



National Audit Office

Departmental Overview 2020-21

The Ministry of Defence

February 2022

This overview summarises the work of the Ministry of Defence including what it does, how much it costs, recent and planned changes and what to look out for across its main business areas and services.

We are the UK's independent public spending watchdog



What this guide is about

This guide summarises the key information and insights that can be gained from our examinations of the Ministry of Defence (the Department) and related bodies in the UK defence sector.

The guide includes:

- information about the Department, its people and how it uses its resources;
- the Department's COVID-19 response;
- major programmes, defence contracts and the affordability of the Department's Equipment Plan;
- management of the Department's estate, including accommodation; and
- the Department's future plans and its work on sustainability.



This report updates our previous overview, Ministry of Defence Departmental Overview 2019-20, published in December 2020.

How we have prepared this guide

The information in this guide draws on the findings and recommendations from our financial audit and value for money programme of work, and from publicly available sources, including the annual report and accounts of the Department and its bodies.

We have cited these sources throughout the guide to enable readers to seek further information if required. Where analysis has been taken directly from our value for money or other reports, details of our audit approach can be found in the Appendix of each report, including the evaluative criteria and the evidence base used.

Other analysis in the guide has been directly drawn from publicly available data and includes the relevant source as well as any appropriate notes to help the reader understand our analysis.

Other relevant publications

More information about our work on the UK defence sector, as well as information about our other recent and upcoming reports on can be found on the NAO website.



About the National Audit Office

The National Audit Office (NAO) is the UK's independent public spending watchdog. We scrutinise public spending for Parliament and are independent of government and the civil service. We help Parliament hold government to account and we use our insights to help people who manage and govern public bodies improve public services.

The Comptroller and Auditor General (C&AG), Gareth Davies, is an Officer of the House of Commons and leads the NAO. We audit the financial accounts of departments and other public bodies. We also examine and report on the value for money of how public money has been spent.

In 2020, the NAO's work led to a positive financial impact through reduced costs, improved service delivery, or other benefits to citizens, of £926 million.

If you would like to know more about the NAO's work on defence, please contact:

Tom McDonald

Director, Defence and Cyber Security
Value for Money Audit

tom.mcdonald@nao.org.uk
020 7798 7706

Hilary Lower

Director, Defence
Financial Audit

hilary.lower@nao.org.uk
020 7798 7450

If you are interested in the NAO's work and support for Parliament more widely, please contact:

Parliament@nao.org.uk
020 7798 7665



Design & Production by Communications Team
DP Ref: 11009-001

© National Audit Office 2022

Contents

Overview

About the Ministry of Defence	4
How the Ministry of Defence is structured	5
How the Ministry of Defence spends its money	6

Part One – Finance

Financial management	8
The Department's response to COVID-19	10
Staff and pay	11
Civil Service Annual People Survey	14
Major programmes and key developments	15
Accounting Officer scrutiny of major programmes	17
Integrated Review	19

Part Two – Value for money

Affordability of the Equipment Plan	20
Defence equipment contracts	22
Defence estate optimisation	23
Single Living Accommodation	25
Sustainability	26
What to look out for	27

About the Ministry of Defence

The Ministry of Defence (the Department) states that it is both a Department of State and a military headquarters. It is responsible for providing the military capability necessary to deliver the government's objectives and defines future military requirements. Its main purpose is to deliver, alongside other government departments, security for citizens of the UK and the Overseas Territories by defending them, including against terrorism, and to act as a force for good by strengthening international peace and stability.

The Department's priority outcomes are to:

- strengthen the UK's national security through delivering threat-based defence decision-making;
- protect the UK and its Overseas Territories;
- enhance global security through persistent engagement and response to crises;
- contribute to NATO collective deterrence and defence; and
- modernise and integrate defence capabilities by taking a whole-force approach to our people and increasing the use of technology and innovation.

Long-term strategic direction

In March 2021, the government published its *Integrated Review of Security, Defence, Development and Foreign Policy: Global Britain in a Competitive Age*. This was followed by the Defence Command Paper. The Integrated Review describes the government's vision for the UK's role in the world over the next decade and sets policy to work towards this for the next four years, to 2025. We look at the impact of these changes on page 19.

Focus of National Audit Office (NAO) work on defence

Since our previous overview, the NAO has published reports on *The Equipment Plan 2020 to 2030*; *Improving the performance of major equipment contracts*, *Optimising the defence estate* and *Improving Single Living Accommodation*. These are summarised on pages 20–25.

The Department has eight defence tasks:

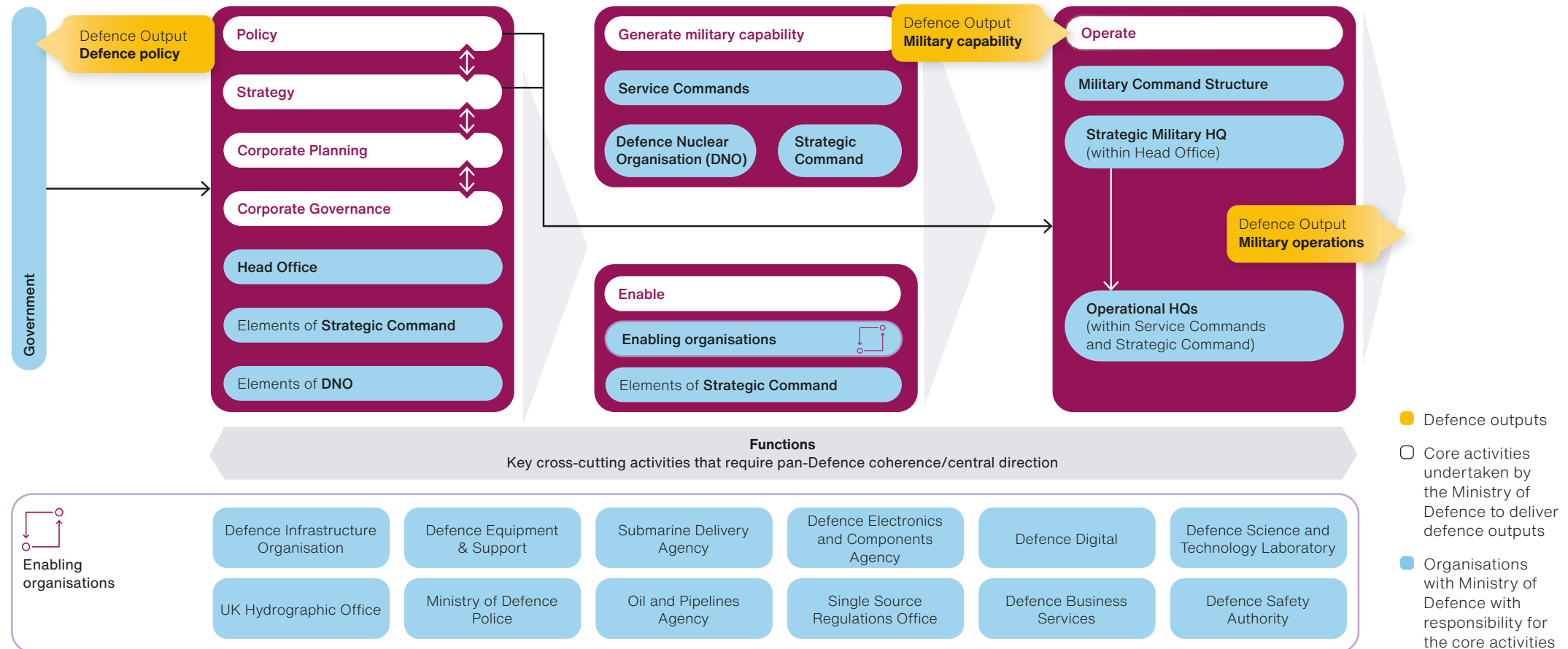
- 1 defence, security and resilience of the UK and its Overseas Territories;
- 2 nuclear deterrence and the defence nuclear enterprise;
- 3 contribute to improved understanding of the world through strategic intelligence and the global defence network;
- 4 influence through international defence engagement;
- 5 overseas defence activity;
- 6 promote UK prosperity and civil society;
- 7 direct defence; and
- 8 strategic base and enabling functions.

How the Ministry of Defence is structured

The Ministry of Defence (the Department) works alongside other government departments to develop UK national security policy and strategy. It turns this policy into defence tasks and directs how the Department will deliver these tasks, as set out in its annual Defence Plan.

In March 2021, the government published its Integrated Review and the Department published a Defence Command Paper (see page 19 for more information). This established new capabilities, including Space Command, which was formed on 1 April 2021.

The Defence Operating Model



How the Ministry of Defence spends its money

In 2020-21, the Ministry of Defence spent £42.4 billion.

Total Defence spending budget is allocated to the Department for the year for day-to-day resources and administration costs such as civilian and military staff, and capital investments such as infrastructure, equipment support costs and investment in military equipment.

The total does not include adjustments to the accounts, such as the impact of changes to the HM Treasury discount rate on the valuation of nuclear decommissioning provisions, non-cash depreciation and impairment of non-current assets.

Spending across major business areas

Capital expenditure and equipment support: The Department spent £11.7 billion on capital items, including equipment, and £7.4 billion on equipment support (together constituting 45% of total Defence spending).

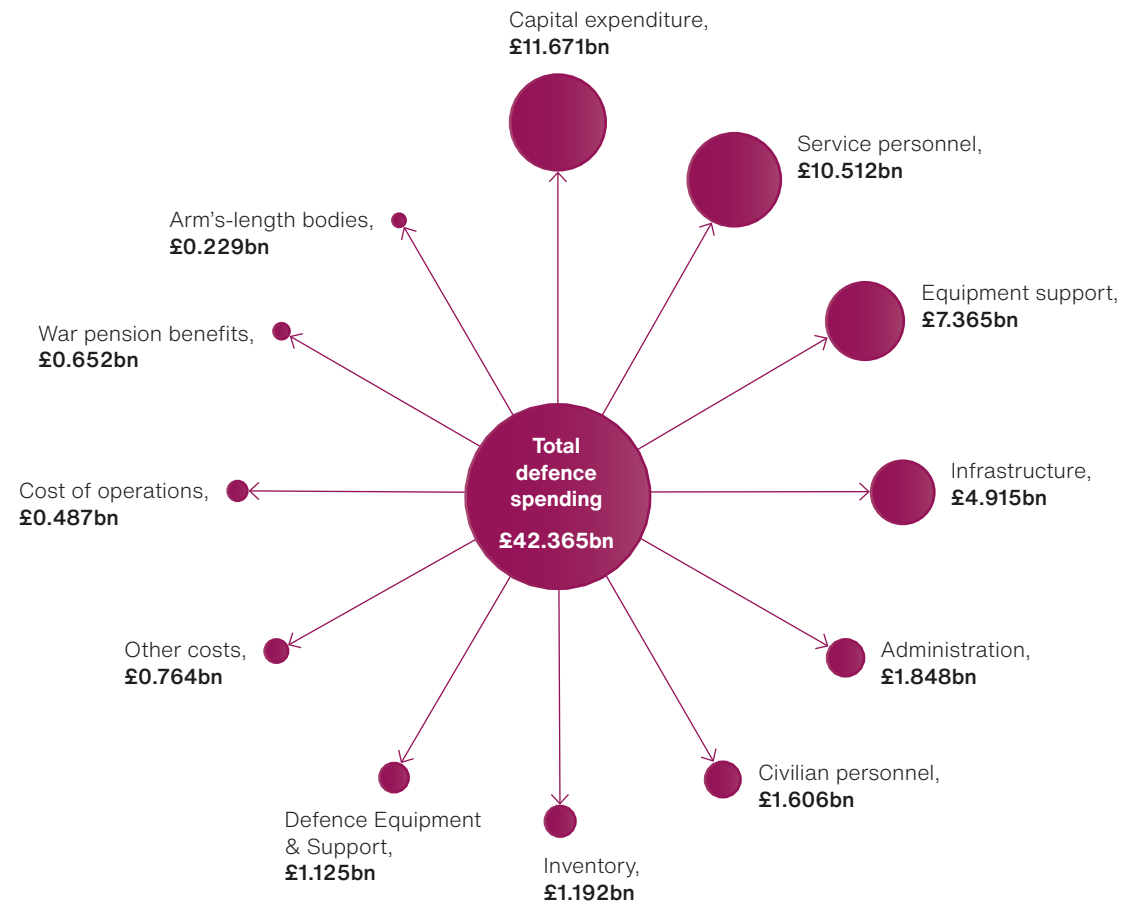
Before the 2020 Spending Review, the Department's forecast costs for its Equipment Plan exceeded budgets by £7.3 billion over the next 10 years, although it should be noted that in our view, the Department's estimated funding shortfall is not comparable to previous years, as the Equipment Plan 2020-2030 is presented on a different basis.¹ The Equipment Plan 2020-2030 did not include the impact of the additional funding and decisions taken in the 2020 Spending Review.

People: The Department spent £14.6 billion (35% of total Defence spending) on personnel, of which £11.4 billion was for service personnel.²

Defence capability: Other key areas of spend include £4.9 billion on infrastructure, £1.8 billion on administration and £1.2 billion on inventory consumption.

Operations: The cost of operations and peacekeeping in 2019-20 was £0.5 billion.

Breakdown of total Ministry of Defence spending, 2020-21



Note

¹ Total spending is correctly stated as £42.365 billion. However category totals sum to £42.366 billion due to rounding.

Source: National Audit Office analysis of *Ministry of Defence, Annual Report and Accounts, 2020-21*

¹ There is continued uncertainty over the completeness of cost forecasts and the Department's approach to making management adjustments. The Department also changed its approach to setting budgets, which means there are differences in presentation of its equipment budget compared with previous years.

² The £14.6 billion figure does not reconcile directly to personnel spend in the diagram opposite, because other categories also include personnel spend, for example in Defence Equipment & Support and other arm's-length bodies.

How the Department spends its money *continued*

The Department's financial position:

The diagrams on the right show the key components of the Department's Statement of Financial Position (Balance Sheet). They show the assets of the Department (the resources it owns and controls in furtherance of its objectives) and its liabilities and obligations. Together these show the economic position of the Department, its financial stability and the potential risks that it must manage.

Property, Plant and Equipment – £120.5 billion:

The Department's property, plant and equipment had a net book value of £120.5 billion at 31 March 2021. This included:

- Land, buildings and dwellings valued at £37.5 billion.
- Military equipment valued at £40.4 billion, of which £6.9 billion related to capital spares for repairing assets.
- Assets under construction valued at £28.9 billion.

Intangible Assets – £30.1 billion: The Department held intangible assets valued at £30.1 billion. Of this, the largest items relate to military equipment development costs.

Other Assets – £5.4 billion: Other assets included £1.2 billion of cash at bank and in hand, and £4.1 billion of receivables including VAT and prepayments.

Inventories – £3.7 billion: Inventories relating to such items as munitions, clothing and fuel, are valued at £3.7 billion. Inventories include supplies and spares for immediate and potential use.

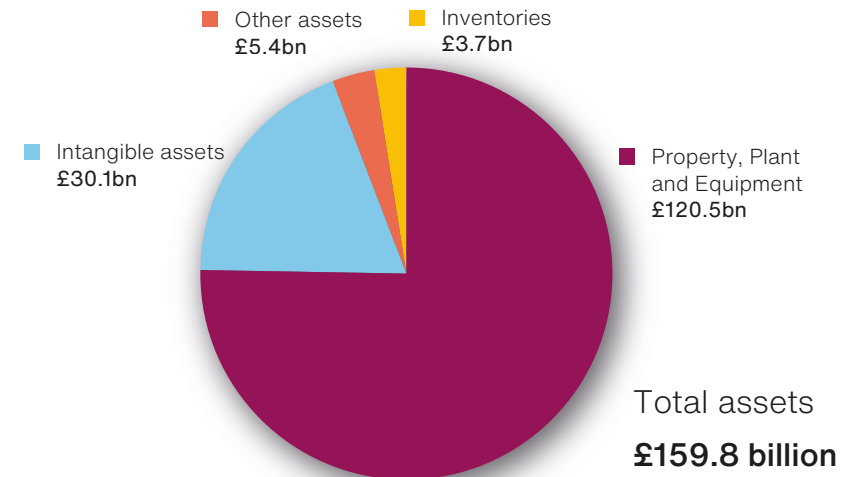
A large part of these items are recorded on the inventory accounting systems and comprise more than 740 million items. Raw materials are purchased for conversion into Property, Plant and Equipment assets. Consumables are not repairable and consist of items such as ammunition, fuel and support items.

Payables – £16 billion: £10.8 billion of the £16 billion of amounts payable to contractors and others, is due within one year.

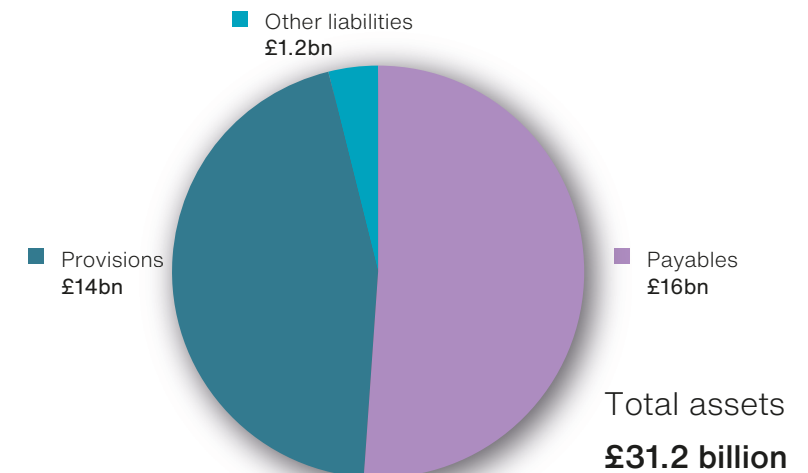
Provisions – £14 billion: The majority of the Department's provisions relate to decommissioning the Defence Nuclear Programme, costed at £13.2 billion as at 31 March 2021. These costs are significant, and with more than £11 billion of the total due in more than five years' time, are subject to change, due to the high degree of uncertainty associated with the liability. Only £159 million of the balance was utilised in 2020-21.

Other liabilities – £1.2 billion: Other liabilities include £0.7 billion relating to retirement benefit schemes for overseas employees.

Breakdown of total Departmental assets £159.8 billion, 2020-21:



Breakdown of total Departmental liabilities £31.2 billion, 2020-21:



Note

1 Totals do not sum due to rounding.

Source: National Audit Office

Part One

Financial management

The table on the right describes the Department’s assessment of some of the most significant control risks which have informed our work.

Assessment of control risks



Workforce and skills

The Department continues to face challenges recruiting and retaining personnel in engineering, commercial, project, programme and portfolio management. It plans to introduce a skills framework to improve workforce flexibility across defence, establish a career management model for cyber and medical staff and continue to modernise its employment offer.



Management of change and transformation

The Department’s transformation programmes aim to ensure its capabilities remain fit-for-purpose in the future. Defence Internal Audit reviewed progress against the Department’s transformation action plan earlier this year. It identified reasonable progress in most areas but found some implementation dates had slipped and that oversight and reporting required further improvements.



Business and financial planning

In November 2020, the government increased the Defence budget by £16.5 billion over four years, a cash increase of more than £24 billion compared with last year’s budget. But the Department continues to face difficult prioritisation decisions as it seeks to strengthen the control framework and improve value for money through measures such as: Acquisition and Approvals Transformation, Defence and Security Industrial Strategy, Transformation portfolio and Finance Functional Leadership Programme.



Commercial capability and governance

The Department is trying to improve the commercial and contract management skills of its staff by developing training, setting targets to ensure staff are properly accredited and supporting the cross-government contract management capability programme.



Strategic suppliers and the supply chain

The Department has completed work to understand the impact of EU Exit and the COVID-19 pandemic on its supply chain. The Department is also trying to improve relationships with strategic suppliers and better understand supply chains and supplier performance.

Assessment of control risks *continued*



Estates and infrastructure

The Department has around 132,000 built assets across 1,107 establishments spread globally. This includes 900 UK sites with roughly 96,000 buildings, around 30% of which are not in a condition considered acceptable. The Department has reduced the size of its UK built estate by 2% (1,600 hectares) since 2015-16 and now expects to meet around half of its target of a 30% reduction by 2040-41 (see pages 23–24 for more information). The Spending Review settlement secured additional funding to deliver a more cost-effective, modern and capability-aligned built estate. The Department plans to change how it delivers facilities management, offering flexible contracts to a more diverse supply base.

Service accommodation:

The Department is investing in improving Service Family and Single Living Accommodation (SFA and SLA) and providing greater choices for service personnel as part of its Future Accommodation Model programme. Dissatisfaction with accommodation can impact on retention, with knock-on consequences for the Department's ability to deliver defence capabilities. We found that SLA has not been a priority for the Department, identifying a lack of strategy and 'fix on fail' approach to maintenance (see page 25 for more information).



Cyber

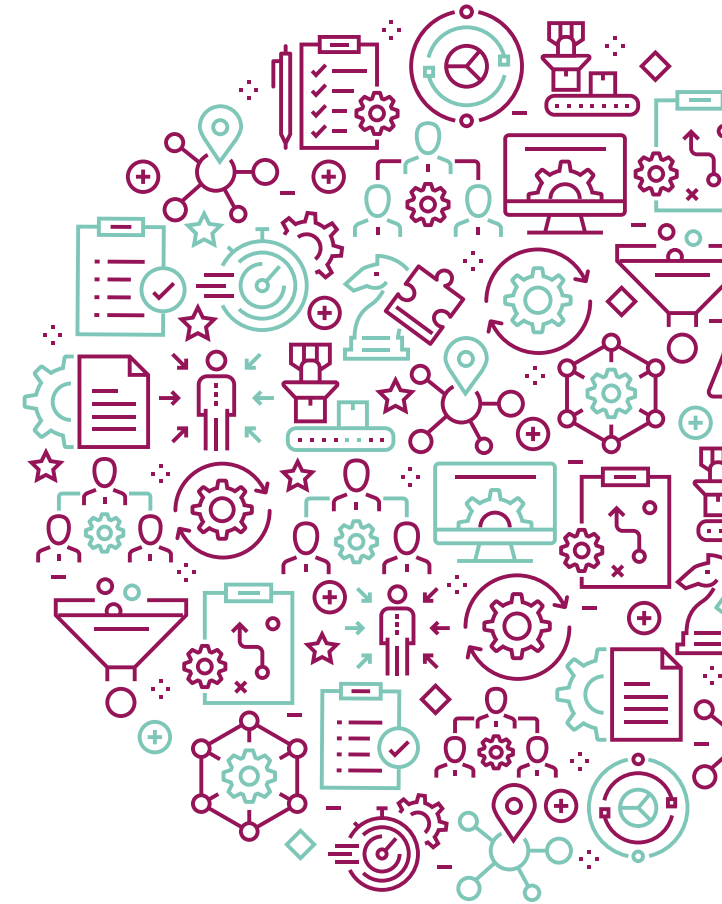
There is an ongoing risk that the Department's systems may be compromised by cyber attacks. Last year the Department introduced programmes to improve its resilience and it continues to work with government, allies and industry to strengthen the cyber security of its supply chain and ensure new military capability is "secure by design".



IT obsolescence

Like other organisations the Department is affected by IT obsolescence, for example due to rapidly changing technology, shorter lifetime of components or extending out-of-service dates for IT equipment. The Department aims to progressively modernise its technology and has revised its risk management approach.

Other areas of risk identified by the Department include: health, safety and environmental protection; management information; business resilience; physical security of assets and infrastructure; and COVID-19 (see page 10).



The Department's response to COVID-19

The COVID-19 pandemic has continued to impact the Department and its personnel in the past year and the Department has continued to contribute significantly to the government's response.



Impact on readiness and operational requirements:

- The Department continued to deliver core outputs and tasks, developing measures to safeguard and reduce the risks to personnel and their families, in the UK and overseas.
- It has continued to work with its suppliers to minimise interruption to critical Defence outputs. The Department paid £102 million in interim payments during the year, for which the full value of goods and services was subsequently fully delivered by suppliers.
- It reviewed contractual obligations for additional COVID-19-related costs impacting on its equipment programmes, resulting in costs of £175 million to the Department.
- As at 3 September 2021, 331,907 tests had been administered to Defence personnel as part of the national testing programme. Of the 308,177 UK Armed Forces personnel tested, 13,967 had a positive test recorded in their medical record.



In responding to the pandemic, the Department:

- Helped set up temporary hospital facilities.
- Provided 2,300 medical personnel to assist NHS frontline healthcare workers, and 225 Armed Forces personnel to support the Scottish ambulance service.
- Procured and distributed ventilators, personal protective equipment and other critical medical equipment.
- Set up a network of mobile testing units, each capable of testing 500 people per day.
- Assisted with vaccine planning, distribution and administration, including by:
 - embedding military planners in the vaccine taskforce;
 - establishing a Vaccine Quick Reaction Force to provide additional support to the vaccine roll-out, with 21 teams of six personnel ready to support NHS regional teams;
 - delivering 49,240 vaccine doses by military transport aircraft to government personnel overseas;
 - deploying military personnel to prepare vaccination centres; and
 - supporting the Cabinet Office's Rapid Response Unit to help quash rumours and counter disinformation. Two British Army experts were also deployed to NATO's COVID-19 Communications Hub.



In order to deliver this support, the Department:

- Established senior-level cross-functional forums to ensure issues were surfaced and dealt with in a timely manner.
- Used established Military Assistance to Civilian Authorities (MACA) mechanisms to call upon Defence capabilities. In the 2020-21 financial year, there were 397 MACAs for Operation RESCRIPT (the domestic response to COVID-19).
- Committed more than 5,000 personnel on Operation RESCRIPT at the peak of the Department's support to the national COVID-19 response, in February 2021.

Staff and pay

Military

The Department aims to become a more diverse and inclusive organisation that is more representative of UK society. It monitors the diversity of its new recruits, as well as diversity within the military services. In the 12 months to 31 March 2021, 8.0% of recruits to the UK regular forces and reserves were Black Asian and Minority Ethnic (BAME), down from 11.7% in the 12 months to 31 March 2020. The Department identified that a contributory factor was COVID-19 travel restrictions, which led to fewer people joining from Commonwealth countries.

In the 12 months to 31 March 2021, 11.8% of recruits were women, down from 12.6% in the 12 months to 31 March 2020.

Despite this, as at 1 April 2021, regulars and reserves both had record levels of female representation (11.0% of regulars, 15.1% of reserves) and BAME representation (9.2% of regulars, 5.7% of reserves).

Diversity of recruits in 2021:

11.8%

were women

▽ down from 12.6% in 2020.

8.0%

were ethnic minorities

▽ down from 11.7% in 2020.

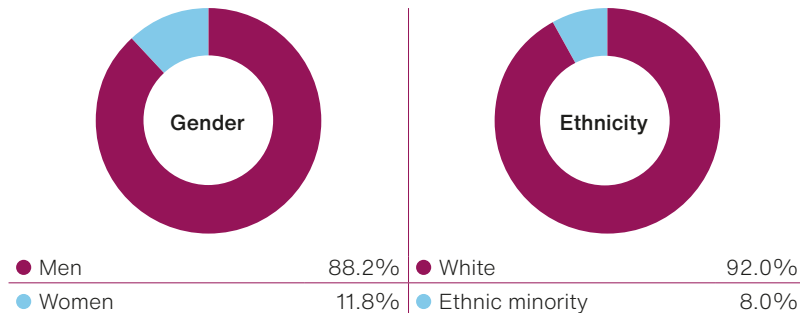
Note

- 1 Civilian personnel figures include only Ministry of Defence main staff, excluding trading funds, Defence Equipment & Support, executive agency, Royal Fleet Auxiliary, locally engaged civilians.

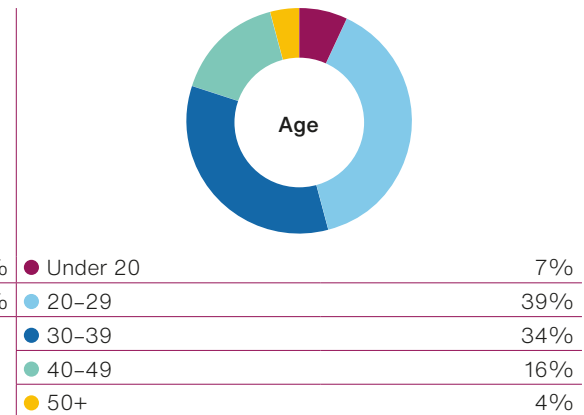
Workforce across the Ministry of Defence 2020-21

Military personnel, 2020-21

Breakdown of total UK regular forces and reserves recruited, 21,200 in 2020-21, by gender and ethnicity (%)



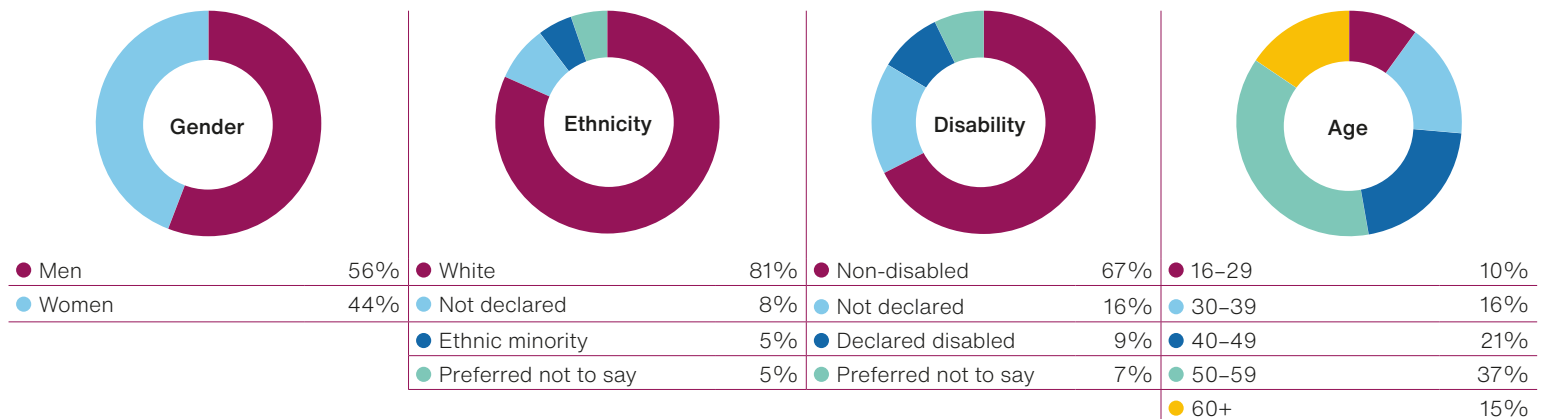
Age profile of UK regular Armed Forces personnel, total 149,280 at 31 March 2021



Source: National Audit analysis of Ministry of Defence data, *UK Armed Forces biannual diversity statistics: 2021* – GOV.UK (available at: www.gov.uk)

Civilian personnel, total 37,660 at 31 March 2021, by gender, ethnicity, disability and age (%)

Civilian personnel



Note

- 1 Figures may not sum to 100% due to rounding.

Source: National Audit Office analysis of Ministry of Defence data, *Civilian personnel biannual diversity dashboard report 1 April 2021* – GOV.UK; *MoD diversity dashboard: 2021* – GOV.UK (both available at: www.gov.uk)

Staff and pay *continued*

Civilian

The proportion of civilian personnel within the Department who are female is 44.1%; this figure has been steadily increasing since 2017 but remains 10% lower than the civil service average. As at 1 April 2021, 52.6% of the Department's civilian staff were 50 years old or over.

Note

- 1 Civilian personnel figures include only Ministry of Defence main staff, excluding trading funds, Defence Equipment & Support, executive agency, Royal Fleet Auxiliary, locally engaged civilians.

Workforce across the Ministry of Defence 2020-21

Staff breakdown 2020-21 (full-time equivalent)

	Permanent civilian staff	Armed Forces	Other civilian staff	Ministers	Special advisers	Departmental Group Total 2020-21	Departmental Group Total 2019-20
Staff numbers	57,371	160,232	6,015	5	2	223,625	219,169
Cost (£ million)	2,873	11,411	358	0.1	–	14,641	13,832

Pay multiples 2020-21

	Military pay multiple 2020-21	Military pay multiple 2019-21	Civilian pay multiple 2020-21	Civilian pay multiple 2019-21
Mid-point of band of highest paid director's total remuneration (£)	367,500	357,500	192,500	207,500
Median total remuneration (£)	35,715	35,315	33,106	31,393
Ratio	10.3	10.1	5.8	6.6

Note

- 1 Figures may not sum due to rounding.

Source: National Audit Office analysis of *Ministry of Defence Annual Report and Accounts 2020-21*

The Department's Annual Report and Accounts shows that staff costs have increased by

£0.8 billion (6%) since 2019-20

while staff numbers have increased by

4,456 (2%)

in the same period.

In 2020-21 the military pay ratio has increased slightly and the civilian pay ratio decreased due to changes in the remuneration of the highest paid board members of each respective category.

Staff and pay *continued*

The Integrated Review and subsequent Command Paper announced further future reductions to the size of the British Army (see also page 19). The number of military personnel is already lower than the numbers voted by Parliament. The table below illustrates the difference over the past three years:

Number of military personnel and numbers voted by Parliament, 2018-19 to 2020-21

	2020-21		2019-20		2018-19	
	Maximum number of personnel voted by the House of Commons	Actual maximum number of personnel during year	Maximum number of personnel voted by the House of Commons	Actual maximum number of personnel during year	Maximum number of personnel voted by the House of Commons	Actual maximum number of personnel during year
 Royal Navy	 29,500	 27,010	 29,000	 26,080	 27,380	 25,630
 Royal Marines	 8,200	 6,770	 8,200	 6,830	 8,090	 7,010
 Army – other than Services below	 102,990	 83,990	 102,460	 81,670	 103,010	 83,650
 Army – Commonwealth, Colonial and Gurkhas	 4,860	 4,080	 4,420	 3,930	 4,620	 3,620
 Royal Air Force	 36,400	 33,060	 35,090	 32,860	 35,290	 32,960

Civil Service Annual People Survey

The annual Civil Service People Survey looks at civil servants' attitudes to, and experience of working in, government departments. The results of the most recent survey were published in May 2021.

Theme	Result in 2020 (%)	Result in 2019 (%)	Change (Percentage points)	Civil service median in 2020 (%)
Employee engagement index	67	63	▲ 4	66
My work	79	77	▲ 2	80
Organisational objective and purpose	83	79	▲ 4	85
My manager	70	67	▲ 3	74
My team	81	79	▲ 2	84
Learning and development	58	56	▲ 2	56
Inclusion and fair treatment	79	77	▲ 2	82
Resources and workload	73	70	▲ 3	75
Pay and benefits	42	33	▲ 9	40
Leadership and managing change	47	39	▲ 8	58

▲ Increase ▼ Decrease ● No change

The Department's results improved across every survey category compared with 2019. This maintains its increased scores across all categories since 2018.

The biggest improvements were in pay and leadership, although the Department's leadership score is 11% below the civil service average.

The Department still scores lower than civil service averages across all but three categories (employee engagement, learning and pay).

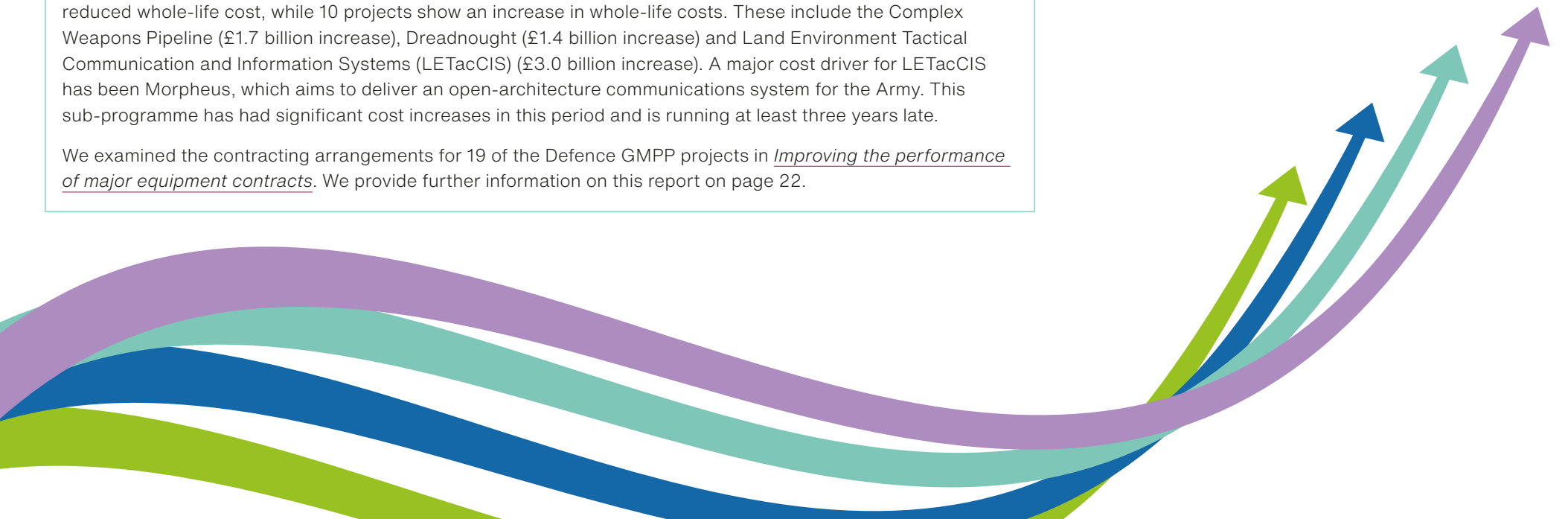
Major programmes and key developments

The Department has 36 projects in the Government Major Projects Portfolio (GMPP), the largest number for any department and approximately one-fifth of the total portfolio. The total whole-life cost of defence projects is £166.6 billion. Since last year eight defence-related projects have been added to the GMPP, and seven projects were removed.

Fourteen projects have delivery confidence assessment risk ratings of 'red' or 'amber/red', which means successful delivery appears unachievable or is in doubt. Only four projects are 'amber/green', where successful delivery appears probable. None of the Department's projects have a green risk rating (indicating that successful delivery appears highly likely and there are no major outstanding issues to threaten delivery). Four risk ratings are redacted for national security reasons. Since last year's Departmental Overview, delivery time has slipped on five projects while three projects are now expected to be delivered earlier than previously reported.

Thirty-one of the Department's 36 projects are to deliver 'military capability'. Compared with other projects in the GMPP, these have the highest average whole-life cost – at £7.6 billion – and the longest average length – at 18 years. Our analysis of GMPP data shows that, since our last Overview, eight projects now forecast a reduced whole-life cost, while 10 projects show an increase in whole-life costs. These include the Complex Weapons Pipeline (£1.7 billion increase), Dreadnought (£1.4 billion increase) and Land Environment Tactical Communication and Information Systems (LETacCIS) (£3.0 billion increase). A major cost driver for LETacCIS has been Morpheus, which aims to deliver an open-architecture communications system for the Army. This sub-programme has had significant cost increases in this period and is running at least three years late.

We examined the contracting arrangements for 19 of the Defence GMPP projects in *Improving the performance of major equipment contracts*. We provide further information on this report on page 22.



Major programmes and key developments *continued*

Delivery confidence assessments for major defence projects, 2013–2021

Project name	2013	2014	2015	2016	2017	2018	2019	2020	2021
A400M	Amber	Amber/green	Amber/green	Amber/green	Amber	Amber	Amber	Amber	Amber
Armed Forces Recruitment								Amber/red	
Armour Main Battle Tank 2025					Amber	Amber	Amber	Amber	
Armoured Cavalry 2025					Amber	Amber	Amber	Amber	Amber/red
Astute Boats 1-7	Amber	Amber	Amber/red	Amber/red	Amber/red	Red		Amber/red	Amber/red
Clyde Infrastructure							Amber/green		Amber
Collective Training Transformation									
Complex Weapons	Amber	Amber	Amber	Amber	Amber	Amber	Amber	Amber	
Core Production Capability	Green	Green		Amber	Red	Red			
Crowsnest Programme	Exempt	Exempt	Green	Amber/green	Amber	Amber	Amber	Red	Red
Defence Estate Optimisation						Amber/red	Amber/red	Amber/red	Red
Dreadnought	Exempt	Amber/green	Amber/red	Amber/red	Amber/red	Amber/red	Amber	Amber	Amber
E-7 Wedgetail									Amber/red
Fleet Solid Support						Amber	Amber	Amber	Amber/red
Future Beyond Line of Sight				Amber	Amber	Amber/red	Amber/red	Amber/red	
Future Combat Air System									Amber/red
Future Maritime Support						Amber/red	Amber/red	Red	Amber/green
Joint Crypt Key Programme						Exempt	Exempt	Exempt	Exempt
Land Environment Tactical Communication and Information Systems					Amber/red	Amber/red	Amber/red	Amber	Amber
Lightning	Amber/green	Amber	Amber	Amber	Amber	Amber/red	Amber/red	Amber	Amber/red
Maritime Electronic Warfare System Integrated Capability									Amber
Maritime Patrol Aircraft					Amber	Amber/red	Amber/red	Amber	Amber/red
Marshall	Exempt	Exempt	Amber	Amber/green	Amber/red	Red	Amber/green		Amber/green
Mechanised Infantry Programme						Amber	Amber	Amber	Amber/green
Mine Hunting Capability									Amber/red
MODnet Evolve						Amber	Amber/red	Amber/red	Amber/red
New Medium Helicopter									Amber
New Style of Information Technology (Base)				Amber	Amber	Amber/red	Amber/red	Amber/red	Amber/red
New Style of Information Technology (Deployed)					Exempt	Amber/red	Amber	Amber	Exempt
Next Generation (fixed) Communication Network									Amber/green
Nuclear Warhead Capability Sustainment Programme	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Project Bramley									Exempt
Protector					Amber	Red	Amber/red	Amber	Amber/red
Spearfish Upgrade Programme	Exempt	Exempt	Amber/green	Amber/green	Amber/green	Amber/red	Amber/red	Red	Amber
Type 26 Global Combat Ship Programme						Amber/green	Amber/green	Amber	Amber
Type 31e						Exempt	Exempt	Amber	Amber

Key

- Green
- Amber/green
- Amber
- Amber/red
- Red
- Exempt

Source: National Audit Office analysis of Infrastructure and Projects Authority data

Accounting Officer scrutiny of major programmes

Departmental accounting officers (AOs) scrutinise significant plans to start or vary major projects and assess whether they meet the standards set out in HM Treasury's guide to *Managing Public Money*. In response to recommendations in our 2016 report, *Accountability to Parliament for taxpayers' money*, designed to encourage AOs to provide positive assurance about regularity, propriety, feasibility and value for money ahead of key implementation decisions, the government committed to making available a summary of key points from the Accounting Officer's Assessments. Since our last Departmental Overview, the Department has issued a further four Accounting Officer Assessments, which are set out below:

Ministry of Defence Accounting Officer Assessments, 2020-21	Background	Accounting Officer conclusion
<p>A400M Atlas military transport aircraft</p> <p>(Reason for assessment: re-baselining)</p>	<p>A400M programme will provide the UK with 22 aircraft by 2023, supplied by Airbus.</p> <p>Delays have rendered the original schedule unrealistic. Between 2017 and 2019, Airbus sought to strike a "new deal" with the UK and other customers. It committed to deliver all aircraft to the original specification but revised the delivery schedule and schedule for retrofitting aircraft to meet this specification. Only the final UK aircraft will be delivered to the full specification: The rest will be retrofitted between 2020 and 2026.</p> <p>As availability of aircraft was previously very poor, the senior responsible owner (SRO) brought together front-line users, support organisations and Airbus. Availability "almost tripled" – leading the SRO to conclude that availability was manageable.</p>	<p>The re-baselining and improvement in availability rates had had a positive impact on the programme's feasibility.</p> <p>Airbus's firm commitment to deliver the original capability standards and the success in improving aircraft availability meant that the A400M programme remained feasible.</p> <p>The AO had no concerns about its regularity, propriety, or value for money.</p>
<p>Project PEGASUS</p> <p>(Reason for assessment: cost/schedule increases)</p>	<p>PEGASUS, an enriched uranium storage and manufacture facility, will replace infrastructure which does not meet modern safety, security and material accountability standards. It is a key component of the Nuclear Warhead Capability Sustainment Programme. The programme has two phases: to build a storage facility, followed by a manufacturing facility.</p> <p>The Department expects to complete the storage facility by June 2025 and has set a target completion date in 2030 for the first unit of the manufacturing capability. However, it still needs to carry out further 'assessment phase' work to identify the best way to deliver the manufacturing facility. It also recognises that delivery of PEGASUS in time to meet the warhead programme's requirements will be challenging.</p> <p>In 2011, when PEGASUS was approved, the Department expected it to cost £634 million. The Department now expects costs to be higher and will develop a new cost estimate as part of the manufacturing facility's 'assessment phase'.</p> <p>The Department recognises the project has suffered from poor project performance, and an overly complex technical solution leading to increasing costs and severe delays. It has also been impacted by the latest replacement warhead policy announcement and additional design requirements.</p>	<p>PEGASUS remains an essential capability and a satisfactory use of public funds.</p> <p>While the Department is still determining how best to deliver the manufacturing element, the approach taken for the storage facility represents value for money.</p> <p>Timescales are challenging, but PEGASUS is still deliverable.</p>



Accounting Officer scrutiny of major programmes *continued*

Ministry of Defence Accounting Officer Assessments, 2020-21

Background

Accounting Officer conclusion

Fleet Solid Support

(Reason for assessment: Outline Business Case stage)

The programme will build a new class of ships which will supply munitions, provisions and other stores to Royal Navy Task Groups at sea. It is an essential component of Carrier Enabled Power Projection.

The Department has changed its procurement approach in line with the refreshed National Shipbuilding Strategy. It aims to incentivise bidders to include as much UK content as possible (including carrying out integration work in the UK) while also encouraging international bids to make the programme more affordable and deliverable.

The programme has submitted an Outline Business Case; the Full Business Case is expected in spring 2023.

The Outline Business Case meets the tests set out in *Managing Public Money* and is content with the direction of travel.

The flexible procurement strategy meant the potential cost and schedule risks had been mitigated as far as possible.

MODnet Evolve

(Reason for assessment: joining Government Major Projects Portfolio – NB this was in 2018)

MODnet Evolve programme aims to purchase and deliver IT services at OFFICIAL and SECRET classification, by maximising investment in software, improving electronic records management, expanding end user hardware choice, optimising print services and developing the Department's ability to work at SECRET.

The Department believes it will obtain better value for money by disaggregating the services required, rather than pursuing a large IT contract. The Department plans to build on lessons from other programmes of this scale.

MODnet Evolve is deliverable in performance, cost and time and remains a satisfactory use of public resources.

The Department acknowledges the complexity of the programme, including dependencies on the wider Defence Digital portfolio.

Source: National Audit Office analysis of Ministry of Defence and HM Treasury data, available at: www.gov.uk/government/publications/government-major-projects-portfolio-accounting-officer-assessments-mod



Integrated Review

Government published the *Integrated Review of Security, Defence, Development and Foreign Policy* in March 2021, setting out its strategic priorities for security and international engagement in the coming decade and its vision for the UK in 2030. The Integrated Review includes a framework of objectives and actions by 2025 and some spending decisions to support their implementation, with the intention of also guiding future spending decisions.

The government's objectives by 2025 are: sustaining strategic advantage through science and technology, shaping the open international order of the future, strengthening security and defence, and building resilience, at home and overseas. In working towards these objectives, the government plans to collaborate with allies and partners and increase integration across and within departments. The Integrated Review highlights new capabilities which contribute to these objectives such as the National Cyber Force and Space Command, together with existing 'soft power' strengths such as the BBC.

In the Integrated Review, the government explains the changing strategic context in four trends:

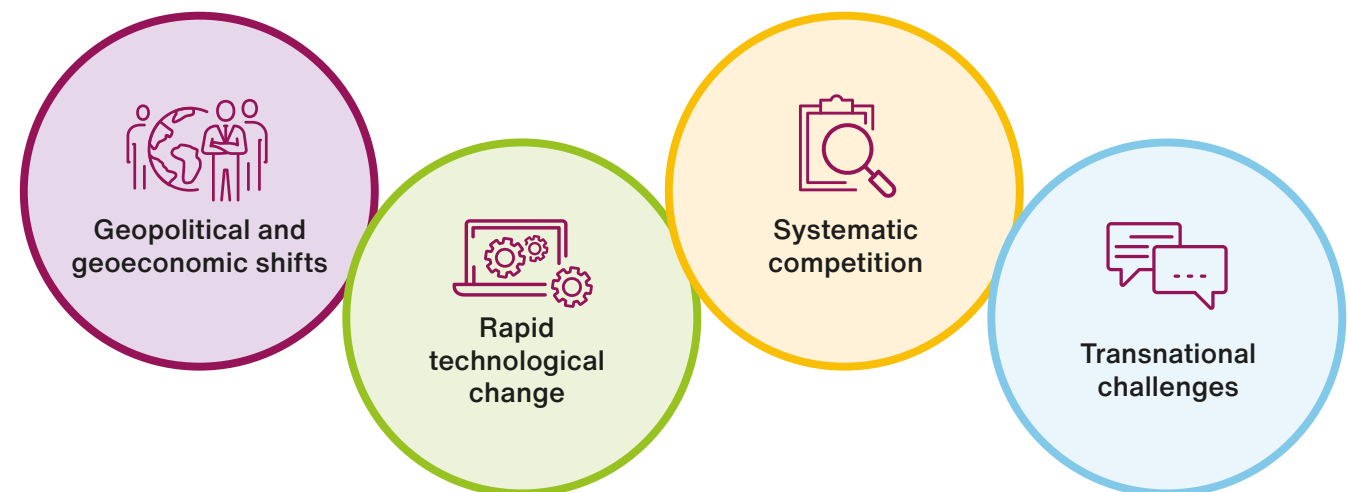
- 1 Geopolitical and geoeconomic shifts, including the growing importance of the Indo-Pacific region.
- 2 Systemic competition, between states, values and systems of government.
- 3 Rapid technological change resulting in reshaped economies and greater competition.
- 4 Transnational challenges necessitating collaboration and cooperation.

The government announced spending decisions in its 2020 Spending Review to support the Integrated Review, including £24 billion over four years for the Department, to cover research into Artificial Intelligence, restructuring the Armed Forces, establishing Space Command and the National Cyber Force, continuing the renewal of the nuclear deterrent, and developing the next generation of naval vessels and combat aircraft.

A week later, the Department published the *Defence Command Paper*. This considers the threats to the UK and its interests in light of the changing strategic context described in the Integrated Review and provides an assessment of the capabilities the Department can and will contribute. It predicts the technological developments that will be relevant in the future battlefield. It describes how the Department plans its forces to be more versatile in delivering a range of tasks, focusing on collaboration with allies and partners, attracting a diverse workforce, partnering with industry to pioneer research and development, and evolving to a force designed for permanent and persistent global engagement. The plans also detail investments in equipment for each of the Commands, the platforms to be retired and restructuring of its forces, including further reducing the size of the British Army by 3,500.

This year's accounts include impairments to reflect some of these changes, where decisions had already been made before 31 March 2021. The Department made £1.4 billion impairments to non-current assets because of earlier retirement of platforms and £0.5 billion write-offs to assets under construction because of cancellation or curtailment of equipment procurement programmes. Further consequences of the Integrated Review, where decisions were made after 31 March 2021, will be reflected in future years' accounts.

Four overarching trends of particular importance to the UK



Part Two

Affordability of the Equipment Plan

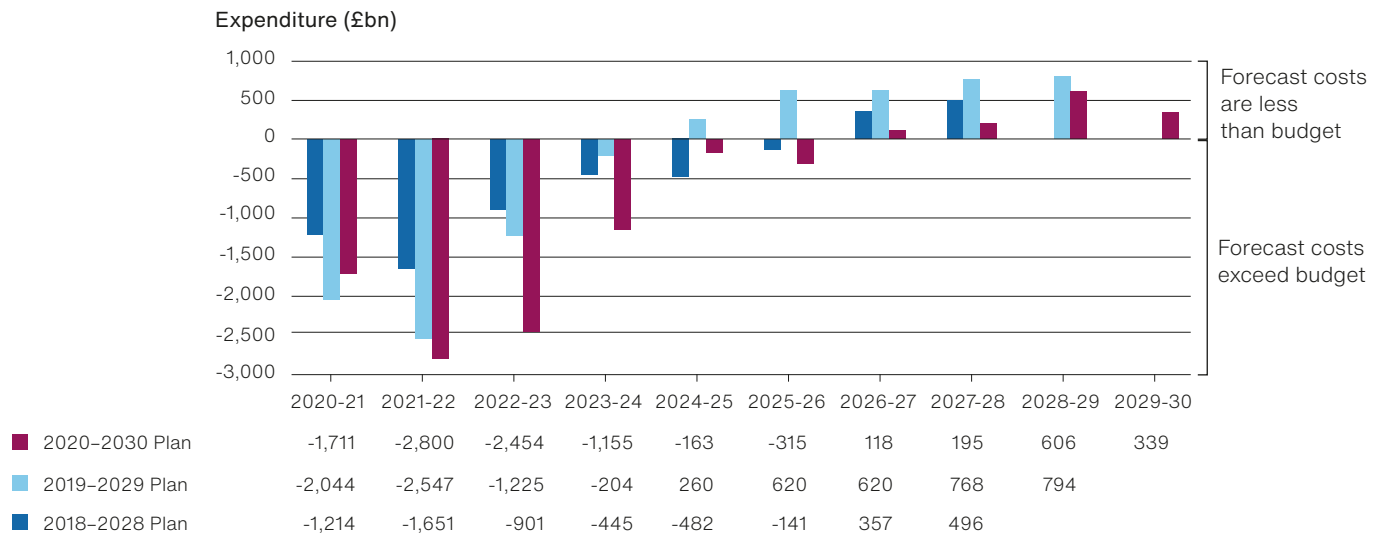
Our [Equipment Plan report](#) assesses whether the Department's planned investment in its equipment and support programmes is affordable and sets out its expected expenditure on projects to equip the Armed Forces.

In January 2021, prior to the Integrated Review, we reported on the challenges the Department faced. We concluded that the Department faces the fundamental problem that its ambition to develop new capabilities far exceeds its available resources.

We found that, for the fourth year in a row, the Equipment Plan was unaffordable. The Department's central estimate of the most likely funding shortfall was £7.3 billion over the period 2020–2030, although this could be as high as £17.4 billion if risks materialise. This was despite the Department reducing its overall cost forecast by £25.1 billion to reflect adjustments for expected savings. The funding shortfall is highest in the period until 2026-27 (see below).

The profile of the Ministry of Defence's annual funding shortfalls on the 2020–2030 Equipment Plan, compared with 2019–2029 and 2018–2028

The Department forecast that costs will exceed annual budgets in years 1 to 6 of the Plan



Notes

- 1 While we urge caution in making direct year-on-year comparisons, the profile of funding shortfalls has shown the same pattern for three years.
- 2 The 2020–2030 Equipment Plan provides the Department's latest assessment of the affordability of military commitments. Its forecast budget and costs are based on financial information available at the start of the 2020-21 financial year and therefore precede the November 2020 government announcement of additional defence funding over the next four years.

Source: National Audit Office analysis of Ministry of Defence data

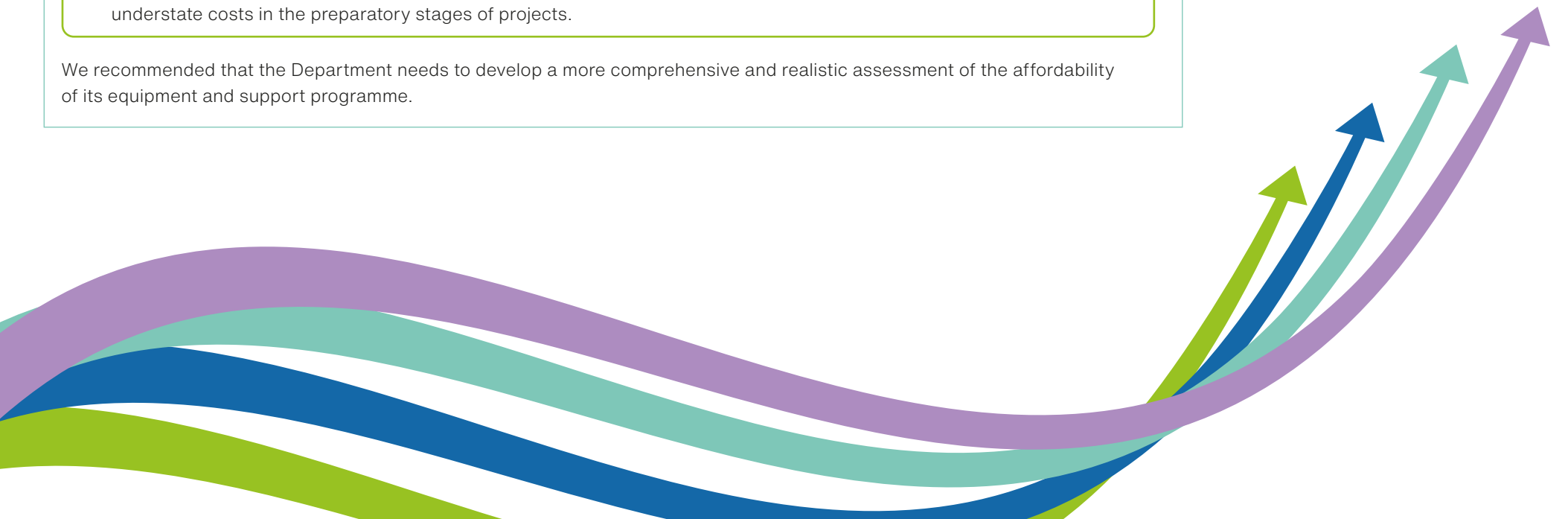
Affordability of the Equipment Plan *continued*

We found that the Department's equipment costs were rising more rapidly than its budget as new projects were added, the costs of existing projects increased and the Equipment Plan was adjusted to include lower levels of expected savings. The Department also faced substantial additional cost pressures – of up to £20 billion – to develop future military capabilities which are not yet reflected in the Equipment Plan.

The Department's constant need to react to short-term funding pressures has created practical issues which it must address:

- The Department has taken a short-term approach to financial management, which has led to increasing cost pressures.
- Cost pressures have restricted top-level budgets from developing military capabilities in a way that will deliver value for money, and from investing in new equipment to address capability risks.
- Financial pressures have created perverse incentives to include unrealistic savings. Our report *Improving the performance of major equipment contracts* found equipment suppliers and the Commands may have incentives to understate costs in the preparatory stages of projects.

We recommended that the Department needs to develop a more comprehensive and realistic assessment of the affordability of its equipment and support programme.



Defence equipment contracts

The Department is responsible for some of government’s most technically complex, risky and costly procurement programmes. However, due to its complex requirements for its major equipment programmes, the Department relies on a limited specialist supplier base to meet its needs. In 2019-20, it paid 44% of its £26.6 billion procurement expenditure to 10 major providers.

In *Improving the performance of major equipment contracts*, we concluded that the Department has struggled to manage its major equipment contracts effectively, with frequent delays and cost increases. This has been due to under-performance; weaknesses in contract management; underestimating the scope and technical complexity of equipment programmes; and prioritising short-term solutions because of affordability challenges. As a result, the Department has been unable to optimise value for money from the contracts for its largest, most complex equipment programmes.

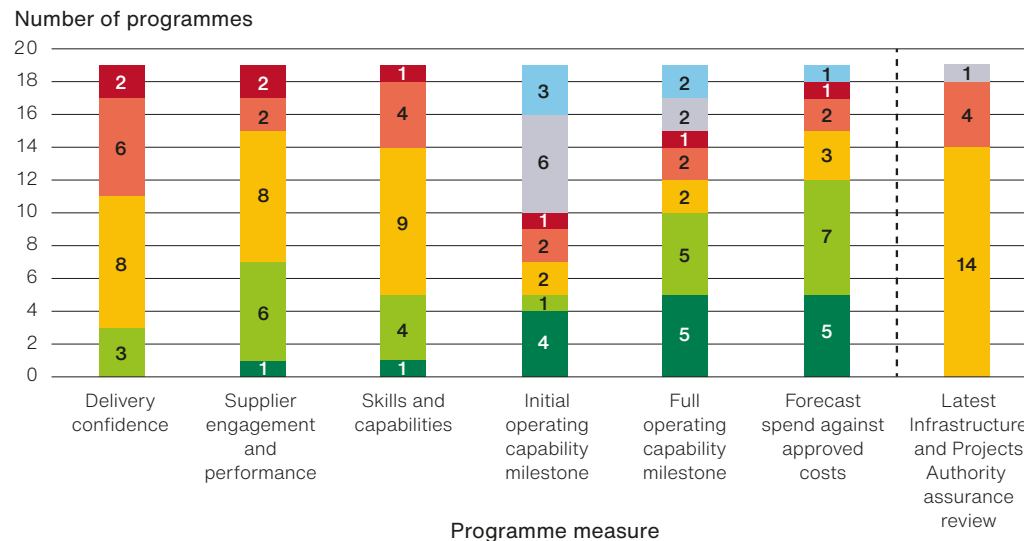
The Department’s senior responsible owners (SROs) have regularly expressed concerns over aspects of the delivery of equipment programmes and suppliers’ performance. As at March 2021, among 19 of the programmes we examined, SROs rated a range of programme measures, including:

- delivery confidence as ‘amber/red’ or ‘red’ in eight;
- supplier engagement and delivery performance as ‘amber/red’ or ‘red’ in four, involving three prime suppliers; and
- programme skills and capabilities as ‘amber/red’ or ‘red’ in five.

To improve value for money, the Department must build on its initial efforts to embed wider good practice in its commercial relationships and project delivery. These are promising steps, but it is early days for the initiatives, some of which have been tried unsuccessfully before and do not necessarily fit easily with the existing departmental culture. Strong leadership and sustained resources will be needed to fully embed these changes and deliver real benefits. A key part of the Department’s agenda must also be to learn lessons routinely across the portfolio, including being honest in acknowledging and learning from examples of poor value for money when they occur.

The Ministry of Defence’s senior responsible owner (SRO) and Infrastructure and Projects Authority programme risk ratings, January to March 2020-21

SROs rated eight programmes out of 19 as ‘amber/red’ or ‘red’ for delivery confidence and four programmes as ‘amber/red’ or ‘red’ for supplier engagement and performance



Risk ratings key
 ■ Green ■ Amber/green ■ Amber ■ Amber/red ■ Red ■ Not applicable ■ Not stated

Notes

- 1 Data for the Infrastructure and Projects Authority’s (IPA) assurance review ratings reflect the most recent delivery confidence assessment valid at quarter four 2020-21. The IPA has not reviewed the Ministry of Defence’s (the Department’s) Future Combat Air System Technology Initiative programme.
- 2 The six categories on the left are rated by the SRO, the final category on the right shows the IPA’s risk rating.

Source: National Audit Office analysis of Ministry of Defence documents

Our findings drew on insights from other government departments from the NAO’s Commercial Hub, whose work contributes to improving commercial capability and contract management across the public sector.

Defence estate optimisation

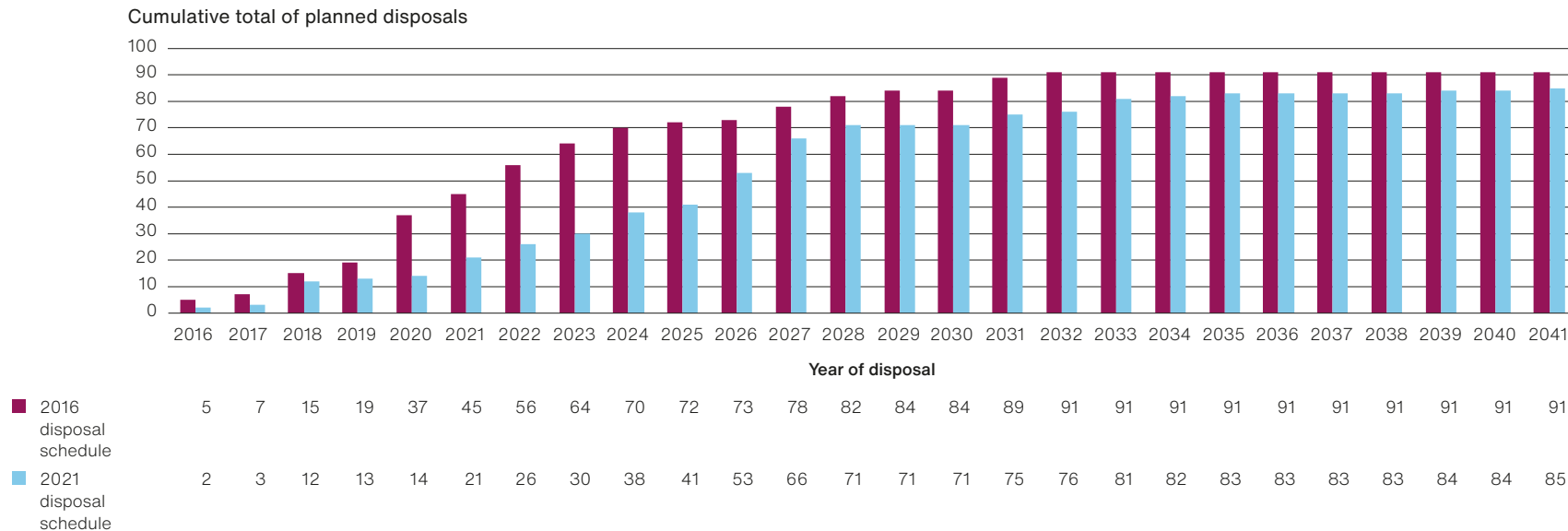
The Department has access to one of the largest estates in the country, accounting for 1.5% of the UK landmass. Its estate is crucial to delivering the country's defence capability and it must also retain flexibility so that it can respond to changes in operational requirements and evolving security threats. In 2019-20, it spent £4.6 billion (12% of its budget) on its estate.

The Department recognises that its estate is too large and that its scale, nature and location has not evolved enough to accommodate the Armed Forces' future needs. In 2016, it published a strategy to optimise the defence estate and launched its 25-year Defence Estate Optimisation (DEO) Portfolio.

These set out plans for construction activity, personnel moves and land release to pursue its vision of providing a more affordable built estate that will support defence. The Department had three estate disposal targets: to reduce the size of its built estate by 30% (23,200 hectares) by 2040-41; raise £1 billion through disposals by the end of March 2021; and release enough land by March 2020 on which to build 55,000 homes. However, our report *Optimising the defence estate* found that since 2015-16, the Department has made limited progress in rationalising its estate. It has reduced the size of its built estate by just 2% (1,600 hectares) and did not achieve its targets for disposal proceeds or releasing land for new housing.

Comparison of Defence Estate Optimisation (DEO) Portfolio disposal plans from 2016 and 2021

The Ministry of Defence's (the Department's) 2021 plan is that fewer disposals will be completed and nine years later than originally planned



Notes

- 2016 disposal schedule includes 11 sites which the Department now plans to retain, and four that are no longer part of the Defence Estate Optimisation (DEO) Portfolio.
- 2021 disposal schedule includes nine sites that were not included in the 2016 schedule.
- 2021 disposal schedule includes actual site disposals up to 2020.
- 2021 disposal schedule includes two disposals (in 2034 and 2041) which the Department plans to remove from the DEO Portfolio.

Defence estate optimisation *continued*

Since 2016, the Department has updated its approach to delivering its built estate optimisation work. It terminated the contract with its business partner and is building its in-house capability. It has delegated more responsibilities to the frontline Commands, shifted from prioritising disposals to 'optimising' the use of its estate and revised its site disposal programme three times to reflect project realism and military requirements. These changes mean that it now plans to complete fewer disposals and to do so nine years later than it had envisaged in 2016. As a result, the Department now expects to reduce the size of its built estate by 16% by 2040-41. This means it will not reduce estate running costs as much or as quickly as expected – the Department estimates it will save £2.7 billion in running costs by 2040-41, 33% less than its 2016 plans. In addition, it has reduced its estimate of the DEO Portfolio's net benefits from £2.4 billion to £0.65 billion.

The changes mean the Department is now better placed to proceed, although significant challenges remain. Reducing the size of the defence estate is a complex task involving multiple stakeholders, with site disposal projects taking an average of six years to complete – including the preparation of sites for disposal and relocating personnel and equipment. Other challenges include recruiting skilled staff, managing interdependencies and meeting the Department's net zero commitments. Affordability is also likely to remain a challenge as costs increase. The Department resolved a £2.8 billion funding gap in the DEO Portfolio and is committed to spending £4.3 billion on it over the next 10 years, but relocation and disposal costs are likely to be underestimated and budgets have already been reduced to reflect anticipated lower maintenance costs.

Single Living Accommodation

The Department has committed to providing regular service personnel and some full-time reservists with high-quality subsidised accommodation as a condition of service. Single Living Accommodation (SLA) is normally provided in the form of accommodation blocks inside military bases and is available to single and unaccompanied personnel undertaking initial training or serving on a regular engagement with the Armed Forces, as well as some full-time reservists.

On 31 October 2020, 79,963 service personnel, around 52% of the Armed Forces, occupied SLA. Nineteen per cent of those living in SLA were in accommodation rated as Grade 1 (the highest grade) but 36% lived in accommodation rated as Grade 4 or below (see figure opposite). The number of service personnel living in Grade 1 has reduced by 29% since 2018, while those living in Grade 4 has increased by 15%.

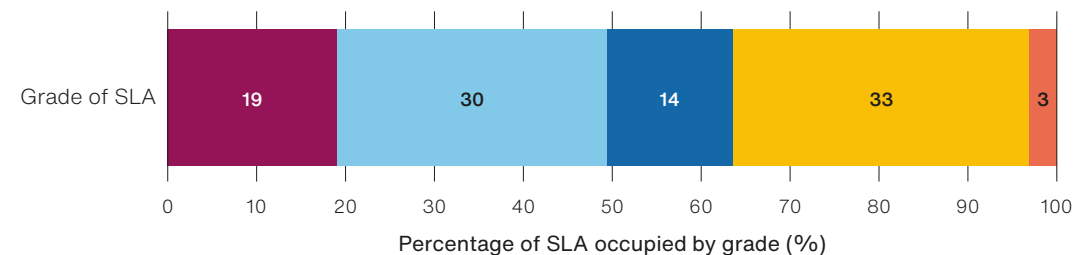
In *Improving Single Living Accommodation*, we concluded that the Department is not meeting its commitment to provide high-quality subsidised accommodation to all service personnel. Satisfaction with SLA has declined in recent years and can impact on retention, risking the Department's ability to deliver defence capabilities. SLA has not been a priority for the Department. There has been no clear strategy, limited investment in buildings and a 'fix on fail' approach to maintenance. While this approach might help with short-term cost savings, it has led to an overall decline in the condition of SLA and shortened the life of these buildings, thereby increasing future costs.

Although work is under way to improve some SLA, with Commands developing investment plans worth £1.5 billion, these are not yet based on a clear understanding of future demand for SLA, the expectations of service personnel or knowledge of what a reasonable standard of SLA would look like. The Department has tried to improve governance arrangements for SLA and coordinate maintenance work, including by introducing a new management information system. However, without these arrangements operating effectively, the Department risks not achieving value for money in the future.

The Department plans to address our recommendations, in the first instance by setting a 'minimum standard' for SLA and carrying out further work to understand the 'lived experience' of service personnel.

Breakdown of the proportion of service personnel living in Single Living Accommodation (SLA) in the UK by grade

As at 31 October 2020, 36% of service personnel living in SLA occupied accommodation at Grade 4 or below, the lowest grades for charging



- Grade 1 (highest grade)
- Grade 2
- Grade 3
- Grade 4
- Below Grade 4 (lowest grade)

Notes

- 1 Percentages are based on 79,963 service personnel occupying SLA, as at 31 October 2020.
- 2 Grade 2 includes 3,958 service personnel living in Substitute Service Single Accommodation out of the total 24,334 service personnel in the Grade 2 category.
- 3 Excludes 'other' category comprising 3,521 service personnel classed as living in SLA, but which is not graded. This includes those living on a ship or in misappropriated Service Family Accommodation.
- 4 Data include service personnel who do not pay charges due to waiver conditions.
- 5 These data are taken from the Joint Personnel Administration system as at 31 October 2020 and therefore will not reconcile with the total number of bed spaces taken from other data sources.
- 6 The Ministry of Defence operates a four-tier grading system to set charges for SLA. Accommodation deemed to be in the poorest category is classed as below Grade 4.
- 7 Percentage values are rounded to the nearest whole number and do not sum to 100% due to rounding.

Source: National Audit Office analysis of Ministry of Defence data

Sustainability

In May 2020 we published an *Environmental Sustainability Overview* on the Ministry of Defence. It gives an overview of the approach taken by the Department to environmental sustainability and the extent to which this supports the government's long-term objectives in this area. The size and range of the Department's activities make its performance vital to government meeting its environmental targets.

The Department achieved its Greening Government Commitments (GGC) target for reducing carbon emissions in 2018-19, reporting 830,000 tonnes of greenhouse gas emissions – a 42% reduction since 2009-10. However, the Department's energy mix had not changed significantly over the past 10 years and it has made little progress in increasing the proportion of its energy drawn from renewable sources. Additionally, 1.8 million tonnes of emissions from military activity, such as operating defence equipment, fell outside the scope of the GGC targets.

The Department owns or controls approximately 1.5% of the UK's land mass, with more than one-third (38%) of this area designated as sites of special scientific interest (SSSIs). Natural England has assessed 48% of the Department's English sites as in 'favourable' condition, comparing well to the English average of 39%. More than half of these sites have not been assessed since at least 2011 (by Natural England), raising concerns that this assessment is no longer accurate.

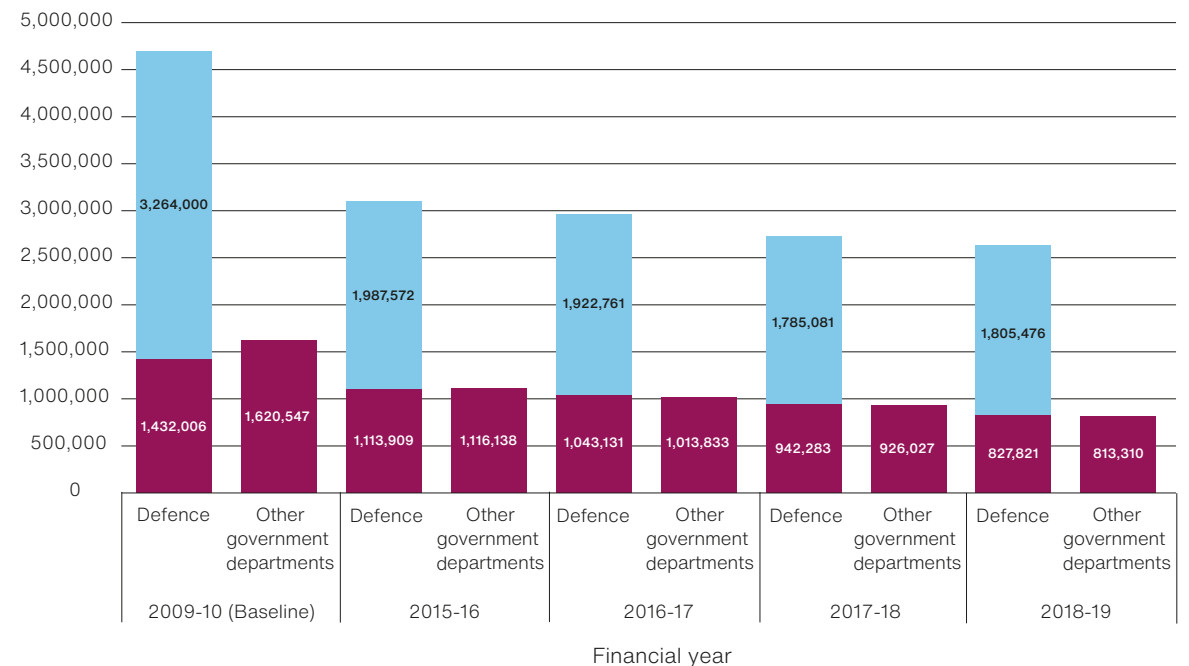
We concluded that the Department lacked the central oversight to gain assurance over whether its activity is sufficient to deliver its desired environmental outcomes. We found that activities at the local level were not seen as priorities themselves, but were instead subject to a broader health and safety agenda.

In March 2021, the Department produced the *Ministry of Defence Climate Change and Sustainability Strategic Approach*, which has begun to address the issues raised by our review. It has already established a Head Office team to oversee the delivery of the Department's approach, including in the first year to embed sustainability into the defence procurement supply chain, and focus on reducing emissions from the built estate.

The Ministry of Defence's greenhouse gas emissions, 2015-16 to 2018-19, and 2009-10 baseline

In 2018-19 the Ministry of Defence's Greening Government Commitment (GGC) reported emissions, which are less than half of its total emissions, were slightly higher than for the rest of government combined

Carbon equivalent emissions (tCO₂e)



■ Greening Government Commitment reported emissions ■ Other Defence emissions

Notes

- GGC reported emissions cover government departments' estates and vehicle use. Other defence emissions cover defence activity out of GGC scope, such as fuel use as part of defence operations.
- The 2009-10 figure for 'other defence emissions' has not been adjusted for any changes to emissions calculation methodology that may have taken place in recent years.
- This figure has been updated from that which appeared in the *Environmental Sustainability Overview* to include 2018-19 GGC data for the whole of government.

Source: Greening Government Commitments annual reports, available at: www.gov.uk/government/collections/greening-government-commitments, and National Audit Office analysis of Ministry of Defence data

What to look out for

In the coming year, we expect to see the Department's progress in implementing the Integrated Review, including:

- developing costed plans for existing programmes and introducing new capabilities;
- adapting its strategy to reflect changing defence priorities and transformation, for example the Army's *Future Soldier Guide*; and
- implementing its plans to change the shape of the military and developing the skills it needs in its workforce.

As part of the ambition set out in the Integrated Review, the UK recently announced a new alliance with Australia and the United States, which will include collaboration on nuclear powered submarines for the Royal Australian Navy. At the same time the Department is facing escalating nuclear costs of its own, including new submarines, infrastructure, decommissioning and storage facilities.

The 2020 Spending Review included £6.6 billion for Defence research and development over the next four years. The Department plans to strengthen defence and security by building its capabilities in areas such as:

- a new Defence Artificial Intelligence Centre;
- continuing to invest in the Future Combat Air System concept and assessment phase;
- increasing its capability to tackle space threats, such as establishing the Space Command;
- modernising the Armed Forces, prioritising the development and integration of new technologies;
- increasing its involvement in counter-terrorism, for example by introducing the Counter-Terrorism Operations Centre; and
- strengthening cyber security, including investment in the National Cyber Force.

Changing operational commitments, such as the withdrawal from Afghanistan, will affect how the Department will manage its business and organise itself in the future.

