### **Departmental Overview 2019-20**

## Ministry of Defence





#### December 2020

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

#### **Departmental Overview 2019-20**

## Ministry of Defence (MoD)

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<sup>\*</sup>Government Major Projects Portfolio

The National Audit Office (NAO) scrutinises public spending for Parliament and is 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 2019, the NAO's work led to a positive financial impact through reduced costs, improved service delivery, or other benefits to citizens, of £1.1 billion.

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## **About the Department**

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 define 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.

## **Objectives** Protect our people Project our global influence Promote our prosperity Transform the way we do business Support delivery of EU Exit Responsibilities Defending the UK and its Overseas Territories Providing strategic intelligence Defending our interests by projecting power strategically and through expeditionary interventions Providing nuclear deterrence Providing a defence contribution to UK influence Supporting civil emergency organisations in times of crisis Providing security for stabilisation

#### Long-term strategic direction

The Department undertakes Strategic Defence and Security Reviews (SDSR) to set policy for the next five years. The most recent SDSR was in 2015 and it has shaped all aspects of what the Department has done since.

In February 2020, the government launched the Integrated Review of Foreign Policy, Defence, Security and International Development. In particular, it stated that the Review will:

- define the government's ambition for the UK's role in the world and the long-term strategic aims for national security and foreign policy;
- set out the way in which the UK will be a problem-solving and burden-sharing nation, examining how we work more effectively with our allies;
- determine the capabilities we need for the next decade and beyond to pursue our objectives and address the risks and threats we face; and
- identify the necessary reforms to government systems and structures to achieve these goals.

The Review will report early in 2021.

#### Focus of National Audit Office (NAO) work on defence

Over the past few years, the NAO's value for money work has focused on whether the Department's plans are affordable; how it delivers major programmes and manages its commercial relationships; and whether it has the right skills among its military and civilian personnel to deliver its objectives.

In the last year, the NAO has published reports on the Equipment Plan 2019–2029; the management of infrastructure projects on nuclear-regulated sites; the delivery of defence capabilities; and Carrier Strike. These are summarised later in this overview.

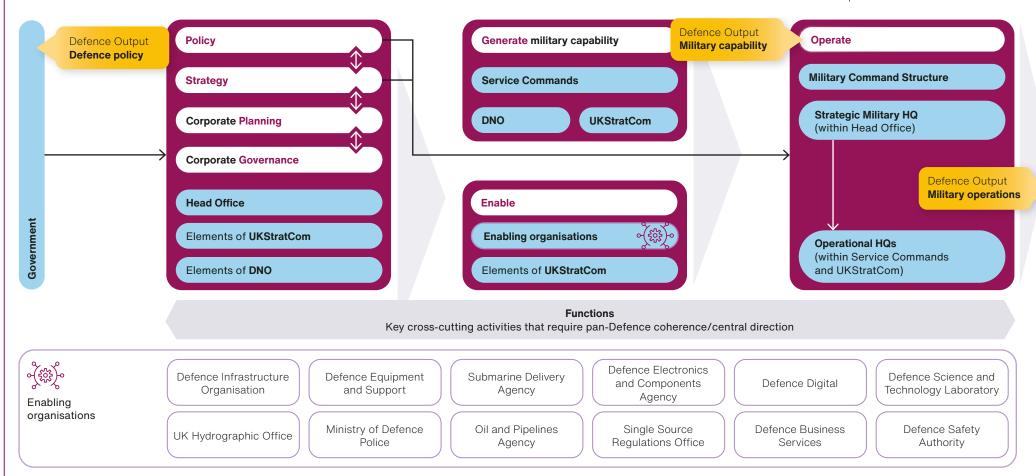


## How the Department is structured

#### **The new Defence Operating Model**

The MoD works with other parts of government to develop UK national security policy and strategy through periodic reviews; turns the policy into a series of Defence Tasks; and directs how the Department will deliver these tasks, as set out in an annual Defence Plan.

In 2020, the MoD revised the model for how it operates. In April the Department disbanded the former Head Office and Corporate Services organisation and delegated its responsibilities to Head Office Directors General and some of the enabling organisations. A Head Office Board oversees the new structure and provides coherence.



#### Note

1 DNO - Defence Nuclear Organisation.

Source: National Audit Office analysis of Ministry of Defence, How Defence Works, September 2020

## How the Department spends its money

In 2019-20, the Ministry of Defence spent £39.8 billion.

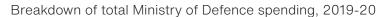
This total is made up of the government budget allocated to the Department for the year for day-to-day resources and administration costs such as civilian and military staff, and capital investments such as infrastructure, equipment support costs and investment in military equipment.

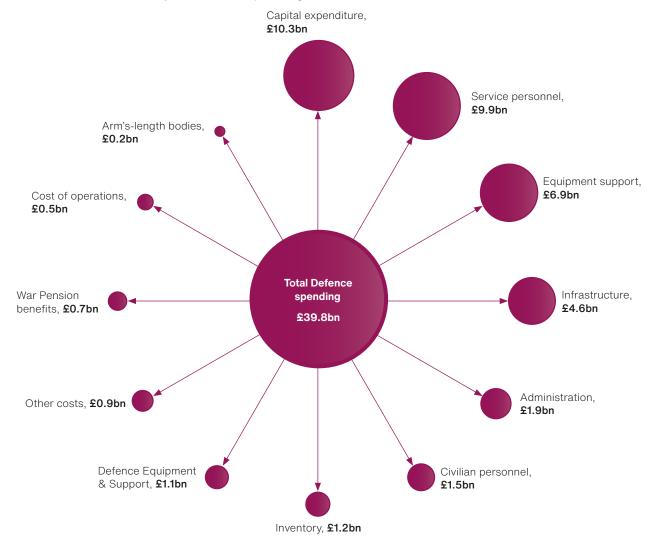
The total does not include: adjustments to the accounts, such as the impact of changes to the HM Treasury discount rate on the valuation of nuclear decommissioning provisions; non-cash depreciation and impairment of non-current assets.

#### Spending across major business areas

Capital expenditure and equipment support	The Department spent £10.3 billion on capital items, including equipment, and £6.9 billion on equipment support (together constituting 43% of total Defence spending).
	The Department's forecast costs for its Equipment Plan exceed budgets by $£2.9$ billion over the next 10 years, although in some scenarios costs could increase further to £13 billion (see page 20).
People	The Department spent £13.8 billion¹ (35% of total Defence spending) on personnel, of which £10.8 billion was for service personnel.
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Defence capability	Other key areas of spend include £4.6 billion on infrastructure, £1.9 billion on administration, and £1.2 billion on inventory consumption.
	Other key areas of spend include £4.6 billion on infrastructure, £1.9 billion on administration, and

<sup>1</sup> The £13.8 billion figure does not reconcile directly to personnel spend in the diagram opposite, as a number of other categories contain personnel spend, including Defence Equipment & Support and other arm's-length bodies.





#### Note

1 Totals do not sum due to rounding.

Source: Ministry of Defence, Annual Report and Accounts 2019-20

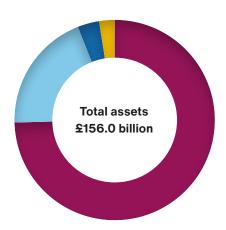


## How the Department spends its money continued

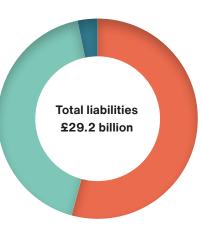
#### The Department's financial position

The following diagrams 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.

2019-20
Departmental asset breakdown, total £156.0 billion



2019-20
Departmental
liabilities breakdown,
total £29.2 billion



#### Property, plant and equipment - £116.1 billion

The Department's property, plant and equipment had a net book value of £116.1 billion at 31 March 2020. This included:

- Land, buildings and dwellings valued at £35.6 billion.
- Military equipment valued at £41.2 billion, of which £7.0 billion related to capital spares for repairing assets.
- Assets under construction valued at £24.5 billion.

#### Intangible assets – £30.3 billion

The Department held intangible assets valued at £30.3 billion. Of this, the largest items relate to military equipment development costs.

#### Other assets - £5.8 billon

Other assets included £1.5 billion of cash and £3.8 billion of receivables including VAT and prepayments.

#### Inventories - £3.8 billion

Inventories, relating to such items as munitions, clothing and fuel, valued at £3.8 billion.

#### Payables - £15.8 billion

£10.2 billion of the £15.8 billion of amounts payable to contractors and others is due within one year.

#### Provisions - £12.4 billion

The majority of the Department's provisions relate to decommissioning the Defence Nuclear Programme, costed at £11.7 billion as at 31 March 2020. These costs are significant, and with more than £10 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 £147 million of the balance was utilised in 2019-20.

#### Other liabilities - £0.9 billion

Other liabilities include £0.6 billion relating to retirement benefit schemes for overseas employees.

#### Note

Totals do not sum due to rounding



## Managing public money

#### **Expenditure**

On 19 November 2020 the government announced that it would increase Defence spending by more than £24 billion over the next four years.

The diagram opposite shows the expenditure of the budget allocated to the Department for the year 2019-20. In addition to the outturn of £39.8 billion (as reported on page 3), this diagram also includes £7.2 billion of non-cash costs such as depreciation.

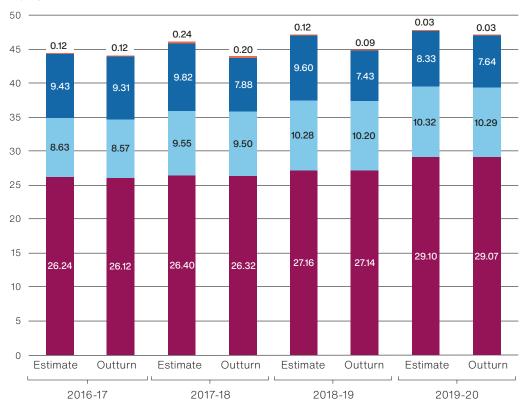
The Department's outturn was £0.7 billion (1.9%) below its total resource budget. The majority of this variance reflected changes in assumptions on the valuation of assets and depreciation in the estate. The variance between estimate and outturn on non-ringfenced cash expenditure was £26 million, against a budget of £29.1 billion, or 0.1%.

The Department has spent on, or close to, its capital budget in each of the past four years, outturn in 2019-20 being £10.32 billion against an estimate of £10.35 billion. The Department would be vulnerable if the outturn cost of planned equipment exceeded budgets over the lifetime of projects, and the value of sterling were to decline.

Ministry of Defence outturn against supplementary estimates 2016-17 to 2019-20

#### The Department spends very close to its capital budget each year

#### £ billion



- Non-ringfenced Resource budget (RDEL)
- Non-ringfenced Capital budget (CDEL)
- Ringfenced RDEL
- Ringfenced CDEL

#### Note

Ringfenced RDEL includes depreciation and impairment (non-cash) related costs and the incremental resource costs of operations. Ringfenced CDEL includes the incremental capital costs of operations.

Source: Ministry of Defence, Annual Report and Accounts

## The Department's accounts have been qualified for the past 11 years

In 2020, the Comptroller and Auditor General qualified his opinion on the Department's accounts for the eleventh year in succession. This was because the Department has not established whether contracts that contain lease-type arrangements constitute finance leases. As a result, a material value of leased assets and liabilities was omitted from the accounts.

A new leasing standard, IFRS 16, will now become effective from 1 April 2021, one year later than planned due to the ongoing disruption from the COVID-19 pandemic. The Department is in the process of preparing for this new standard, and in doing so will need to consider the wider implications of the standard on the full range of its activities, including the potential impact on the accounts qualification. It will need to commit sufficient resources to enable it to manage and report lease data, and will need to work with its suppliers to obtain better contractual information supporting the utilisation of assets.

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## **Financial management**

The table below describes recent developments in some of the areas which represent major risks to good financial management within the MoD.

suppliers. The Defence Supplier Forum has been restructured.

Risks	Key themes and recent developments	Risks	Key themes and recent developments	
Workforce and skills	The Department is:	Estates and	More than half of the 134,000 built assets on the Defence estate are more	
	<ul> <li>facing significant continuing challenges recruiting and retaining personnel in key areas of engineering, commercial, project, programme and portfolio management;</li> </ul>	infrastructure	than 50 years old and approximately 30% is not in a condition considered acceptable. The Department has been identifying and prioritising investment and working to deliver the next phase of the Future Defence Infrastructure Service, which will establish facilities management contracts	
	<ul> <li>closing existing skills gaps, including via the introduction of the Securing Skills in Defence programme to improve workforce flexibility; and</li> </ul>		to roll out in 2021. The Department continues to work on the Defence Estate Optimisation Portfolio to deliver a modern built estate and critical	
8 ==	<ul> <li>continuing to modernise its employment 'offer' to better meet the expectations of service personnel.</li> </ul>		infrastructure, and the IPA uplifted its assessment from Red to Amber-Rebased on recent progress.	
Management of change and transformation	Defence is engaged in a number of transformation initiatives which carry risk and must be well managed to ensure that together they are successful. Failing to address the risk of change means there is a risk of cascade failure as many of the things relied on to solve problems in other parts of the business also fail to deliver. The Infrastructure and Projects Authority recently rated the Transformation programme as Amber-Green, giving confidence that MoD has the structures and processes for success.	Service accommodation	The Department is committed to improving the accommodation offer to personnel and their families. Ninety-seven per cent of Service Family Accommodation (SFA) is now at or exceeds Decent Homes Standard. The Department will spend a further £209 million in 2020-21, including government fiscal stimulus funding, and further funding in 2021-22 on refurbishment and upgrades to existing SFA, and new purchases. In summer 2020 the last of 917 new build properties were handed over	
Business and financial planning	Despite an additional £2.2 billion of funding for 2019-20 and 2020-21, the Department continues to face significant pressures on its resources. The investment by government in supporting the economy during the pandemic will place additional pressures on Defence in the short to medium term. Measures to improve value for money include:		to the Department on Salisbury Plain. The level of void properties has reduced from 23.4% to 21.5% at 31 March 2020, against a target of 10% by autumn 2021. However, the COVID-19 pandemic has imposed a number of constraints on the Department's ability to manage the housing estate as planned to achieve that target.	
	Acquisition and Approvals Transformation and implementation of the Finance Functional Leadership Programme, and the creation of the Project Delivery Function.	Cyber	The Department's cyber risk is complex, evolving and escalating at pace, and is subject to active management and high levels of vigilance. Defence continues to apply a risk-based approach to managing threats. It has	
Commercial capability and governance	The Department has strengthened its senior commercial leadership team but a shortage of professional commercial staff remains an issue. The operating model for the commercial function has been strengthened to improve capability. Work is under way to better forecast the staff and skills needed, and the Department is making use of a commercial Market Skills Allowance. A comprehensive training programme is progressing,		established a new Directorate of Cyber Defence and Risk and has used this to significantly enhance its understanding of the cyber risk landscape. It has worked with partners across government, allies and industry to strengthen supply chain cyber security, build robust security into new military capabilities and raise cyber awareness within Defence.	
	including among non-commercial staff who manage key contracts and supplier relationships.	IT obsolescence	The Department is affected by IT obsolescence for example due to rapidly changing technology and shorter lifetimes of components and	
Strategic suppliers and supply chain	Significant work has been completed to understand and plan for the impact of EU Exit and mitigate risks with strategic suppliers and extended supply chain. This work was extended to monitor and mitigate the potential impacts of COVID-19. Implementation of the Strategic Partnering Programme continues to build more effective relationships with strategic	.Jir.	systems running beyond their planned out-of-service date. It has reset its risk management approach, strengthened governance and improved its understanding of the size and scope of the challenge.	



## The Department's response to COVID-19

The COVID-19 pandemic has inevitably had an impact on the Department and its personnel. The Department has also played an important role in the government's response.

#### Impact on readiness and operational requirements



- The Department has maintained core operations and non-discretionary tasks throughout lockdown, and the training and support required for these activities.
- It has worked with suppliers to ensure critical supplies and activity were maintained, and minimised interruption to critical Defence outputs. For example, it placed more than 500 contracts during the lockdown period (comparable with the same period in 2019) and paid £123 million in interim payments by September 2020.
- By 6 November 2020, nearly 52,000 Defence personnel had been tested for COVID-19, and 1,686 (3%) had tested positive.

#### In responding to the pandemic, the Department:



- revised pre-existing departmental and Command-level plans as COVID-19 spread, using a multi-disciplinary COVID-19 Response Team to enact the departmental plan;
- built on existing relationships with government departments, devolved administrations, NHS, local authorities etc, including expanding its liaison network of embedded military and civilian personnel, to identify possible support needs and ensure that appropriate requests for assistance were delivered effectively;
- used established Military Assistance to Civilian Authorities (MACA) mechanisms to call upon Defence capabilities, and delegated to Regional Commanders authorisation of uncontentious support to civil authorities and devolved administrations. By 1 June 2020, 163 MACA tasks had been conducted (see page 10); and
- created a COVID Support Force (CSF), and deployed military and civilian specialists from bodies including all three services, Defence Intelligence, Defence Equipment & Support (DE&S) and Defence Science and Technology Laboratory. At its height, CSF deployed 3,943 military personnel, with more than a third providing specialist skills. By September 2020, approximately 14,000 Defence personnel had contributed.



## **Examples of support provided during the pandemic**



#### **Temporary hospital facilities**

Provided personnel to support the design, build and operation of the Nightingale, Louisa Jordan and Dragon Hearts temporary hospitals, including infrastructure, logistics and project management advice.



#### **Defence Medical Service**

Developed and deployed medical capabilities, such as 10 Critical Care Transfer teams to move seriously ill patients between hospitals, and teams to help evacuate patients back to the UK. Supported the pandemic response through 1,600 clinicians already employed within NHS hospitals, 1,000 in Defence Primary Healthcare and 150 deployed overseas.



#### **Testing**

Supported government efforts to develop and manage the national testing programme, including training testing personnel, providing military testers to Regional Testing Centres, helping to design and create Mobile Testing Units, and delivering testing equipment to care homes.



#### Logistics

Supported the delivery of ventilators and personal protective equipment (PPE) across the UK, including helping to deliver more than one billion items to NHS staff in England between 22 February and 8 May.



#### **Commercial support**

DE&S provided more than 100 staff to assist Cabinet Office and Department of Health & Social Care identify and purchase approaching 10 billion items of PPE worth £5.3 billion, while MoD's Quality Assurance Field Force helped ensure that newly sourced PPE met NHS and Social Care specifications. The Department also contributed support to the Cabinet Office's ventilator challenge.



## Repatriation of British citizens and service personnel

Helped to repatriate British citizens from several countries and assisted international partners repatriating their nationals. More than 130 Service Family Accommodation (SFA) properties were prepared in under two weeks to support the repatriation of service personnel and their families to ease the burden on in-country health systems.



#### **Overseas Territories**

Supported authorities in Overseas
Territories to manage their response,
including deploying ships and military
personnel in the Caribbean, helping to
build a Nightingale hospital in Gibraltar and
sending a medical team to the Falkland
Islands.



#### Tackling online threats

Provided specialist personnel in advisory roles to support the Cabinet Office's Rapid Response Unit's tackling of deliberate disinformation – including from hostile states – and fraud.



#### Support for veterans

Maintained support services, including the Veterans UK helpline and welfare service. Helped many veterans contribute to the pandemic response through veterans' volunteering organisations or by working alongside the military contribution. By August 2020 had distributed £6 million HM Treasury funding to more than 100 service charities across the country.



## The UK's exit from the European Union

On 31 January 2020 the United Kingdom (UK) left the European Union (EU) and under the terms of the Withdrawal Agreement between the UK and the EU entered a transition period during which existing rules continue to apply. New rules on trade, travel and business between the UK and the EU will come into place on 1 January 2021. The UK's exit from the FU does not affect many of the UK's multinational and bilateral defence arrangements.

The following will not change from 1 January 2021:

- the UK's permanent seat on the UN Security Council;
- relationships with NATO and roles in NATO's Enhanced Forward Presence and Response Force;
- commitment to European defence and security; and
- intergovernmental arrangements, for example, defence intelligence sharing.

The following will change from 1 January 2021:

- withdrawal from membership of the European Defence Agency;
- ending participation in EU Common Security and Defence operations and missions; and
- ending participation in EU programmes, for example, defence research funding.

## Work undertaken by the Department around EU Exit

The Department is continuing to focus on areas of business affected by EU Exit: MoD bases and people in Europe, and its future engagement with the EU's military operations and missions. In particular:

- more than 500 MoD staff supported cross-government preparations for EU Exit either through direct involvement, or by being held at readiness with an expectation of involvement in the near future;
- the Department states that it undertook a significant amount of coordinated work to understand and plan for the impact of EU Exit and to mitigate risks with UK strategic suppliers and the extended supply chain; and
- the Department's Executive Committee considered contingency planning for EU Exit, including: cross-government requirements of the Defence estate; allocation of service personnel and civil servants to support no-deal planning; and implementation.

By the end of January 2020, the Department had spent £39 million on EU Exit preparations. HM Treasury did not allocate additional funds to the Department for EU Exit work in 2020-21.

## Staff and pay

#### **Military**

The Department has met one, but not the other, of its targets to recruit a more diverse and representative Armed Forces by 2020. The targets are:

10% target 11.7% achieved

10% of UK regular forces and volunteer reserves recruits to be from a black and minority ethnic background; and

15%

target

12.6% achieved

15% of UK regular forces and volunteer reserves recruits to be female.

#### Civilian

The proportion of civilian personnel within the Department who are **female** is

10%

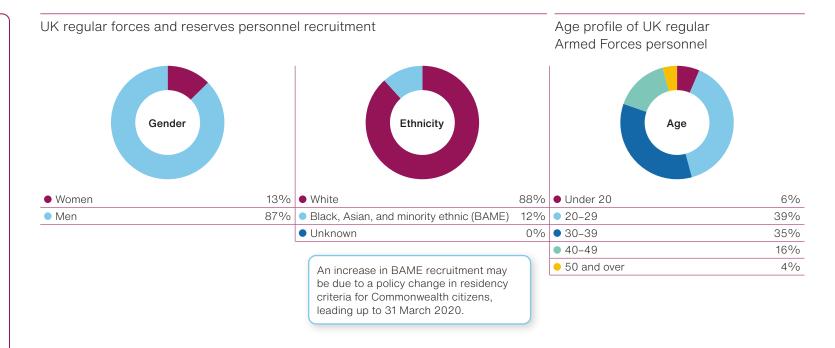
lower than the civil service average.

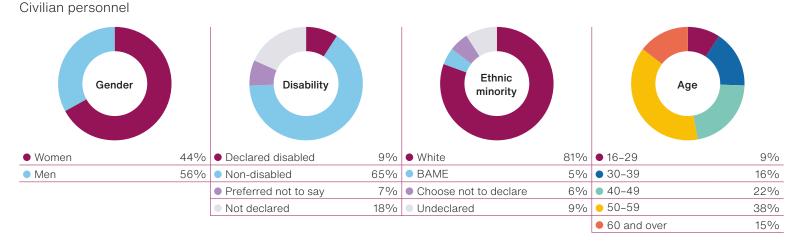
As at 1 April 2020

53%

of MoD civilian staff were

50 years old or over.





Source: Ministry of Defence, Annual Report and Accounts 2019-20



## Staff and pay continued



	Military pay multiple 2019-20	Military pay multiple 2018-19	Civilian pay multiple 2019-20	Civilian pay multiple 2018-19
Ratio	10.1	9.8	6.6	6.0
Band of highest paid director's total remuneration (£000)	357,500	337,500	207,500	182,500
Median total remuneration (£)	35,312	34,484	31,393	30,193

Source: Ministry of Defence Annual Report and Accounts 2019-20

#### Pay

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

#### £1.2 billion

since 2018-19, while staff numbers have increased by

**2,418 (1%)** in the same period.

The military and civilian pay multiples increased in 2019-20 as a result of increases in the annual equivalent remuneration of the highest paid Board members.



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## **Civil Service and Armed Forces Annual People Survey**

#### **Civil Service Annual People Survey**

The annual Civil Service People Survey looks at attitudes to, and experience of, working in government. The most recent survey was carried out in autumn 2019.

Theme		Result in 2019	Result in 2018	Change	Civil service average in 2019
		(%)	(%)	(Percentage points)	(%)
	Employee engagement index	63	61	<u> </u>	63
	My work	77	76	<u> 1</u>	77
<b>O</b>	Organisational objective and purpose	79	76	<u></u> 3	83
<b>5</b> 1	My manager	67	66	<u> 1</u>	71
	My team	79	78	<u> 1</u>	82
	Learning and development	56	52	<u></u> 4	55
	Inclusion and fair treatment	77	76	<u> 1</u>	79
	Resources and workload	70	69	<u> 1</u>	74
	Pay and benefits	33	30	<u></u> 3	34
~~°	Leadership and managing change	39	35	<u></u> 4	49



Increase



Decrease



No change

The Department has increased its score across all categories from the 2018 results. The biggest increase of 4% was in learning and development, and leadership and managing change.

- The Department scores are the same as, or slightly lower than, the civil service averages across all categories with the exception of learning and development.
- Despite an improvement in score for leadership and managing change, the Department still scores 10% lower than the civil service average in this area.

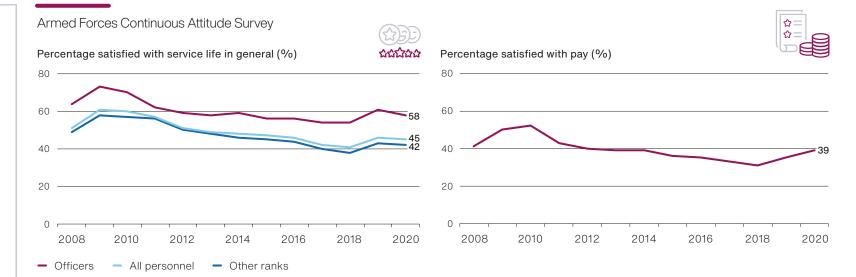
Source: Civil Service People Survey

## Civil Service and Armed Forces Annual People Survey continued

## Armed Forces Continuous Attitude Survey (AFCAS)

The Department conducts a separate survey of a sample of its service personnel. The most recent AFCAS survey was published in May 2020. It reported:

- satisfaction with service life remains unchanged at 45%, but remains well below the peak levels seen in 2009;
- satisfaction with pay has increased for a second year in a row, to 39%, but remains well below those reported in 2010;
- the Royal Marines remain the least satisfied with several aspects of the job compared with other services, but feel the most valued and engaged; and
- the impact of service life on family and personal lives remains the top factor influencing intentions to leave and is the most cited reason for leaving by those who have put their notice in to leave.



#### Main reasons given for leaving the services

All personnel	(%)
Impact of service life on family and personal life	63
Current job satisfaction	42
Opportunities outside the service	39
My morale	33
Amount of pay	18

Officers	(%)
Impact of service life on family and personal life	72
Opportunities outside the service	38
My morale	32
Current job satisfaction	28
Opportunities for career development	23

Other ranks	(%)
Impact of service life on family and personal life	60
Current job satisfaction	48
Opportunities outside the service	40
My morale	33
Amount of pay	20

Source: Armed Forces Continuous Attitude Survey 2020

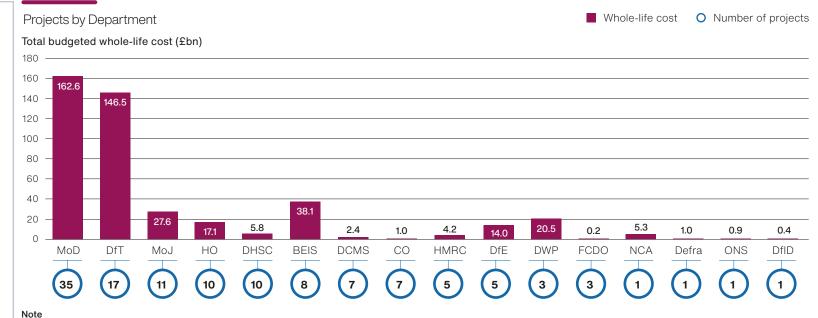


## Defence projects and programmes in the Government Major Projects Portfolio

The Department has 35 projects in the Government Major Projects Portfolio (GMPP), the largest number for any department and more than one-quarter of the total portfolio. Ten are rated higher risk ('red' or 'amber/red') and three lower risk ('green' or 'amber/green'). Two ratings are redacted.

Thirty of the 35 MoD projects are to deliver 'military capability'. Of the four categories of project in the GMPP, these have the highest average whole-life cost, at £6.5 billion. The total whole-life cost is £163 billion.

Within the Department, projects in the GMPP constitute the majority of the Department Major Projects Portfolio (DMPP). We examined the DMPP in our report on *Defence Capabilities: delivering what was promised*, discussed in detail in Part Four.



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1 MoD – Ministry of Defence; DfT – Department for Transport; MoJ – Ministry of Justice; HO – Home Office; DHSC – Department of Health & Social Care; BEIS – Department for Business, Energy & Industrial Strategy; DCMS – Department for Digital, Culture, Media & Sport; CO – Cabinet Office; HMRC – HM Revenue & Customs; DfE – Department for Education; DWP – Department for Work & Pensions; FCDO – Foreign, Commonwealth & Development Office; NCA – National Crime Agency; Defra – Department for Environment, Food & Rural Affairs; ONS – Office for National Statistics; DfID – Department for International Development.

Source: Infrastructure and Projects Authority, Annual Report on Major Projects 2019-20

In September 2020, the Department told Parliament that it will increase the number of Defence-related major projects on the government's Major Projects Portfolio list, thus providing oversight, support and challenge from HM Treasury (HMT) and Cabinet Office to a larger number of Defence projects. The Infrastructure and Projects Authority's gateway review process will be applied to a larger number of programmes. HMT will ensure assurance recommendations are completed before releasing additional funding.

#### Progress of major equipment projects

During the year there were important developments concerning the MoD's major equipment procurements. For example:

- Boeing delivered the first P-8 Poseidon Maritime Patrol Aircraft to the RAF in October 2019 and the RAF declared Initial Operating Capability for the fleet in April 2020, carrying out its first operational mission in August 2020. Boeing also handed over the new strategic facility to house the aircraft at RAF Lossiemouth in July 2020.
- Construction of HMS Glasgow, the first Type 26 frigate is well underway, and a new construction facility for the Type 31 was completed at Rosyth, following contract award in November 2019.

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#### **Part One**

## Accounting Officer scrutiny of major programmes

Departmental Accounting Officers (AOs) scrutinise significant plans to start or vary major projects, and subsequently assess whether they meet the standards set out in HM Treasury's guide to <u>Managing</u> public money.

In response to recommendations in our 2016 report, <u>Accountability to Parliament for taxpayers' money</u>, 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 10 Accounting Officer Assessments, which are set out in this part.



#### **Background**

The Astute programme, valued at more than £11 billion will deliver seven nuclear attack submarines, replacing the previous TRAFALGAR class.

Currently, three boats (ASTUTE, AMBUSH and ARTFUL) are in service. The remaining four boats (AUDACIOUS, ANSON, AGAMEMNON and AGINCOURT) are at varying stages of completion. The Astute programme is being procured through single source contracts and is being built at the lead supplier's shipyard in Barrow-in-Furness.

#### The Contracting, Purchasing and Finance Programme (CP&F)

Astute

CP&F enables the MoD to electronically process orders for all goods and services (from medical supplies to defence equipment and associated spares) and pay invoices in one system. It provides the foundation for the MoD's end-to-end purchasing, sourcing, contracting, payment and accounting systems.

Since approval, the Department has re-profiled the funding for CP&F due to delays in delivering the final stage of the CP&F programme, and approved funding to extend support for the system.

#### Armed Forces People Programme (AFPP)

The AFPP was designed to address several shortcomings associated with the attractiveness and affordability of the present employment offer for service personnel and issues with access to some key skills.

The Infrastructure and Projects Authority agreed that AFPP should be closed as a programme with effect from the end of September 2019. Two of the former AFPP projects (Future Accommodation Model and Enterprise Approach) will continue.

#### **Accounting Officer conclusion**



Whole Programme Approval was secured in March 2018, which allowed for an Operational Handover date for AUDACIOUS at a future date.



AO assessed both the Astute programme and AUDACIOUS as a satisfactory use of public resource. The Astute programme was assessed to be essential to the maintenance of Continuous at Sea Deterrence and the nation's strategic nuclear capability.



Final delivery of the seventh Astute class submarine.



Original intended Full Operating Capability.



AO assessed that the final release of CP&F is deliverable with acceptable risk, still represents value for money and should continue.



Anticipated Full Operating Capability.



Future Accommodation Model Main Gate Business Case.



AO assessed that the individual former AFPP projects still under way remain deliverable with acceptable risk, remain value for money and should continue.



A decision will be taken on whether to extend the Future Accommodation Model across the rest of the UK.

18



#### Background

#### **Future Beyond Line** of Sight (Skynet)

The purpose of the SKYNET 6 programme is to sustain strategic assured Beyond Line of Sight Satellite Communications through to 2041. The programme includes:

- SKYNET 6A, a single satellite procurement from Airbus Defence and Space (ADS);
- Service Delivery Wrap, a support contract for management services to control the SKYNET constellation, extend the life of key ground infrastructure and manage satellite communication services;
- SKYNET 6 Enduring Capability, provision and operation of both satellites and ground infrastructure to deliver satellite communication services on an enduring basis; and
- Secure Telemetry, Tracking and Command (STT&C), providing assured UK control and management of satellites and their payloads.

#### Joint Crypt Key Programme

The Joint Crypt Key Programme between MoD and GCHQ is a part of a set of measures to support cyber security.

The aim of the programme is to:

- design and develop next generation of Crypt Key capabilities;
- stay ahead of the threat posed by the most capable adversaries; and
- ensure the future Crypt Key capabilities meet MoD's mission requirements.

#### Protector

Protector RG Mk1 is designed to deliver a UK sovereign capability for deep and persistent armed intelligence, surveillance and target acquisition out to the late 2030s, which will encompass long range, persistent wide area surveillance and precision strike capabilities and will replace the current Reaper fleet.

To manage a wider affordability challenge, the Department decided to delay the programme by two years. As a direct consequence, the existing programme milestones were no longer achievable. This also led to increased costs of £187 million. When combined with a £60 million sensor upgrade, and foreign exchange and accounting adjustments, gives a total programme cost growth of £325.6 million.

#### Type 31

The Type 31 programme aims to deliver a class of five flexible general-purpose frigates to maintain a fleet of 19 frigates and destroyers. The Type 31 will undertake missions such as interception and disruption of those using the sea for unlawful purposes, collection of intelligence, defence engagement and assisting those in need.

#### **Accounting Officer conclusion**

Departmental approval. JUN 2016

Cabinet Office Project Assessment Review raises eight recommendations. 2018

AO assessed that the expenditure remains entirely proper. Value for money will be determined at the point that each component project reaches its Main Gate. In the case of SKYNET 6A, the Department considers that scrutiny under the Single Source Contract Regulations is more rigorous.

Service entry of SKYNET 6. Q2 2025

2019

2028

AO assessed that Joint Crypt Key Programme is on track to deliver the expected outcomes and benefits within its approved budget. A statement 2019 regarding value for money cannot be made at this stage given that several of the programme tranches are in the assessment phase. preventing detailed analysis of potential market offerings in response to the requirements.

Initial Approval for Protector programme. 2016

> AO concluded cost growth and time delay to the programme imposed in July 2017 were outside of programme tolerances but were the result of the need to ensure the affordability of the overall Defence programme. He stated that, at all times, the programme has been properly governed and assured in accordance with HM Treasury rules.

Strategic Defence and Security Review reduced the planned procurement of 13 Type 26 frigates to eight, and launched a concept study to design and 2015 build a lighter, flexible general-purpose frigate.

Launch of seven-month competitive design phase. DEC 2018

Three bids received and evaluation phase entered. 2019

AO assessed that the Type 31 complies with regularity and propriety standards and that all is deliverable within Departmental planning assumptions.

All ships to be accepted off contract.



#### **Background**

### Queen Elizabeth Carrier programme

The Queen Elizabeth Class Aircraft Carrier Programme is delivering Carrier Strike capability.

The first of class (HMS QUEEN ELIZABETH) achieved entry into service in February 2018 and the second and final ship (HMS PRINCE OF WALES) entered service in March 2020.

## AJAX armoured vehicle (Armoured Cavalry)

The AJAX Armoured Cavalry programme, alongside the Mechanised Infantry programme (delivering BOXER), will enable the Army's Strike capability. AJAX provides a reconnaissance and direct fire engagement capability.

#### Fleet Solid Support Programme

These ships will deliver the solid sustainment (food, stores and ammunition) that is required for Maritime Task Groups and Joint Forces to carry out their objectives under current Defence policy. In particular, it has a key role in enabling Carrier Enabled Power Projection.

#### **Accounting Officer conclusion**



Programme cost re-baselined following negotiations between the MoD and the Aircraft Carrier Alliance, at £6.212 billion.



MoD accepts the need for costs to increase in order for the schedule to be met, but continues to negotiate the proportion of increased costs it is reasonable for MoD to bear.



The NAO reports that costs are expected to rise by 3% to £6.405 billion, but notes that additional funding will be required for logistics projects and ammunition.



AO confirms the cost increase.



MoD gives approval for AJAX to proceed with an expected Initial Operating Capability (IOC) date of 31 July 2020.



Contract is renegotiated.



AO reports that IOC is now expected in June 2021, with a separate in-service date of January 2021, and that there has been no increase in the firm contract price of  $\mathfrak{L}3.5$  billion.



MoD gives approval for project to enter assessment phase.



International competition launched for design and manufacture of ships.



2019

Secretary of State halts competition after failure to achieve a value for money solution.



Secretary of State announces the competition will be relaunched in spring 2021. International teams will be invited to collaborate with UK firms, but a UK shipbuilder must lead the bid.

#### **Part Two**

## Affordability of the Equipment Plan

The Equipment Plan report assesses whether the Department's equipment and support programmes are affordable and sets out its expected expenditure on projects to equip the Armed Forces.

In our February 2020 report <u>The Equipment Plan</u> <u>2019 to 2029</u>, we concluded for the third successive year that the Plan was unaffordable. The Department estimated that forecast costs exceeded budget by £2.9 billion over the period 2019–2029, although this could be as high as £13 billion if all risks materialise. In particular, it faced a £6 billion shortfall in the years 2019-20 to 2023-24.

We concluded that the Department's estimate of the funding shortfall was likely to be understated due to inconsistent approaches to making adjustments to cost estimates, and the completeness of the costs of developing new military capabilities. Problems are exacerbated by short-term financial settlements undermining the ability to plan long-term, significant pressures in other areas of its budget (most notably its estate), and cost pressures throughout the year, including from adverse foreign exchange rate movements. The Department has introduced new controls to prevent budget holders from committing to new expenditure in future years.

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

The Ministry of Defence forecasts that costs will exceed annual budgets in years two to five of the Equipment Plan



Source: National Audit Office analysis of Ministry of Defence data

The focus on living within annual budgets is leading to reduced capabilities and higher overall costs. For example:

- reductions in existing capabilities, such as the loss of medical facilities provided by the ship RFA Argus, or reducing numbers of Sentry aircraft;
- reduced levels of support, such as limiting maintenance activity to legislative minimums; and

deferring project expenditure which increases future costs. For example, the Department now expects the costs of delaying Protector to increase from £160 million to £187 million, with a further £50 million cost of retaining existing, less capable equipment until Protector enters service.

Our next report on the Department's Equipment Plan 2020–2030 (due in December 2020) will present an updated affordability assessment.

#### **Part Three**

## **Carrier Strike**

In June 2020, our report Carrier Strike - Preparing for deployment recorded that the Department had made considerable progress since 2017 in delivering its 'Carrier Strike' capability.









It had built two new carriers in line with its overall timetable and at a forecast cost of £6.4 billion - £193 million (3%) above the revised budget agreed in 2013. It had completed the infrastructure necessary to berth both carriers simultaneously at Portsmouth.

As at April 2020, the Department had received 18 Lightning II jets and ordered a further 30, but not committed to buying more of the 138 Lightning II jets intended to sustain Carrier Strike operations to the 2060s at this stage. It has also delayed delivery of seven jets. The Integrated Review will consider the number of jets required to sustain Carrier Strike operations through the life of the carriers.

The Crowsnest airborne radar system will provide a crucial element of protection for a Carrier Strike group. Although the IOC will be achieved 18 months later than planned, a basic radar capability will deploy on Carrier Strike Group 21.

The Department has been slow to develop the solid support ships, which are crucial to operating a Carrier Strike group. It has only one ship currently able to resupply a Carrier Strike group. The Department suspended an attempted competitive procurement of new Fleet Solid Support Ships in November 2019. In October 2020 the Department announced that it would restart the competition in spring 2021.

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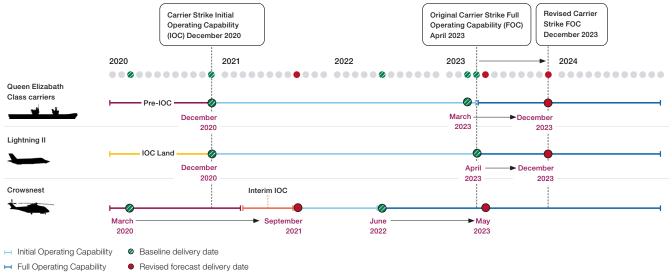


#### **Progress towards capability milestones**

As at June 2020, the Department expected to meet its target of declaring IOC for Carrier Strike in December 2020. However, to deliver Full Operational Capability by 2023 it needs to monitor the delivery of multiple projects and coordinate the integration of supporting capabilities against a challenging timeline.

Changes to capability milestones for the main Carrier Enabled Power Projection projects, 2020 to 2024

Progress on the core Carrier Enabled Power Projection projects impacts on the delivery of Carrier Strike



→ Shows a change

#### Notes

- 1 Interim IOC for Crowsnest represents a 'deployable capability' but not the expected IOC standard.
- 2 The Queen Elizabeth Class (QEC) project aligns to the Carrier Strike IOC/FOC dates. The change in FOC Carrier Strike date does not reflect a delay on the QEC project.
- 3 Forecast delivery dates as at April 2020.
- 4 The revised FOC date for Carrier Strike was reported in April 2020.

Source: National Audit Office analysis of Ministry of Defence data



The Department has still not provided a long-term solution for the movement of people, mail and cargo to the Carrier Strike group. It is not clear what future enhancements will be needed to maintain warfighting capabilities, or their cost. Neither is it clear what Carrier Strike will cost to operate and support in the future, prior to first deployment in 2021. These decisions will create added funding pressures at a time when the Equipment Plan is already unaffordable (see page 20).



## Part Four Delivering defence capabilities

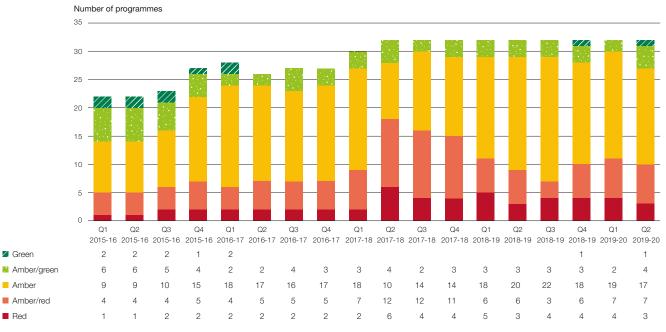
A military capability is not just the equipment, but also includes elements such as personnel, training and maintenance. Defence capabilities - delivering what was promised, published in March 2020, reported that nearly one-third of the current most significant capabilities were rated as either requiring 'urgent action' to address major risks to delivery, or being 'undeliverable' to the approved timescale. Many of these capabilities require solutions that are inherently technically complex.

Across the most significant capabilities there was an average delay of 12 months for those projects yet to reach IOC, and an average delay of 26 months for capabilities which were yet to achieve Full Operational Capability. Similar levels of delay are also seen in the United States and Australia.

A similar proportion of these capabilities experienced serious concerns about supplier engagement or delivery performance – from poor quality control to lack of transparency about progress. In addition, teams delivering nine of the 32 Defence Major Projects Portfolio capabilities consider that a lack of team capacity and skills was affecting capability delivery.

Assessment of confidence in delivering against key milestones for capabilities in the Defence Major Projects Portfolio (DMPP), 2015-16 to 2019-20

A number of programmes continue to report risks to project delivery as at 30 September 2019



#### Notes

- Red denotes where successful delivery of the project appears to be unachievable.
- 2 Amber/red denotes where successful delivery of the project is in doubt, and urgent action is needed to address whether resolution is feasible.
- 3 Amber denotes where successful delivery appears feasible but significant issues already exist, which prompt management attention should resolve.
- 4 Amber/green denotes where successful delivery appears probable.
- 5 Green denotes where successful delivery of the project appears highly likely.
- 6 Data cover all capability projects in the DMPP at the given time.

Source: National Audit Office analysis of Ministry of Defence data

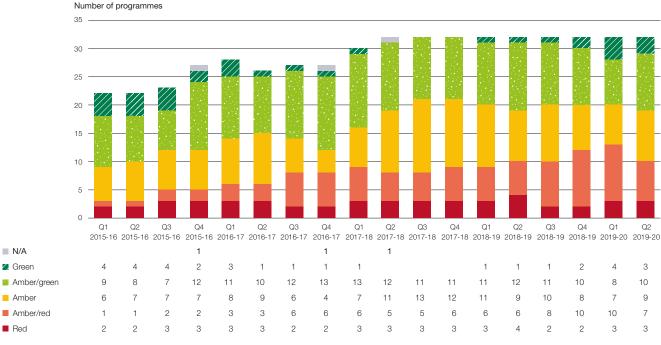
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The Department is introducing a more rigorous business case process and providing more flexibility in procurement routes for new technologies. Potentially the initiatives could have prevented problems in our in-depth case studies where, for example, there were significant delays in delivering capabilities. The initiatives would not have prevented other problems identified in our analysis, such as inadequate contractor performance or failure to deliver timely training. Our case studies also included upgrades to existing capabilities where implementation was delayed by funding shortages.

In some cases, teams declared delivery milestones in our case studies because progress was 'good enough' as it was considered of operational benefit to users, even though the capability would not be useable in the way intended. Exceptions can be made to milestone criteria where there is a timebound plan in place to address them, although such plans have not always been put in place. In some cases this left the Department unclear what level of capability had actually been achieved against the specified requirements. It was also apparent that several of the capabilities needed further development work due to the original specification not meeting the user's capability needs.

Assessment of supplier issues for the Defence Major Projects Portfolio (DMPP) over time, 2015-16 to 2019-20

A proportion of capabilities continued to report concerns with supplier performance and relationships as at 30 September 2019



#### Notes

- 1 For projects that are in the post-contract phase, green signifies supplier engagement and/or performance is going well, while red indicates that supplier engagement is poor or non-existent and/or is not delivering in accordance with the contract.
- 2 Data cover all capability projects in the DMPP at the given time.

Source: National Audit Office analysis of Ministry of Defence data



**Part Five** 

# Infrastructure projects on nuclear-regulated sites

The Department's submarine-based continuous-at-sea nuclear deterrent relies on a network of equipment, people and infrastructure.

The infrastructure includes sites critical for nuclear reactor cores and weapons, which are monitored by independent safety regulators. Several of the most significant sites are owned or operated by contractors.

The 2020 report <u>Managing infrastructure projects</u> on <u>nuclear-regulated sites</u> examined three of the Department's large and complex construction projects for facilities at nuclear-regulated sites.

These were:

- the MENSA nuclear warhead assembly facility;
- the nuclear reactor core production facility at Derby; and
- the Dreadnought submarine construction facility at Barrow-in-Furness.

Currently valued together at

#### £2.5 billion

construction has already started in each case.

Between them the projects have experienced cost increases of

#### £1.35 billion

with delays of between

### 1.7 years and 6.3 years

(see right). These delays have broader implications for the renewal of the nuclear deterrent.

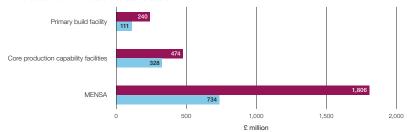
The report found that in the projects' early days the Department made the same mistakes as were made more than 30 years ago in previous upgrades to the deterrent. In doing so, the Department's early management of these projects has not delivered value for money.

More recently, the Department has started to get to grips with the challenges through revised commercial, regulatory and governance arrangements, although it is too early to tell whether these will be effective. On 2 November 2020 the government announced that, following an in-depth review, the MoD had concluded that the Atomic Weapons Establishment site will become an arm's-length body on 1 July 2021, wholly owned by the MoD.

Cost increases and delays with infrastructure projects at nuclear-regulated sites

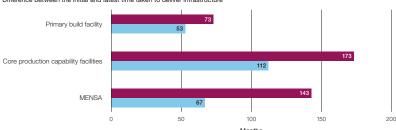
The Ministry of Defence's projects have experienced delays and cost increase

Difference between the initial and latest cost forecasts



- Most recent cost estimate
- Original cost estimate

Difference between the initial and latest time taken to deliver infrastructure



- Current estimated length
- Original length

#### Notes

- 1 Initial costs and timeframes reflect those approved as part of the Main Gate Business Case
- 2 Primary build facility: new facilities at the BAE Systems-operated shipyard in Barrow-in-Furness to allow a modular submarine-build approach Latest forecast cost represents the best judgement as at October 2019, subject to contractor discussion and cost modelling.
- 3 Core production capability facilities: new facilities at Rolls Royce-operated site to produce the latest nuclear reactor core designs
- 4 MENSA: new nuclear warhead assembly and disassembly facility at AWE Plc-operated site

Source: National Audit Office analysis of Ministry of Defence data



#### **Part Six**

## What to look out for

#### Integrated Review of Foreign Policy, Defence, Security and International Development



The most significant development in the coming year is expected to be the Integrated Review of Foreign Policy, Defence, Security and International Development. As with the previous Strategic Defence and Security Reviews, the Integrated Review is likely to have a major influence over the direction taken by the Department in the coming years. The review will conclude early in 2021.

## Implementation of the new Defence People Strategy



The Department has developed a People Strategy. The main objectives are to: have an adaptable and sustainable workforce; maximise the use of talent across the military and civilian workforce; provide attractive offers to secure and retain the right talent; and provide more choice about how personnel live and work, recognising the Department has a wide and increasingly diverse workforce.

Implementation of the People Strategy will come against a background of the Integrated Review and the impact of COVID-19 on employment in the UK. To deliver the Strategy it is, among other things: taking an active role in cross-government initiatives to develop skills in areas such as finance, commercial and digital; made improvements to the recruitment process, increasing the number of Armed Forces recruits; and is seeking to compete in recruitment markets for specialist skills.

#### **Carrier Strike - main developments**



The Department is expected to announce Initial Operating Capability for Carrier Strike by December 2020. This means that one carrier is ready for warfighting. In 2021, we will see the first joint deployment of Carrier Strike, to be undertaken with the United States Marine Corps. To prepare for this, the Department has worked closely with its counterparts in the United States, holding regular meetings to allow data-sharing, identification of risks and alignment of a joint action plan. It has made necessary modifications to the carriers and conducted joint training and trials. The Carrier Strike Group assembled for the first time in October 2020.

#### **The Defence Estate**



In 2016, the Department launched <u>A Better Defence Estate strategy</u>, through which it aims to create a 30% smaller estate by 2040 which "better supports our military capability, is better quality, and more efficient." Almost half of the assets are more than 50 years old and approximately 30% of the estate is not in the condition which the Department considers acceptable, potentially affecting recruitment, retention and morale. In July 2020, the Secretary of State and Chancellor announced £200 million new funding for the UK Armed Forces' housing and accommodation from 2020 to 2022, to upgrade 3,500 service homes as well as single living quarters. From 2021, the Department plans to roll out new facilities management contracts as part of its Future Defence Infrastructure Services initiative.