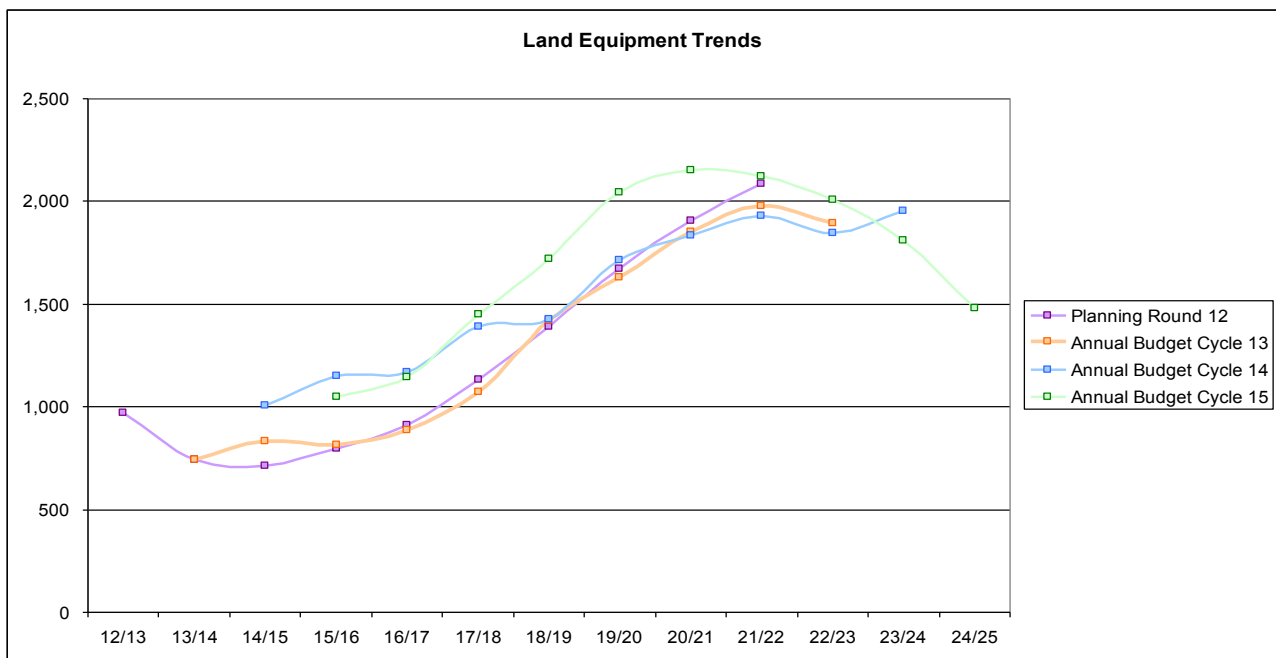


50. This sector covers spending on the delivery and support of armoured, protected and support vehicles; artillery systems; operational infrastructure; soldier fighting systems; and training solutions. This includes:

- the Warrior Capability Sustainment Programme (WCSP), to extend the life of the platform and deliver capability enhancements.
- the Utility Vehicle and Armoured Battlefield Support Vehicle (ABSV) Programme, delivering a family of tracked and wheeled vehicles.
- the Challenger 2 Life Extension Programme, which will mitigate platform obsolescence issues and extend the life of the platform.
- the Ajax Vehicle programme which will replace a range of tracked armoured vehicles reaching the end of their lifecycle.
- the Multi Role Vehicle Protected programme delivering a family of protected 4- and 6-wheeled vehicles for command and logistic support.
- the VIRTUS programme delivering a protection and load carriage system for the individual soldier.

51. During ABC 15 we:

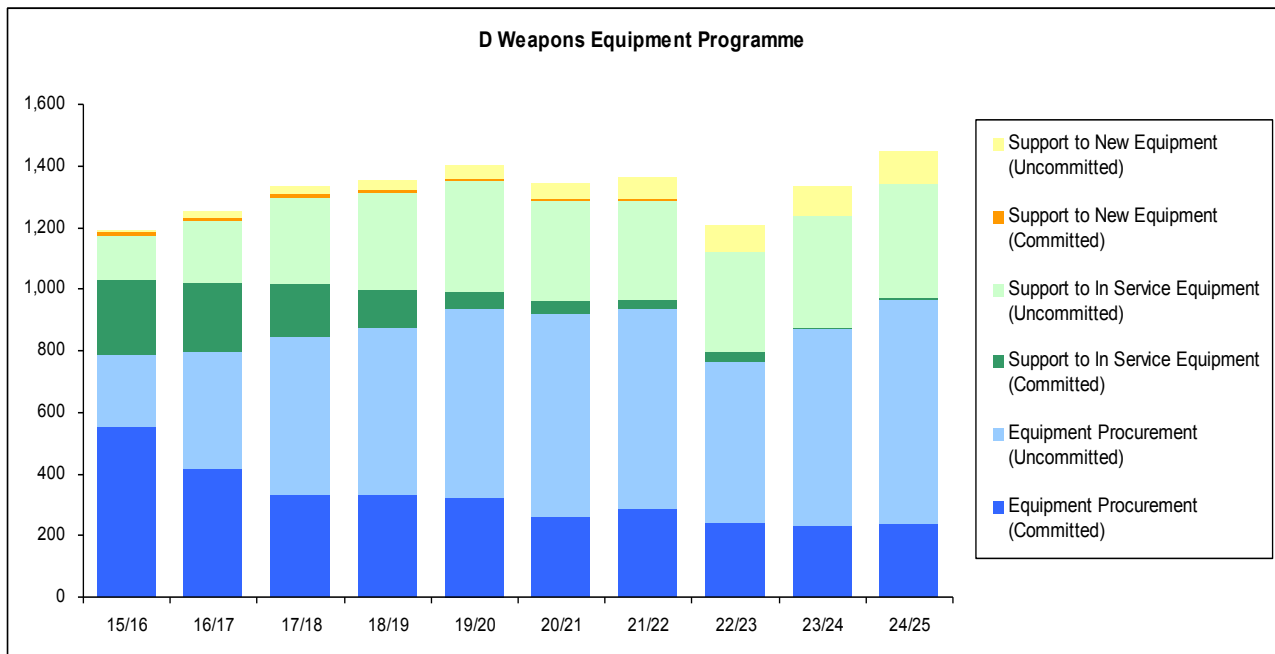
- signed a manufacturing contract worth £3.5bn for the delivery of the Ajax Vehicle programme in Sept 14.
- signed a manufacturing contract for the 40mm Cased Telescopic Cannon System that will support the Ajax and WCSP programmes.
- concluded WCSP System Critical Design Review for the FV520 / 521 platforms, enabling manufacture of the Demonstration Vehicles and commencement of the test programme.
- initiated VIRTUS pulse 2 (lighter armour) and pulse 3 (man-worn power and data) Projects.



52. The increase in planned spending compared to last year's plan reflects two factors: the re-profiling of funding for the delivery of Ajax vehicles and additional work for new projects, including starting Concept and Assessment phases.

Weapons

53. We plan to spend £13.2bn on the Weapons Programme over the next ten years, in comparison to £12.6bn at the end of the previous planning cycle.



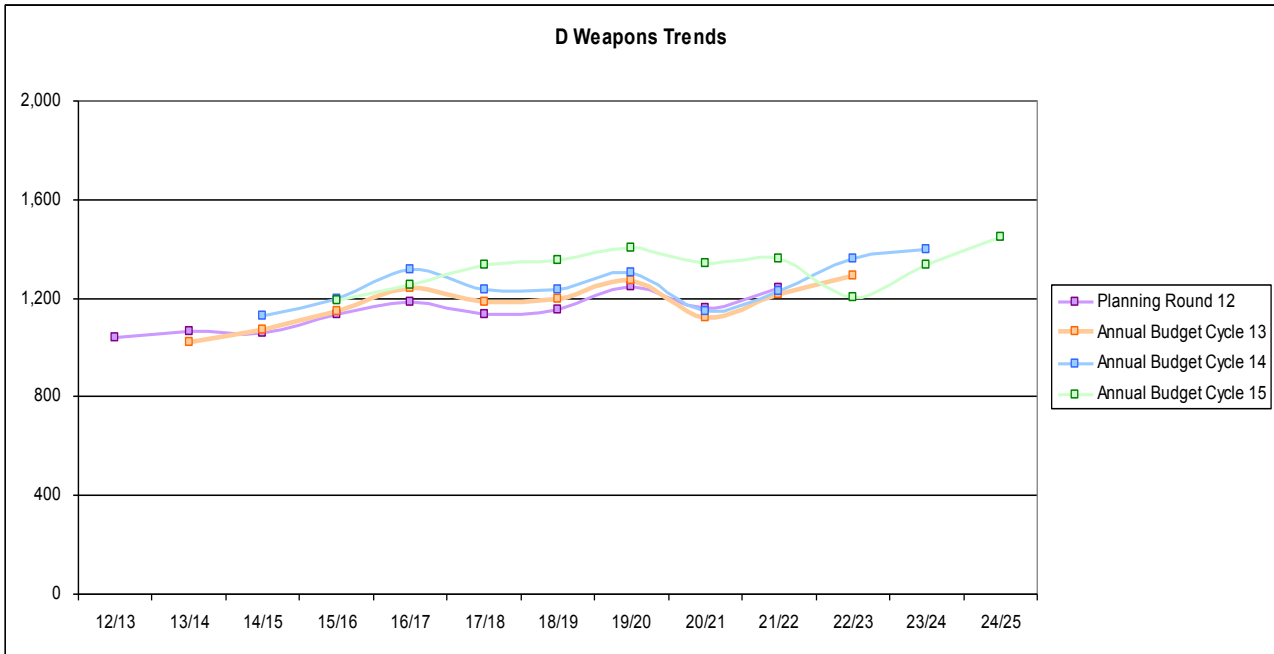
54. We plan to procure the majority of our more sophisticated weapon systems through the Complex Weapons Pipeline arrangement, a wide ranging agreement with our industry partners. Systems that we plan to deliver under this arrangement include:

- the Common Anti-Air Modular Missile (CAMM) which has been developed to be used with the Future Local Area Air Defence (FLAADS) System in the Maritime and Land environments.;
- the Maritime variant of CAMM, known as Sea Ceptor, which will enter service on Type 23 Frigates in 2016 and on Type 26 Frigates from 2022;
- new Future Anti-Surface Guided Weapons (FASGW), a collaborative programme with the Direction Generale de l'Armement of France to procure a helicopter-launched anti-ship missile.
- Meteor, the future Beyond Visual Range Air to Air Missile.
- the Brimstone missile for current platforms, and a replacement for Brimstone when it is removed from Service.

55. During ABC 15 we:

- commenced the Demonstration and Manufacture phase for the FASGW (Heavy) and FASGW (Light) programmes in March 14 and June 14 respectively.

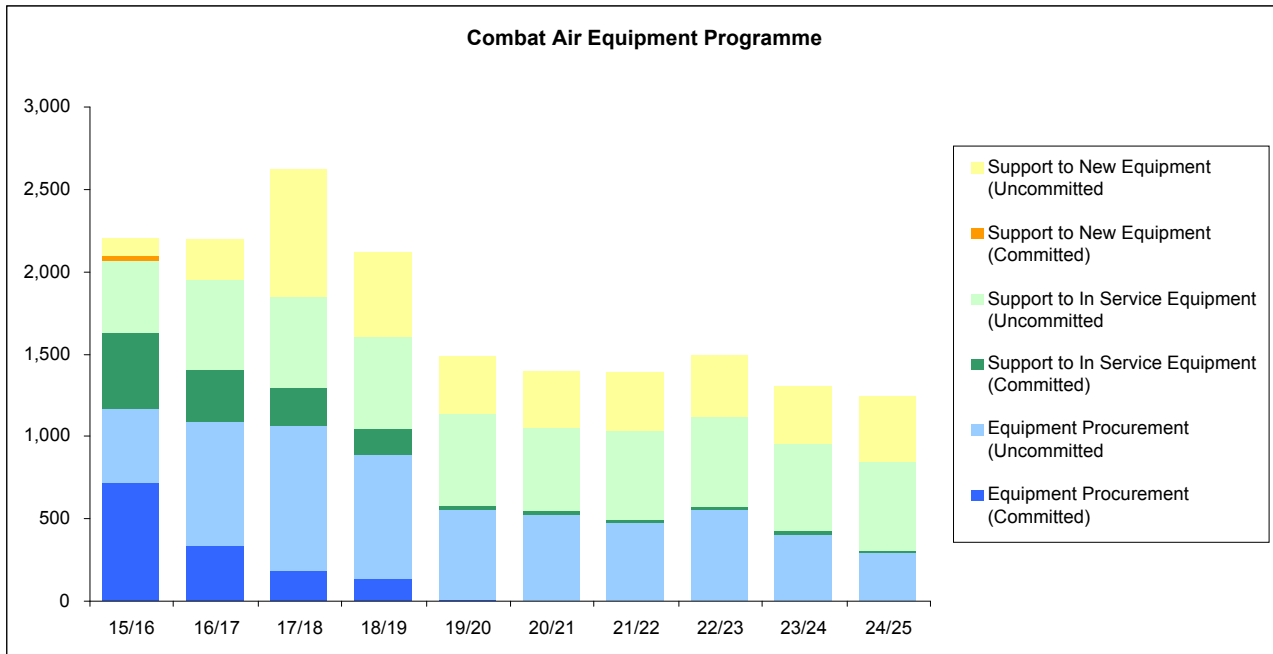
- awarded the contract for Demonstration and Manufacture of phase 1 of the FLAADS Ground Based Air Defence programme in December 2014



56. The increase in the forecast cost between ABC 14 and ABC 15 was mainly driven by a change in the accounting treatment of a munitions contract that has led to revised costings across the project teams in the Weapons Operating Centre. This was previously being paid for from another part of the Defence budget, and is cost neutral to the Department as a whole.

Combat Air

57. We now plan to spend around £17.4bn in the Combat Air sector over the next ten years, in comparison to £17.9bn at the end of the previous planning cycle.



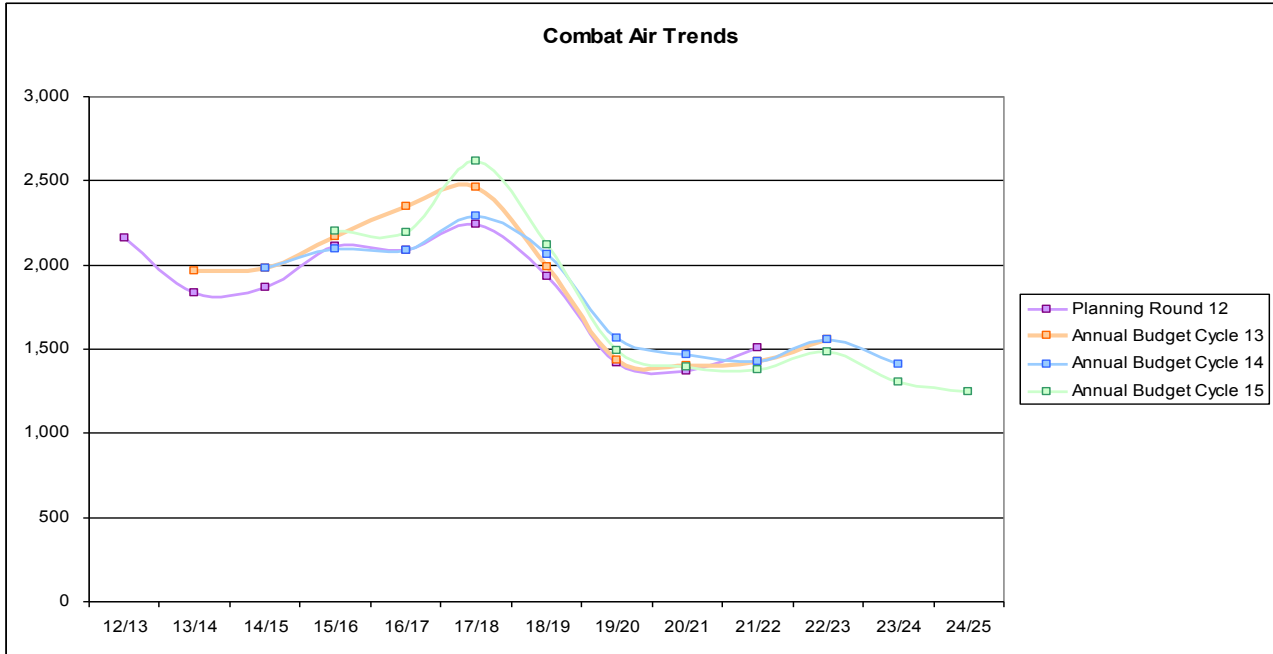
58. This sector covers fast jets, Unmanned Air Systems and military flying training, including the procurement of training aircraft. This investment includes:

- Typhoon capability, including the integration of a suite of weapons capabilities that will enhance its utility in the ground attack role.
- the Joint Strike Fighter programme, a critical element of our plans to deliver a high-end power projection capability for decades to come.
- Unmanned Air Systems, bring into core existing capabilities and investing for the future in replacement systems.

59. During ABC 15 we:

- took delivery of 9 Tranche 3 Typhoon aircraft taking the fleet from 116 to 125 aircraft.
- Committed to the development of an Active Electronically Scanned Array Radar for Typhoon.
- delivered capability enhancements to our Typhoon fleet including air-to-surface capability and enhanced interoperability with coalition forces.

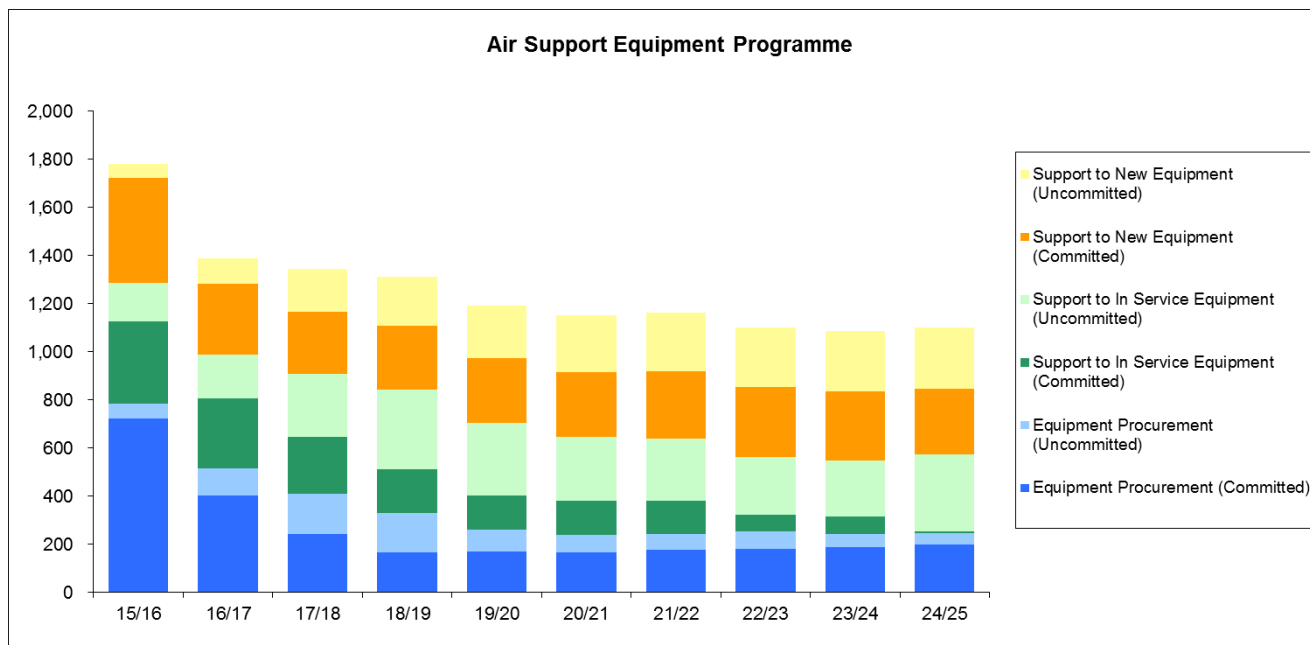
- ordered four F-35B Joint Strike Fighter Air Systems, with delivery planned for 2016.
- invested in METEOR, a beyond visual range air to air missile, which is currently being integrated on the Typhoon fleet.



60. The graph above shows the budget allocated to the Combat Air sector increasing in financial years 13/14 to 16/17 and reducing thereafter. These changes are driven by adjustments to the Typhoon and Joint Strike Fighter production schedules. The spike in 2017/18 is driven by the purchase of helicopters to support the future UK Military Flying Training School capability.

Air Support

61. We now plan to spend around £12.6bn in the Air Support sector over the next ten years, in comparison to £13.8bn at the end of the previous planning cycle.



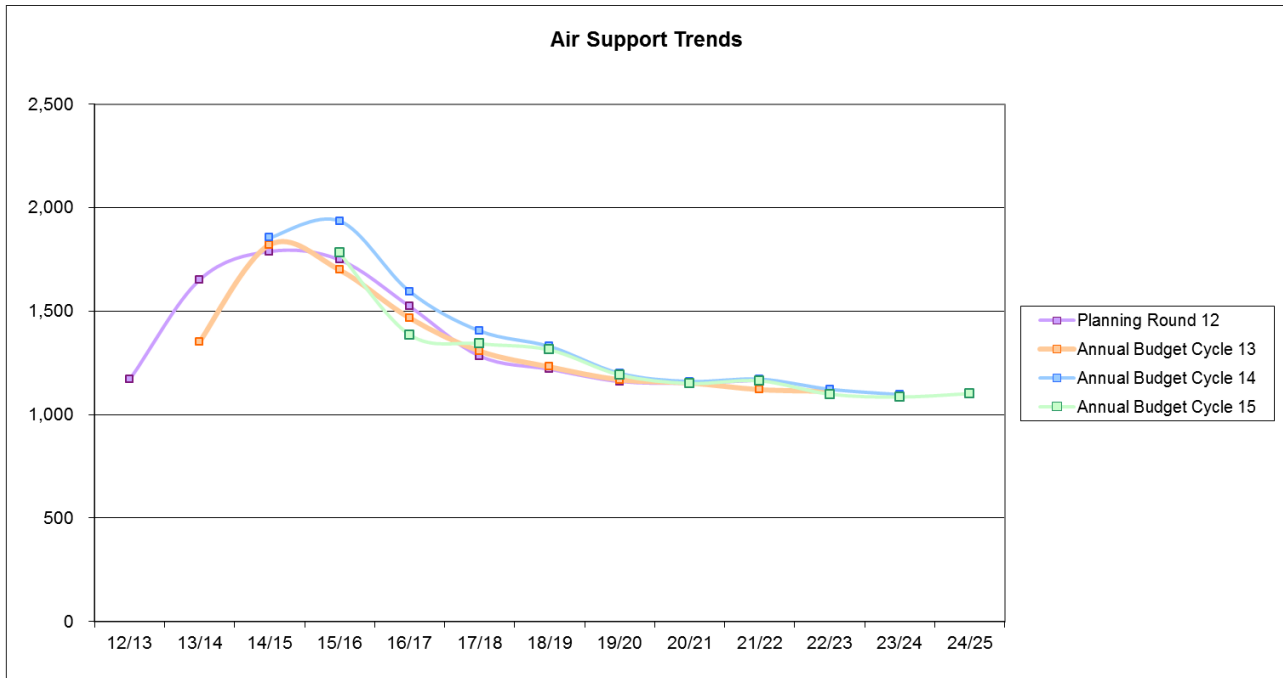
62. This sector covers all large aircraft, including transport, air-to-air refuelling and large ISTAR platforms. This investment includes:

- the A400M future generation of strategic/tactical air transport aircraft.
- the continuation of the Voyager transport and air-to-air refuelling aircraft programme, which replaced the VC10 and TriStar fleets from April 2014.
- new Airseeker aircraft to replace the Nimrod R1 and provide us with a state-of-the-art airborne signals intelligence collection capability.

63. During ABC 15 we:

- made good progress building up core military capability of the Voyager air-to-air tanker and passenger transport aircraft with achievement of air-to-air refuelling In Service Date in May 2014 and air transport ISD in June 2015.
- continued development of the Airseeker capability through support to operations by the first aircraft. Operational clearance of the second aircraft is planned for Oct 2015.
- achieved early operational clearance of Radio Frequency Defensive Aids Suite on the C130J Hercules aircraft in March 2015 and achieved ISD in September 2015.

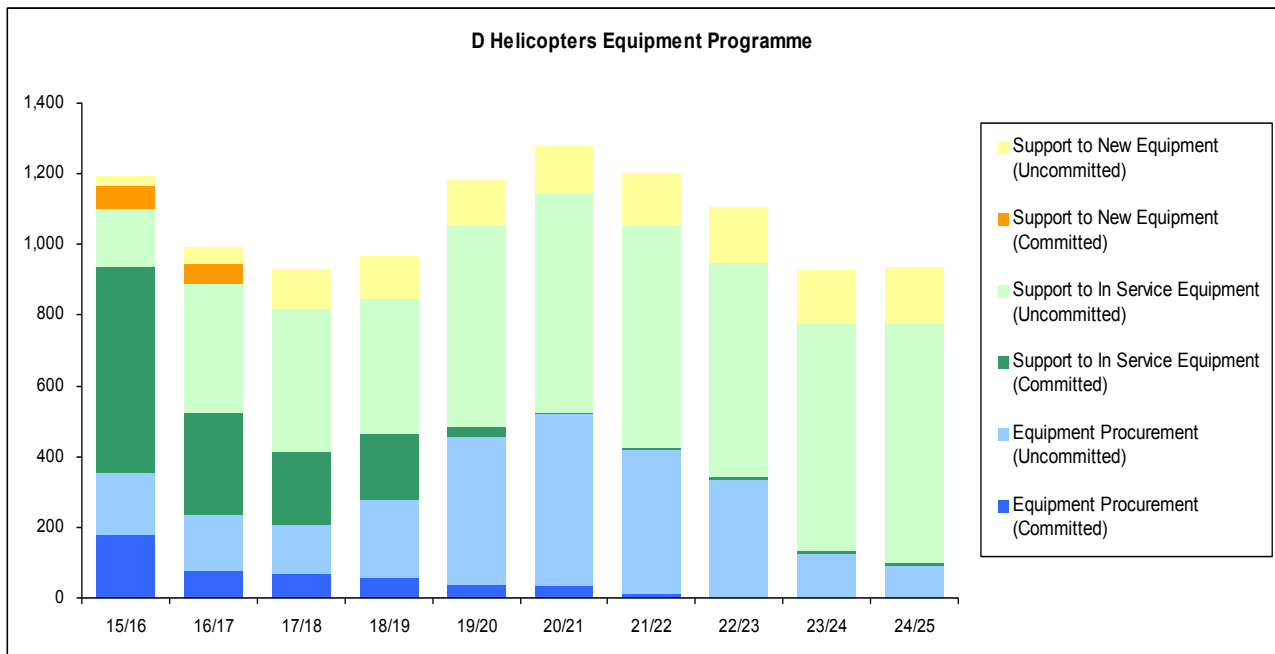
- the first A400M was delivered in Nov 14 and we achieved the ISD of Sept 2015 following delivery of 7 A400M aircraft.
- took delivery of a A400M training simulator in June 14.



64. The variation between ABC 14 and ABC 15 is mainly driven by the procurement of the A400M fleet in year 1 of ABC 14. The remainder of the reduction is due to the delivery of negotiated cost savings against C130J and Sentry.

Helicopters

65. We plan to spend around £10.6bn on helicopter capabilities over the next ten years, in comparison to £11.1bn at the end of the previous planning cycle.



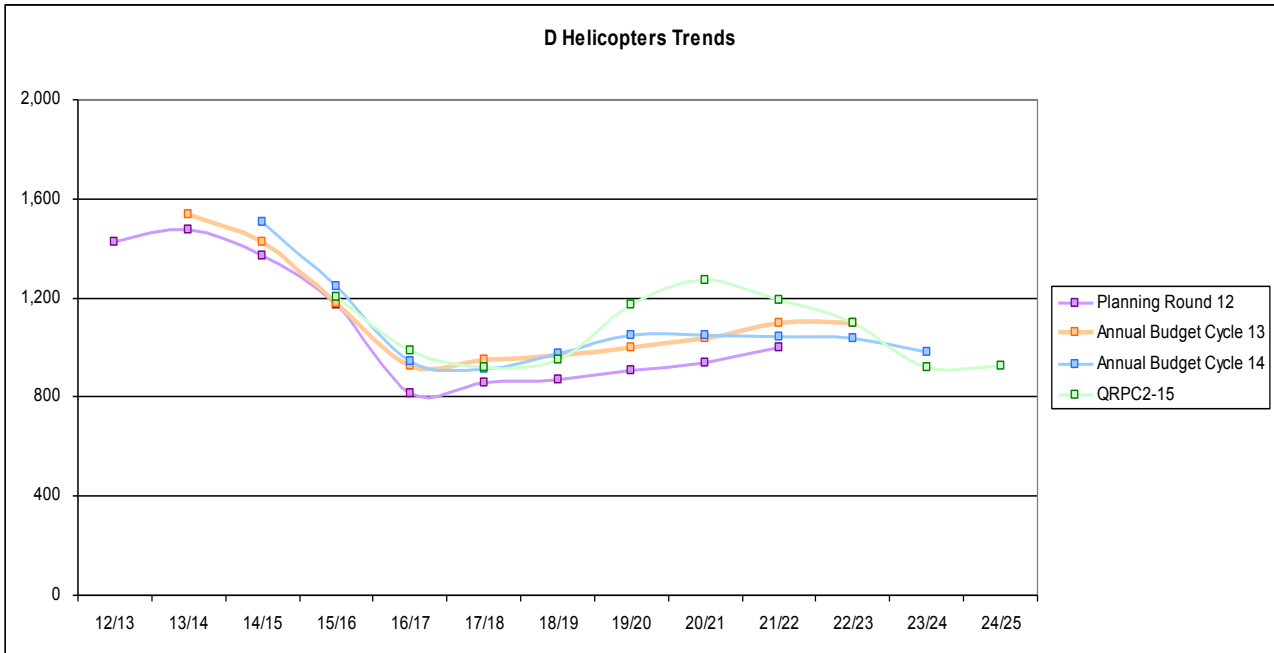
66. This sector covers spending on all helicopter procurement and support. This investment includes:

- upgrades to our existing airframes and investment in new ones.
- longer-term rationalisation to the core helicopter fleets: Chinook, Merlin, Apache and Wildcat, which we plan to sustain until at least 2040. In addition, the Puma 2 fleet was also retained as part of the Strategic Defence & Security Review in 2010 with a current Out-of-Service Date of 2025.

67. During ABC 15 we:

- continued to build upon the delivery of the 2009 Rotary Wing Strategy addressing the future sustainability of helicopter capability by re-directing investment and delivering an affordable whole-life solution.
- delivered a number of new helicopter capabilities to our Armed Forces: the Chinook Mk6, the Army and Royal Navy variants of the Wildcat helicopter, the Puma Mk2 and the Merlin Mk2, having all achieved their respective Initial Operating Capability milestones in 2014-15.
- committed to multi-year availability contracts for the provision of support to our Apache, Chinook and Merlin fleets, following up the commitments made last year for availability contracts for engines for Chinook, Apache and Merlin helicopters.

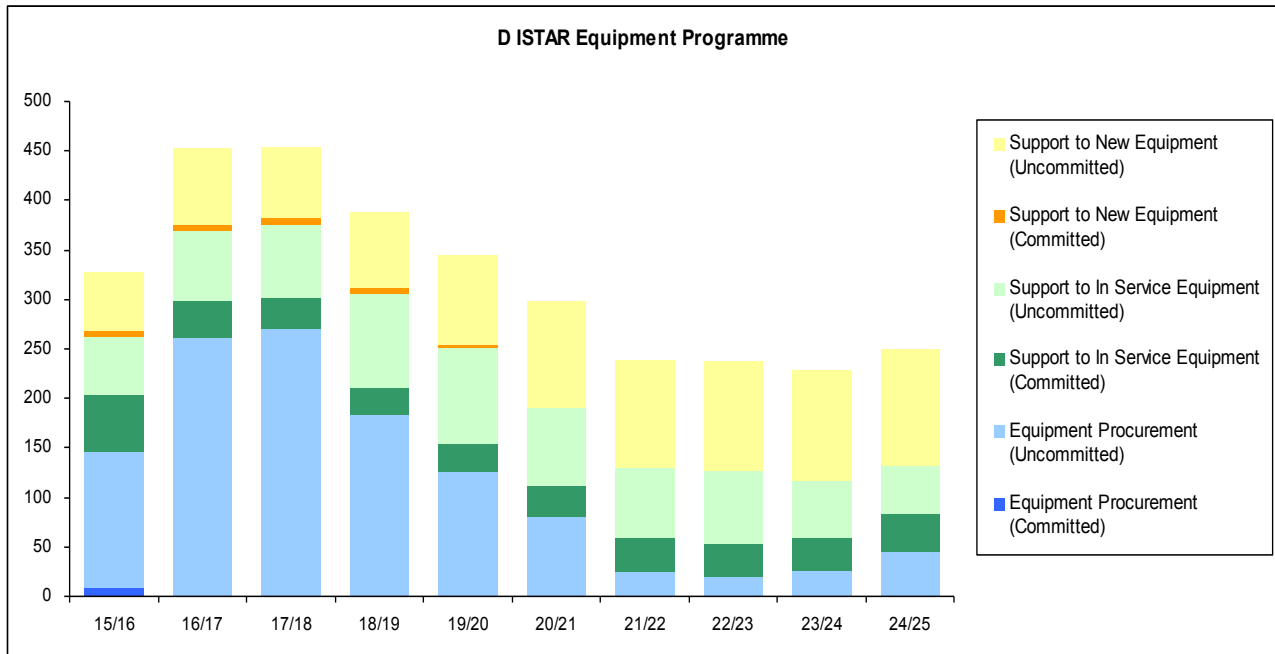
- delivered savings to Defence of more than £440M through the development of support solutions for these helicopter fleets for the next 5 years, and plan to continue to identify further ESP efficiencies for the Puma and Wildcat fleets.



68. There have only been minor adjustments only to the equipment portfolio over the last the four planning rounds as we have taken advantage of opportunities to bring forward Rotary Wing Strategy initiatives. The only significant change from PR12 to ABC 15 has been the re-baselining of the Apache Capability Sustainment Programme to reflect the current procurement strategy. This has resulted in the peak financial activity in 2019 to 2021.

ISTAR

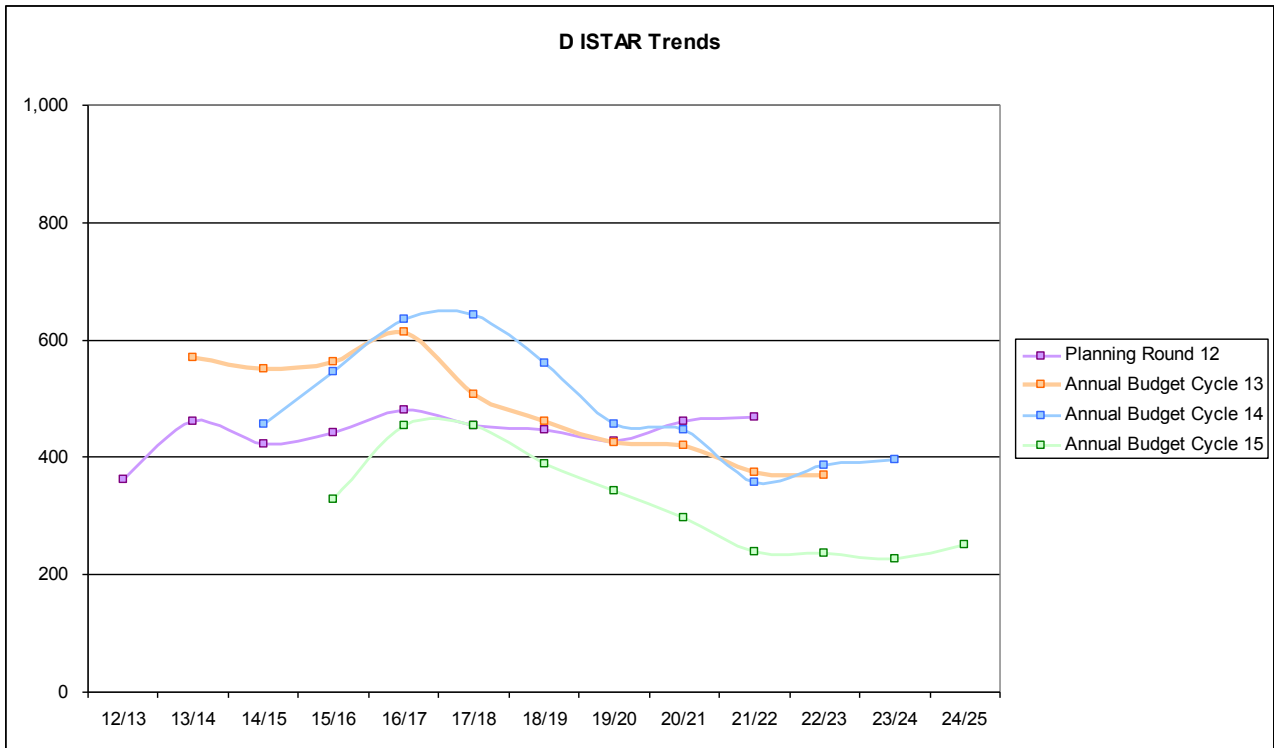
69. We plan to spend £3.2bn on ISTAR over the next decade, in comparison to £4.9bn at the end of the previous planning cycle.



70. This investment includes spend on Chemical, Biological, Radiological and Nuclear (CBRN) detection and countermeasures; operational surveillance systems and electronic countermeasures; a range of Special Forces equipment; air defence; air traffic management and tactical data links. It excludes expenditure on Air ISTAR platforms in the Air Support Operating Centre, including Airseeker and the Reaper Unmanned Aerial Vehicles.

71. During ABC 15 we:

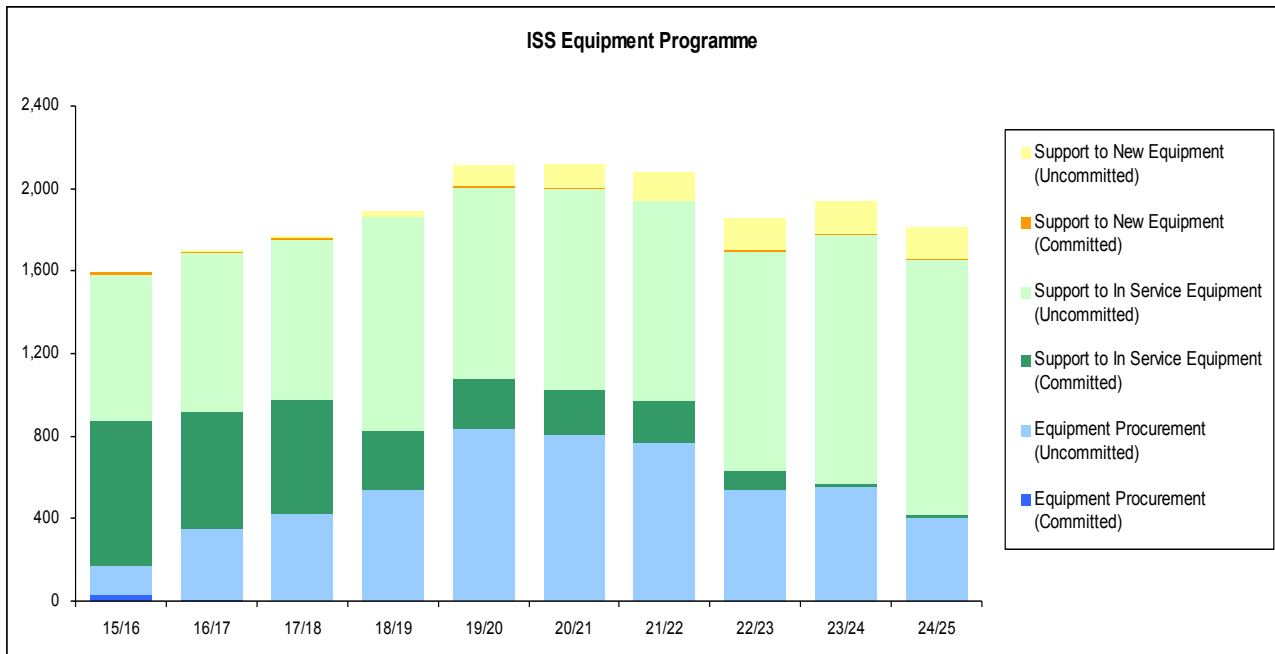
- awarded the £1.5Bn Project Marshall contract on 29 Oct 14. The 22 year contract will deliver modern and reliable military Air Traffic Management services at more than 60 MOD airfields and ranges in the UK and overseas.
- have delivered, at Defence Board direction, CBRN projects for aircrew protection systems, field hospitals, vehicles and decontamination and protection facilities.
- declared Full Operating Capability for Land Environment Air Picture Provision which provides increased air situational awareness and improves the warning and interdiction of all air threats, coordination of air activity and de-confliction of airspace leading to greater combat effectiveness and reduced risk of fratricide.
- saw the £1.8Bn transfer of the Intelligence networks and applications Programme Delivery Group (PDG) to ISS on 1 Apr 15, which results in a corresponding reduction in planned ISTAR Operating Centre spend going forward.



72. The fall in ISTAR’s forecast spend from the ABC 14 position is a result of the transfer of the Intelligence networks and applications PDG to Information Systems and Services . The remaining ISTAR profile is dominated by Project MARSHALL which is planned to amount to around £1.5bn over 22 years.

Information Systems and Services (ISS)

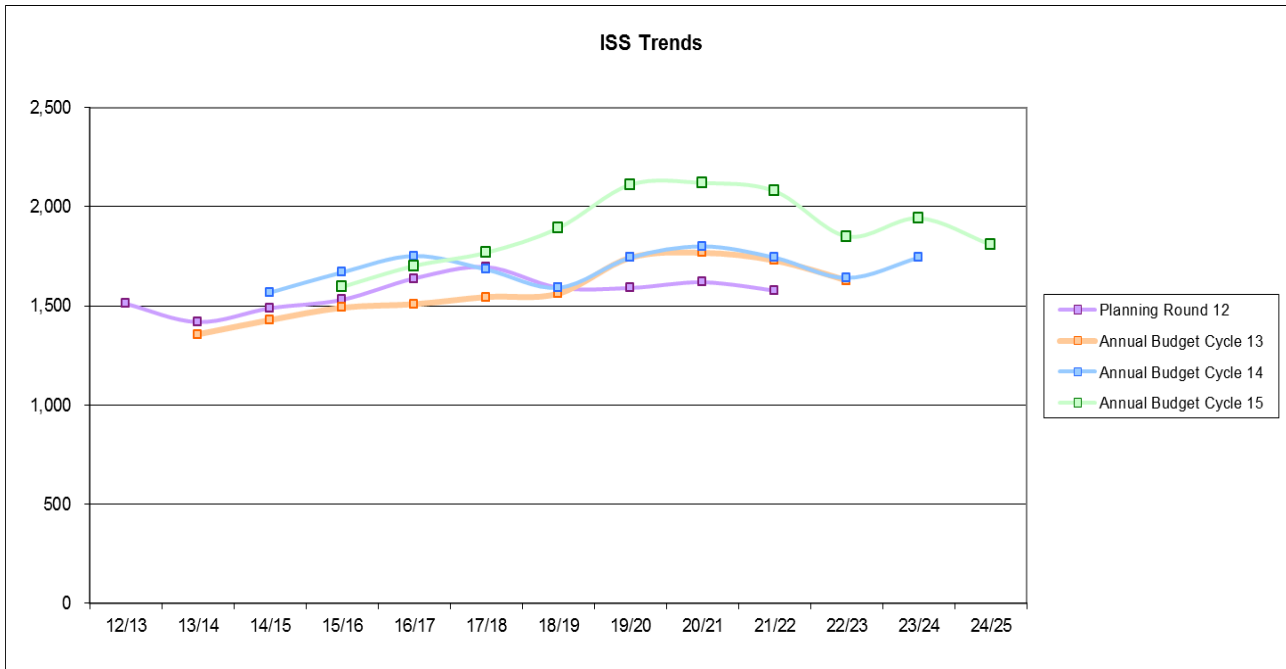
73. We plan to spend around £18.9bn on Information Systems and Services over the next decade. This is an increase from the planned spend of approximately £16.9bn at the end of the previous planning cycle, which is mainly driven by the transfer of the Intelligence and Networks PDG from the ISTAR Operating Centre.



74. This sector covers all of our expenditure on procurement of data and voice communications and the development and upkeep of our entire supporting network infrastructure.

75. During ABC 15 we:

- completed development and integration testing of Maritime Complex Command and Control Applications to support future capabilities.
- maintained the communications essential for operations and more routine activities, including the provision of satellite communications for deployed forces from routine deployments of naval vessels to the support of forces in Afghanistan and Sierra Leone.
- completed a major system upgrade to the in Service Tactical Communications Information Systems, which resulted in improved performance, asset management and supplier engagement.



76. The increase in the forecast cost of ISS in the later years of the plan is mainly driven by the transfer into ISS of the Intelligence and Networks PDG from the ISTAR Operating Centre.

Other elements of the Equipment Plan

77. Other elements of the equipment plan not individually broken down in this analysis total around £6.3bn, which is unchanged from the end of the previous planning cycle. The largest individual section of this (£2.8bn) represents our planned spend on supporting our three naval bases. Also included in this area is spend on the Support Enablers, Logistics Commodities Services and other smaller areas of spend, including a line for the minor adjustments that FLCs make as part of managing their budgets. The total spend is broken down in the table below.

Other Elements of the EP (£m, Near Cash)	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	Total
Naval Bases	271	266	264	264	273	279	283	291	309	317	2,818
D Technical	34	40	35	35	37	24	24	25	26	21	301
Naval Authority Group	21	21	22	24	24	24	25	25	26	27	238
Support Enablers	220	286	209	198	204	209	219	216	222	227	2,211
Logistics Commodities Services	68	76	73	70	81	40	97	53	89	100	746
Total EP	615	688	603	590	618	576	648	612	672	692	6,314

