



National Audit Office

Report

by the Comptroller
and Auditor General

Ministry of Defence

Ensuring sufficient skilled military personnel

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Ministry of Defence

Ensuring sufficient skilled military personnel

Report by the Comptroller and Auditor General

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Sir Amyas Morse KCB
Comptroller and Auditor General
National Audit Office

13 April 2018

This report examined the Ministry of Defence's approach to developing the capability of its regular forces, and how it is adapting to meet new challenges created by the changing character of warfare.

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Key facts

8,200

shortfall in the number of military personnel (full-time trained regulars) as at January 2018 – 5.7% below the requirement

102

number of trades where the Ministry of Defence has insufficient numbers of skilled personnel to maintain defence tasks without placing additional demands on regulars

94%

proportion of trades where the Ministry of Defence does not expect to resolve shortfalls in personnel in the next five years

Shortfalls in critical trades:

- 18%** proportion of regulars below the required number in the 102 trades with shortfalls
- 22** number of trades in which shortfalls in skilled personnel would have a detrimental impact on operations if additional demands were not regularly placed on regulars

Recruitment and retention difficulties:

- 5.6%** aggregate level of regulars leaving voluntarily in the 12 months to 31 December 2017, with much higher rates in some specific trades
- 24%** shortfall in the number of regulars recruited in 2016-17, compared with the Commands' (the Navy, Army and RAF) annual targets

The Ministry of Defence's workforce initiatives:

- £664 million** amount spent on recruitment and retention incentives in the last five years
- 19** number of new workforce projects introduced since 2010 that aim to improve the Armed Forces' terms and conditions
- 42%** proportion of regulars who stated they were "satisfied with service life" in the 2017 Armed Forces attitude survey, down from 60% in 2010

The future:

- Summer 2018** date when the Ministry of Defence will publish the capability review – the Modernising Defence Programme – setting out the new capabilities required to address the threats facing the UK

Summary

1 The Armed Forces need sufficient skilled personnel to meet the government's objectives for the Ministry of Defence (the Department), which were set out most recently in the 2015 *Strategic Defence and Security Review* (the Review). The Review required the Department to maintain a target number of regulars in the Army and make small increases in the size of the Navy and Royal Air Force (RAF). This commitment, together with a proposed £24 billion investment in new equipment, represented a significant change in direction. Previous Defence reviews had scaled back capabilities and reduced the size of the Armed Forces.¹

2 As at January 2018, the Armed Forces had 137,300 trained regulars. This was 8,200 (5.7%) below their requirement – the largest gap in recent years.² More significantly, the aggregate figures mask much larger shortfalls in the number of regulars with critical skills, such as engineers, pilots and intelligence analysts.

3 In 2016-17, the Department spent £9.6 billion of its defence budget on military personnel (27%). It forecasts this will rise to £10.3 billion by 2020-21. At the same time, the Department faces significant financial pressures; for example, it needs to find savings of at least £8.1 billion on its Equipment Plan by 2027 and has a minimum shortfall of £8.5 billion over the next 30 years on the defence estate. It therefore faces a significant challenge in developing the skilled personnel it needs to meet the future ambitions for the Armed Forces and exploit its investment in new equipment.

4 The Department has described “a more dangerous world” in which the threats to the UK are evolving rapidly. The Armed Forces were involved in 25 operations worldwide in 2016-17, with the RAF undertaking more missions than it has for 25 years. The Department is now considering the capabilities and skills needed within the Armed Forces to meet the new threats.³ These changes are likely to mean that the Department will increasingly face the challenge of competing for more specialist technical and digital skills in competitive recruitment markets. Without a flexible and effective approach to developing skills, the shortfalls could affect the Department's ability to undertake future missions. They could also place a greater strain on existing personnel, potentially making them less willing to remain in the Armed Forces.

¹ The 2010 Strategic Defence and Security Review announced plans to reduce the size of the Armed Forces by 17,000 and to scale-back capabilities, such as the number of Challenger tanks, to tackle an unfunded liability of £38 billion over the next 10 years.

² Full-time trained strength (Navy and RAF) and full-time trade trained strength (Army). The gap is measured as the proportion of regulars below the target number.

³ The Department has announced a Modernising Defence Programme and plans to report in summer 2018.

5 We have reviewed whether the Department has an effective approach to developing the capability of its regular forces, and how it is adapting to meet the new challenges.⁴ We have not reviewed the approach for civilians, reserves or contractors, which are the other elements of the Defence workforce. Our report focuses on the effectiveness of the Department's current workforce management framework and its strategic approach to developing capability. We assessed the Department's:

- approach to establishing the requirements for its regular forces (Part One);
- understanding of its capability gaps (Part Two);
- current approach to developing the capability it needs (Part Three); and
- initiatives to reform the way it manages its workforce (Part Four).

Our audit approach is in Appendix One and evidence base is in Appendix Two.

6 The Department's Head Office is responsible for establishing a framework of personnel policies and processes. The Navy, Army and RAF (the Commands) work within this framework and are responsible for recruiting, training and managing the regular forces. Ultimately, the permanent secretary, as accounting officer, is responsible for the Department's use of resources and holds the Commands to account for completing their agreed defence tasks.

Key findings

Establishing personnel requirements

7 **The Department's 2015 headcount targets were not primarily based on a detailed assessment of the skills needed to deliver defence tasks.** The 2015 *Strategic Defence and Security Review* set headcount targets to maintain the size of the Army (at 82,000) and increase the number of regulars in the Navy (by 400 to 30,450) and RAF (by 300 to 31,750) in anticipation of new equipment and future military deployments. These targets were based on negotiations within government, which considered its ambition for the Armed Forces, assessments of future threats and the available budget. The Commands were then required to identify and develop the skills needed to meet the commitments specified in the Review (paragraphs 1.3 to 1.7).

8 **The Department is not on track to meet its workforce targets.** In January 2018, the number of regulars was 5.7% below the requirement. The Department does not expect to meet its target of 144,200 trained regulars by 2020. Its recently announced review – the Modernising Defence Programme – will reconsider the appropriate strength of the future Armed Forces. The Commands also have targets to increase diversity in the regulars and reserves that they recruit. However, the Navy and Army were well below the target that 15% of their intake will be female by 2020, and the Navy and RAF were well below the target that 10% of intake will be from Black, Asian and Minority Ethnic communities (paragraphs 1.8 to 1.11).

4 The Armed Forces are made up of regulars and reserves, as well as civilians and external contractors.

Understanding existing skill gaps

9 The Armed Forces currently have significant shortfalls in critical skills.

The overall headcount figures mask much larger shortfalls in critical trades, including pilots, engineers and intelligence analysts. Between 2010 and 2015, the Department implemented a redundancy programme based on an assessment of affordability and future capabilities. As a result, it released 12,130 trained regulars, including 6,120 from engineering, logistics and aircrew trades – specialisms that now have shortfalls. The Department monitors the shortfalls in specific trades. In April 2017, it identified that 102 trades did not have enough trained regulars to perform operational tasks without taking mitigating actions. These are known as ‘pinch-point’ trades. These trades had a shortfall of 7,700 regulars – 18% below the required number. The size of shortfalls in pinch-point trades has grown over the last year (paragraphs 2.2 to 2.5 and 2.12).

10 The Department understands the scale of existing shortfalls but needs to conduct a deeper analysis of the causes of shortfalls in pinch-point trades.

The Commands have identified the trades and ranks in which there are shortfalls in the number of regulars. They also understand the main reasons why some people leave the Armed Forces and others stay. The level of voluntary outflow in some pinch-point trades is, however, several times higher than the Armed Forces’ average. The Department has not fully analysed data, such as its annual survey of regulars and exit interviews, to understand whether there are specific factors causing higher levels of departures in pinch-point trades. The Commands monitor data on personnel, such as compliance with harmony guidelines. But a deeper analysis of pinch-point trades would enable the Department to better understand where shortfalls are likely to increase and create risks to the completion of future defence tasks (paragraphs 2.10 to 2.14).

11 The changing character of warfare means the Department faces an immediate and growing challenge to develop the skills it will need in the future.

The threats faced by the UK are constantly evolving. For example, the increasing risk of cyber and electronic attacks will change the capabilities – and skills – that the Armed Forces will need in the future. The new demands will add to the pressure to increase capability in some trades that already have shortfalls. For example, as at April 2017, the Department had 11 ‘pinch-points’ in intelligence analyst trades and a 26% shortfall in the required number of regulars. The Department is seeking to increase the number of regulars with specialist skills or be able to access these skills from the other elements of its workforce. For example, it is growing its cyber capability. However, the Department has not yet identified how it will meet all of its future skill requirements for which, increasingly, it will have to compete with the private sector for scarce, specialist skills (paragraphs 2.5, 2.8 to 2.9 and 3.7).

12 The Department has assessed that shortfalls in 22 trades mean that Commands are regularly having to place additional demands on regulars to maintain operations. The Commands have managed the consequences of shortfalls by prioritising ‘front-line’ activities and continually reassessing the impact of shortfalls on the delivery of their tasks. However, having insufficient skilled personnel puts the delivery of future defence tasks at risk. In 11 of these pinch-point trades, Commands had to routinely place greater demands on regulars – such as cancelling leave or training – to maintain operations. In addition, the Department has 33 pinch-points that are regularly having a detrimental impact on the sustainability of the trade. These shortfalls in particular skills have persisted at a time when relatively low numbers of personnel have been deployed.⁵ This means the Department could face greater risks if military commitments increase (paragraphs 2.15 to 2.18).

The Department’s current approach to developing workforce capability

13 The Department has not established effective authority to undertake a strategic assessment of future workforce capability. Under the Department’s delegated operating model, the Chief of Defence People (CDP) has authority for personnel across the Armed Forces. However, the CDP is not able to direct the Commands or tackle recruitment or capability issues that require a cross-Command, longer-term or structural response. Similarly, the Department has appointed ‘skills champions’ for some critical trades but, at most, they perform an ‘advocacy’ role and do not have the authority to develop a targeted response for these trades. As part of its Modernising Defence Programme review, the Department is reconsidering the responsibilities of the CDP (paragraphs 3.2 to 3.6).

14 Head Office has not undertaken a longer-term, strategic analysis of the trades with shortfalls or its ability to meet the changing demands for new skills. It has not assessed whether its existing workforce management policies enable it to develop the capabilities that are needed in trades where the demand for new skills is growing, or where shortfalls have endured. It has not systematically assessed, for example, whether its recruitment policies, career structures and remuneration package enable it to attract and develop the new skills that it will need in the future (paragraph 3.7).

15 Under the delegated model, Head Office does not know how Commands have used workforce budgets. In particular:

- The continuing shortfall in the number of regulars has meant that Commands have been able to reallocate some of their workforce funding to other areas, such as equipment maintenance. Head Office is aware that Commands have not spent all of their workforce funding in 2017-18 but does not know how they have reallocated these funds or whether they are deprioritising skill development in order to achieve other tasks. The Department forecasts that, in 2017-18, the Commands did not use £261 million of funding allocated for personnel.

5 Deployments fell from 231,880 in 2011-12 to 56,900 in 2016-17.

- Head Office could not establish whether the Commands have maintained levels of discretionary expenditure on training and marketing. This is despite evidence that reductions in discretionary marketing activities in 2016-17 had an adverse affect on recruitment and the closure of shortfalls (paragraphs 3.8 to 3.12).

16 The Department's reliance on the 'base-fed' workforce model has not enabled it to close the capability gaps quickly enough. The Department has relied primarily on a 'base-fed' workforce model, in which the Navy, Army and RAF recruit regulars at the lowest ranks and develop their skills and experience over time. The Commands have missed recruitment targets for the last three years. Recruitment was an aggregate of 24% below target in 2016-17. The Commands were also 23% below their target for training new regulars and, with high levels of regulars leaving voluntarily, are unable to fill shortfalls across several ranks and posts. The Commands can also take many years to develop the expertise they require; for example, it can take the Navy 12 years to train and develop a chief petty officer. This limits their ability to respond quickly to changing demands for skills (paragraphs 3.13 to 3.15).

17 The Department does not expect to resolve shortfalls in 96 of 102 pinch-point trades in the next five years. The Department expects to reduce the impact of shortfalls in 35 pinch-point trades over the next five years. However, at the same time, the impact will worsen in 23 trades. The Department has used financial incentives to try to address the shortfalls, paying £664 million in recruitment and retention incentives over the last five years. Its research shows that these payments have helped retain personnel in some key areas, but the shortfalls persist. In addition, the Commands have adapted the Department's standard workforce management practices to improve recruitment, training and retention. Their initiatives have included altering entry criteria, streamlining training requirements and accelerated progression. Many of these changes are, though, at an early stage and small-scale. Head Office has not done enough to review how the Commands' initiatives are helping to address the shortfalls (paragraphs 2.16, 3.16 to 3.21).

The Department's workforce change programme

18 The Department is implementing a substantial workforce change programme, although this has not yet improved recruitment or retention.

Since 2010, the Department has introduced a series of changes to its workforce policies. These are designed to improve recruitment and retention, and make regulars' terms and conditions more attractive. For example, the new pay model enabled the Department to better reward people for their skills. However, some of the changes will not affect many people and two projects may have a negative effect on morale, including higher accommodation charges for regulars living in service family accommodation. The programme's aim was to improve retention but, so far, the level of voluntary outflow has increased from 3.8% in March 2010 to 5.6% in December 2017. The Department's annual attitude surveys also show that satisfaction with pay, accommodation and life in the services has fallen (paragraphs 4.3 to 4.10).

19 The Department is developing a long-term response to workforce capability but has not yet developed its skills strategy. The Department engages widely across government, industry and schools to generate interest in joining the Armed Forces. For example, it is establishing collaborative arrangements with its commercial suppliers to share qualified personnel, strengthening the cadet forces and committing to the government's apprenticeship programme. It is, however, likely to be many years before the benefits of these initiatives are seen. In May 2018, the Department's People Committee will review Head Office's early plans to develop a skills strategy (paragraphs 4.13 to 4.14).

Conclusion on value for money

20 The Armed Forces have significant skill shortfalls in many critical areas. The Commands have responded to these shortfalls by prioritising essential defence tasks, but the reliance on placing increasing demands on regulars is not sustainable in the long-term. The Department also faces the growing challenge of responding quickly to changes in how warfare is conducted. This will increasingly require new specialist technical and digital skills, and will bring it into greater competition with the private sector.

21 Head Office and the Commands are implementing a range of measures to address recruitment and retention problems. Despite these efforts, the Department does not expect to resolve the majority of the shortfalls in the next five years. In view of this, the Department must: fundamentally reassess how to fill its skills gaps; exploit its existing innovative initiatives more widely; and adapt its long-established approaches to managing the development of workforce capabilities to deliver the required skills. Unless it does this, the Department will not have the personnel it needs to respond rapidly to changing demands and make effective use of new equipment, with attendant damage to value for money.

Recommendations

22 The Department needs to reassess its approach to workforce management so that it can respond to future recruitment and retention challenges and, ultimately, develop a workforce capable of meeting the changing demands of modern warfare. We recommend:

- a** After publication of the Modernising Defence Programme in summer 2018, Head Office should work quickly to develop workforce strategies for critical trades. In doing so, it should test whether its recruitment requirements, career structures, remuneration packages and role designations enable it to compete effectively in employment markets for the specialist skills it requires.

- b** The Department should ensure that the Chief of Defence People (CDP) has the authority needed to ensure there is a targeted and sustained emphasis on reducing shortfalls and developing the skills needed in the longer-term. Drawing on input from Heads of Professions and skills champions, the CDP needs to be able to focus on new and changing skill requirements and to direct the Commands to target long-standing capability shortfalls and improve diversity.
- c** Head Office should conduct a review to understand the impact of financial pressures on how the Commands develop the workforce capability needed in the longer-term. It should collect more detailed information to better understand Commands' workforce expenditure. This would enable it to review the incentives created by the budget allocation process and ensure Commands are maintaining an appropriate emphasis on workforce skill development.
- d** Head Office should systematically review its management information to build a deeper understanding of the causes of capability shortfalls for the pinch-point trades and monitor the strain placed on personnel.
- e** Head Office should assess the potential to expand the more innovative approaches to alleviating shortfalls in pinch-point trades. For example, it should assess the potential to: widen the use of direct recruitment into more senior roles (lateral recruitment); increase flexibility to move personnel between Commands; assess whether military posts could be re-designated to be filled by civilians or reserves; and work more closely with other government departments and national security organisations.
- f** Head Office should improve its assessment of how workforce management initiatives are impacting on its 'offer' to regulars. It should establish a clear baseline and metrics to understand the impact of the changes in the Armed Forces People Programme. It should then regularly review its evidence base to better understand the cumulative effect of these changes.

Part One

Introduction

1.1 The Ministry of Defence (the Department) needs the right number of people with the appropriate skills to deliver its objectives. It aims to achieve the most efficient and effective mix of its workforce, which is made up of regulars, reserves, civilians and contractors.⁶ In January 2018, there were 137,300 trained regulars – the largest element of the workforce. Their main role is to undertake military operations, although some also fill civilian posts, including management and commercial roles. Our report assesses how the Department ensures it has enough regulars with the skills that it needs.

1.2 This part describes how the Department has established the personnel requirements for the Armed Forces and sets out its current size.

Establishing the requirements for regular forces

1.3 In November 2015 the government set out the Department’s strategic objectives in the *Strategic Defence and Security Review 2015* (the Review).⁷ Its high-level objectives are to “promote our people; protect our global influence; and promote our prosperity”.⁸ The Review outlined the potential threats to the UK and the capabilities required to address them over the next 10 years.

1.4 The Review set out commitments to spend £24.4 billion on new equipment, including a new maritime patrol aircraft capability, enhanced surveillance and reconnaissance capabilities and increased funding for cyber security and Special Forces. It also outlined the government’s ambition to be able to deploy a force of 50,000 regulars by 2025, and set targets for the size of the Armed Forces. The target number for trained regulars was 144,200 by 2020. This was made up of 30,450 in the Royal Navy/ Royal Marines; 82,000 in the Army; and 31,750 in the Royal Air Force (RAF).⁹

6 There were 56,920 civilians (as at October 2017) and 36,940 reserves (as at January 2018).

7 HM Government, *National Security Strategy and Strategic Defence and Security Review 2015*, Cm 9161, November 2015.

8 The government has subsequently added a fourth objective for the Department to “manage the Department of State and the Defence Enterprise”.

9 “Trained regulars” are personnel who have completed phase 1 and phase 2 training.

1.5 The target size of the Armed Forces was based on negotiations within government about the current and future risks to the UK, the military capabilities required and the budget the government was able to commit. Planners made assumptions about potential military deployments and the need for a contingent capability to respond to crises. They also considered the demands created by the introduction of new equipment.¹⁰ These assumptions were balanced against available budgets. Our 2014 report *Army 2020* noted that the future size of the Army was determined by the need to make financial savings while maintaining enough military capability to meet military commitments.¹¹

1.6 The Department's headcount targets were not based on a 'bottom-up' assessment of the skills required to carry out defence tasks. The Commands – the Navy, Army, RAF and Joint Forces Command – translate the commitments announced in government security reviews into their workforce requirements, and develop the skills that they need. For example, the 2015 Review committed the Department to the accelerated purchase of the F-35 Lightning stealth aircraft and enhancements to intelligence, surveillance and reconnaissance aircraft platforms. These commitments meant that the Commands needed more engineers, intelligence analysts and pilots. For example, the RAF estimates that, between 2019 and 2026, it will need an average of 170 more regulars per year than is funded under the commitments made in the 2015 Review.

The size of the Armed Forces

1.7 The government has been reducing the target size of the Armed Forces for many years (**Figure 1** overleaf). The 2015 Review halted this long-term trend. It sought to maintain the target size of the Army, and to make small increases to the target size of the Navy (increase of 400 regulars) and RAF (300 regulars).

1.8 In January 2018, the Armed Forces were 8,200 regulars (5.7%) below the aggregate full-time trained strength requirement, the largest gap since 2010 (**Figure 2** on page 15).¹² There were 137,300 regulars in the Armed Forces, made up of 29,300 in the Navy, 77,500 in the Army, and 30,500 in the RAF.

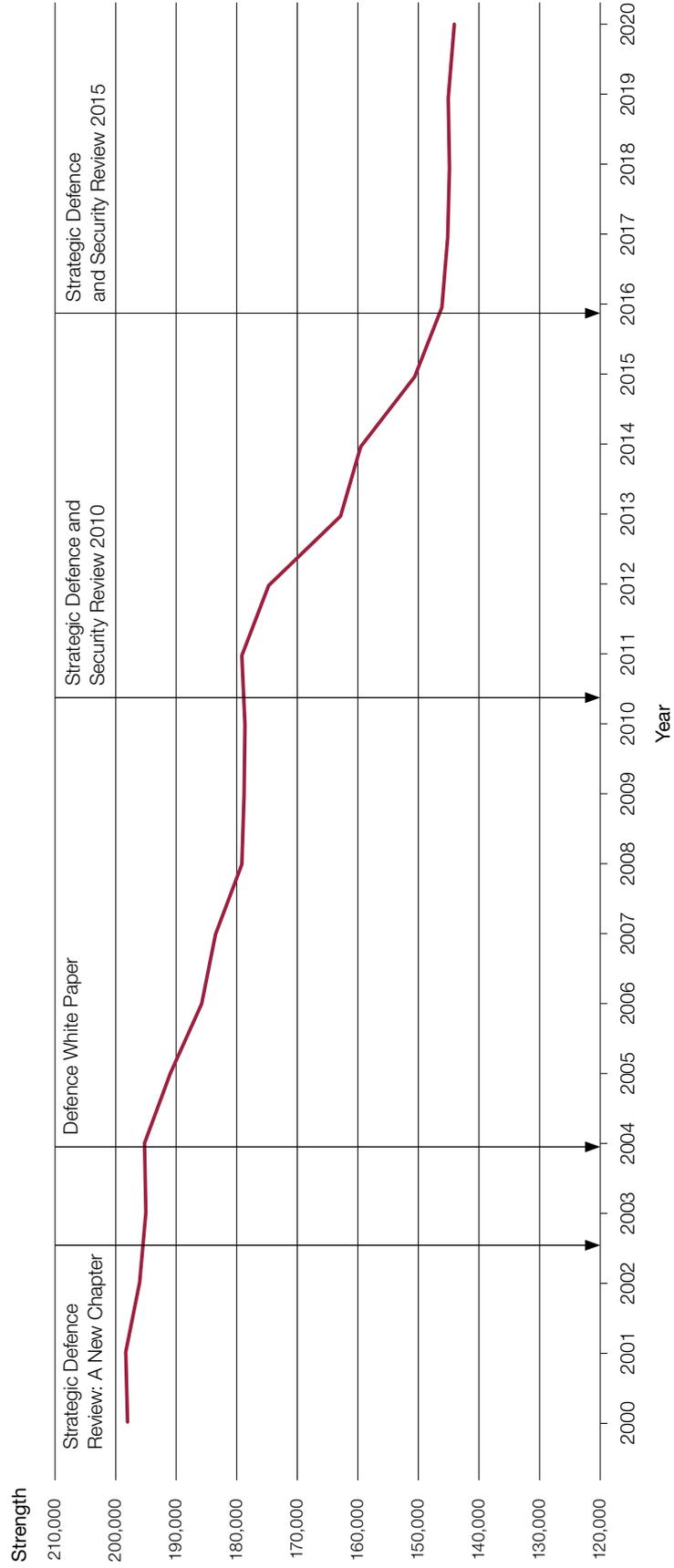
1.9 The Department does not expect to meet its target of having 144,200 trained regulars by 2020. The Navy, Army and RAF have been operating below their target headcount requirement since 2010-11 and do not expect to achieve their required strength before 2022 at the earliest.

¹⁰ The assessments include the possible size of deployments, where they would be made, the duration of operations, and whether the UK will be supported by allies or a host nation.

¹¹ Comptroller and Auditor General, Ministry of Defence, *Army 2020*, Session 2014-15, HC 263, National Audit Office, June 2014.

¹² Full-time trained strength (Navy and RAF) and full-time trade-trained strength (Army).

Figure 1
 The target size of the regular Armed Forces since 2000
 The target size of the Armed Forces has been falling for many years



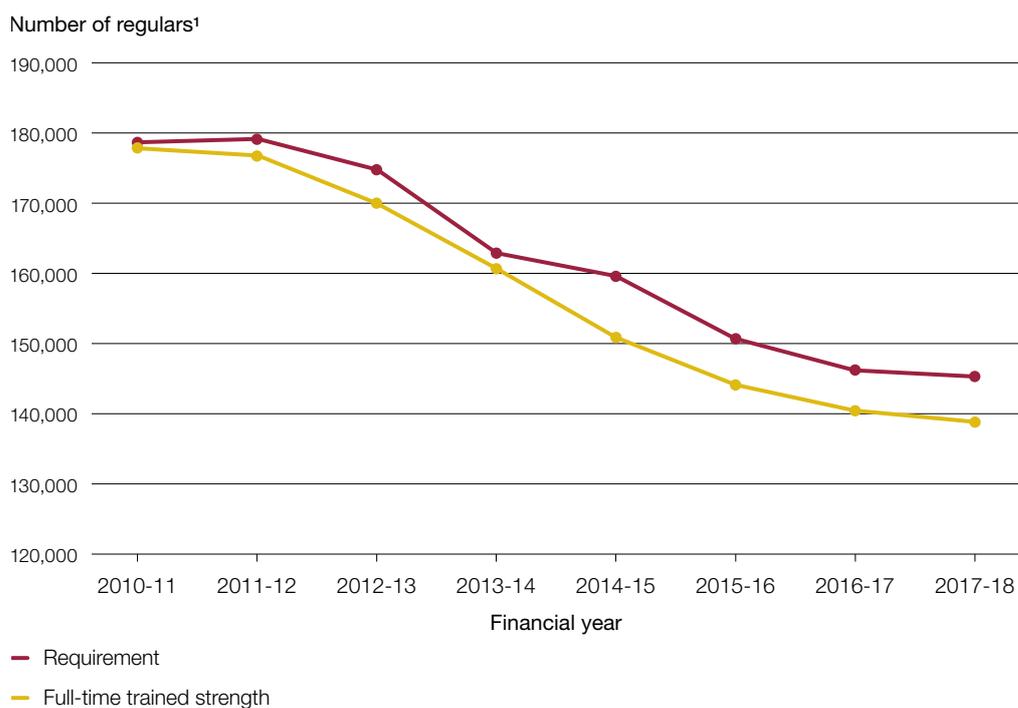
Note

1 Data from 2017 to 2020 have been interpolated based on a 2020 target of 144,200 personnel.

Figure 2

The size of the Armed Forces against target – from 2010-11 to 2017-18

The number of trained regulars in the Armed Forces has been below target since 2010-11

**Notes**

- 1 Full-time trained strength (Royal Navy/Royal Marines and Royal Air Force) and full-time trade trained strength (Army).
- 2 The data is at 1 April of each financial year.

Source: Ministry of Defence, UK Armed Forces personnel statistics

1.10 The number of people leaving the Armed Forces (outflow) has exceeded the number of new recruits (inflow) each year since 2010-11 (**Figure 3** overleaf). In the 12 months to December 2017, 15,300 regulars left the Armed Forces, a net outflow of 2,300.¹³ Of the 12,700 trained regulars who left, 7,500 left voluntarily before the end of their engagement or contract period (59%). The rate of voluntary outflow has increased from 3.8% in March 2010 to 5.6% in December 2017.

1.11 The Department is aiming to increase the diversity of the Armed Forces. Historically, the Commands have recruited mainly young, white males. The 2015 Review set recruitment targets so that, by 2020, at least 15% of the Commands' intake would be female and at least 10% would be from Black, Asian and Minority Ethnic (BAME) communities.¹⁴ Overall, in the 12 months to September 2017, 12.2% of recruits were women and 9.2% were BAME. However, the Navy and RAF remained well below the target for recruiting from BAME backgrounds, and the Navy and Army were well below the target for recruiting women (**Figure 4** on page 17).

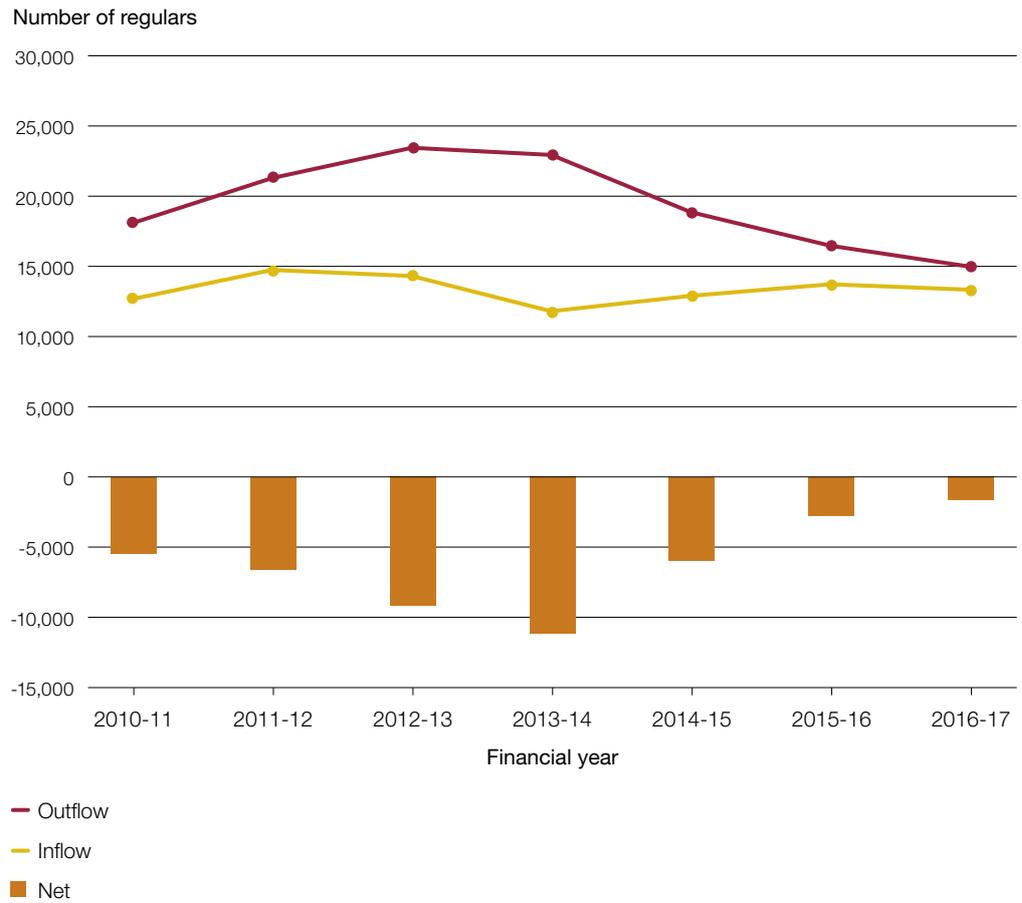
¹³ Includes trained and untrained regulars.

¹⁴ Intake targets include regulars and reserves

Figure 3

The number of regulars joining and leaving the Armed Forces between 2010-11 and 2016-17

The outflow of regulars has exceeded inflow since 2010-11



Note

1 Trained and untrained personnel joining and leaving the regular UK Armed Forces.

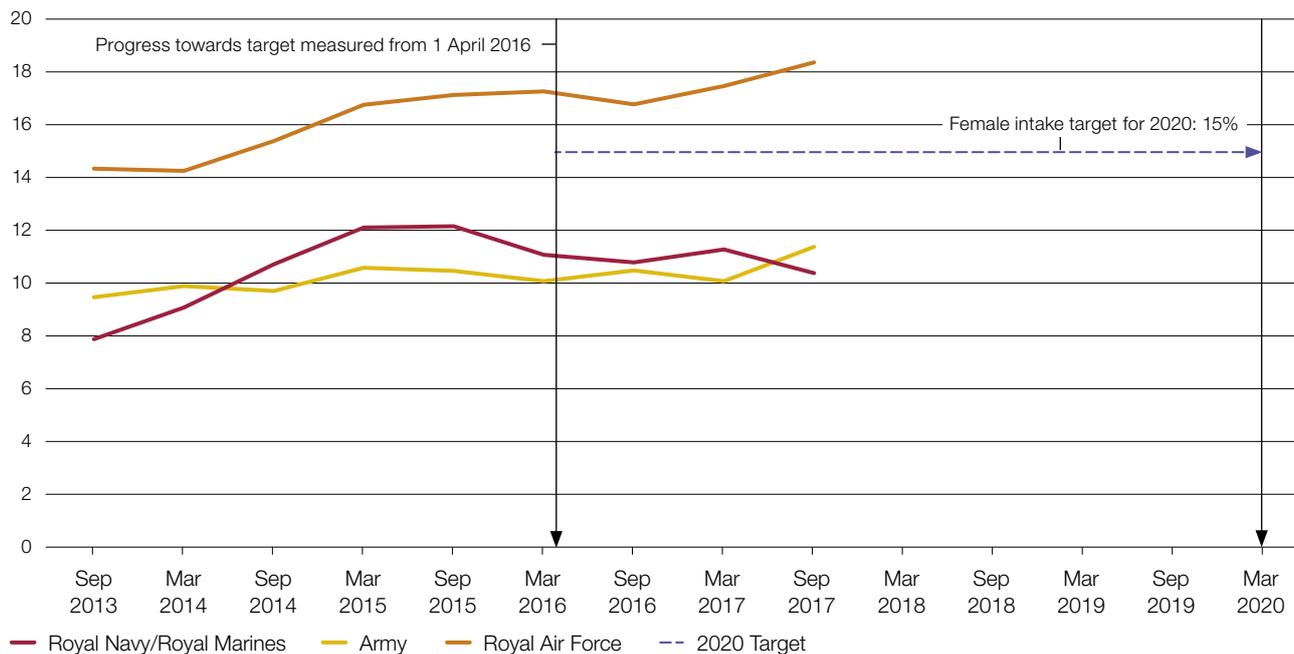
Source: Ministry of Defence, UK Armed Forces personnel statistics

Figure 4
Progress against diversity intake targets (regulars and reserves)

Some Commands remain well below the 2020 target for female (a) and BAME (b) recruitment

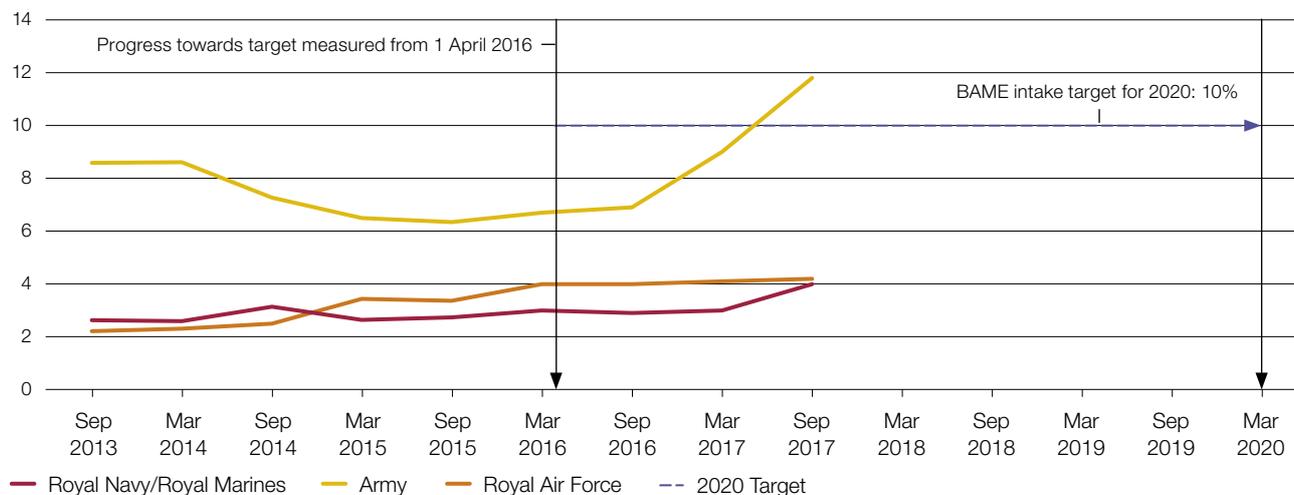
a Female intake

Percentage of female intake



b BAME intake

Percentage of BAME intake



Note

1 The targets are for regulars and reserves.

Source: Ministry of Defence, UK Armed Forces biannual diversity statistics

Part Two

Understanding the existing skill gaps

2.1 The Ministry of Defence (the Department) needs sufficient levels of skilled regulars to maintain its capabilities and achieve its objectives. Taking account of workforce management principles, we assessed whether the Department had a good understanding of its skill gaps and the factors affecting recruitment and retention.¹⁵ This part reviews the Department's approach to assessing the shortfalls in its regular forces and its understanding of the causes and consequences of the gaps.

Assessing shortfalls in regular forces

2.2 All four Commands – the Navy, Army, Royal Air Force (RAF) and Joint Forces Command – have reviewed whether they have sufficient regulars to achieve their agreed defence tasks.¹⁶ They have identified the trades in which there are not enough trained regulars to perform operational tasks without taking action to mitigate these shortfalls. These are known as 'pinch-points' and can relate to a whole trade group or problems in specific ranks.

2.3 The Department has two types of pinch-points:

- Operational pinch-points are defined as a shortfall in trained personnel which, if mitigating action is not taken, will have a detrimental impact on current, planned and future operations. The number and severity of pinch-points may vary in response to urgent or unexpected military operations, such as disaster relief.
- Manning pinch-points are defined as shortfalls in trained personnel that are having a detrimental impact on the sustainability of the trade group as a whole and require the Commands to take action to mitigate them.

2.4 There are significant shortfalls in some critical trades. In April 2017, the Commands had identified 102 pinch-points with an aggregate shortfall of 7,700 regulars, some 18% below the requirement for these trades (**Figure 5**). The size of the shortfalls in pinch-point trades has increased over the last year.

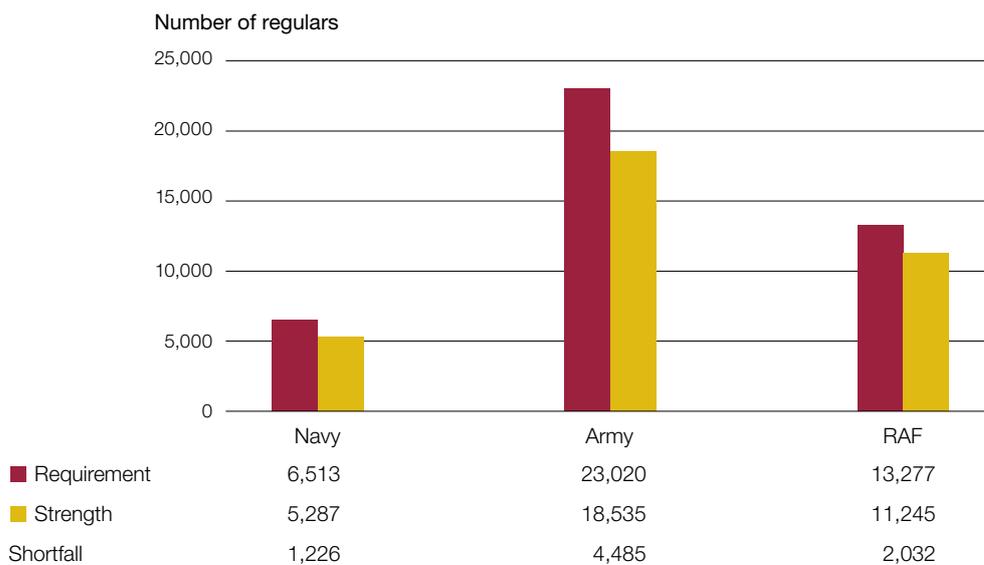
¹⁵ The principles are drawn from previous National Audit Office workforce management studies.

¹⁶ The Commands determine the skills and ranks needed to meet the commitments agreed with Head Office. They take into account the level of deployments, the need for personnel to have sufficient time to recuperate between operations and training requirements.

Figure 5

The number of regulars versus requirement within pinch-points trades for Navy, Army and the Royal Air Force (RAF) – as at April 2017

The Commands have an aggregate shortfall of 7,743 regulars across their pinch-point trades



Total shortfall is 7,743

Note

1 Navy includes Royal Marines.

Source: National Audit Office analysis of Ministry of Defence data as at April 2017

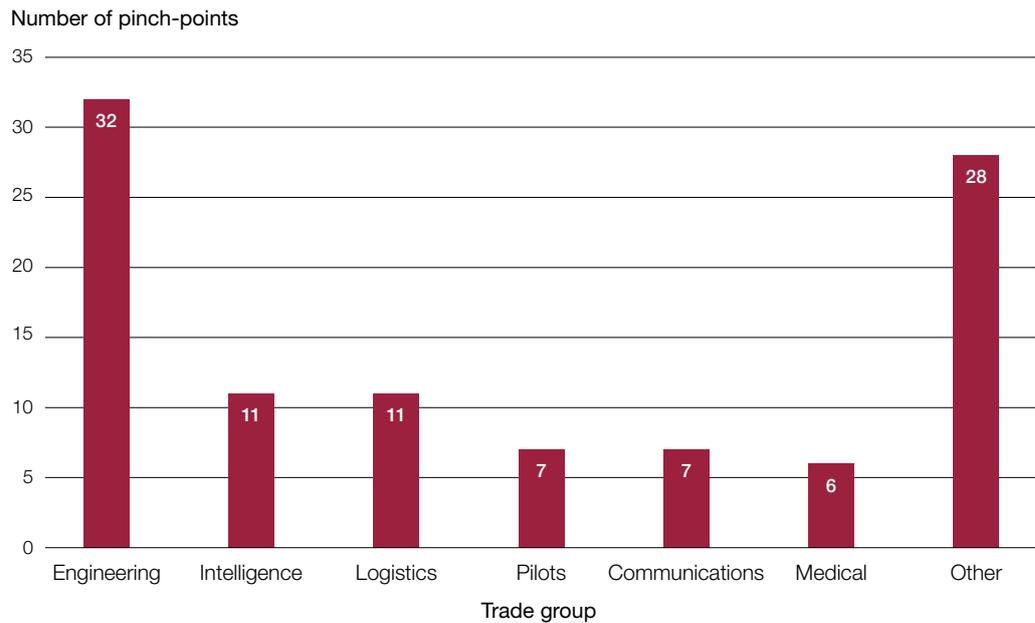
2.5 Most of the pinch-points were in six trades (**Figure 6** overleaf), including:

- 32 engineering pinch-points: a shortfall of 2,400 engineers, 17% below requirement – the largest shortfall was for weapons engineers in the Navy;
- 11 intelligence analyst pinch-points: a shortfall of 700 regulars, 26% below requirement – the largest shortfall was in the RAF; and
- 7 pilot pinch-points – a shortfall of 800 regulars, 23% below requirement – the largest shortfall was in the RAF.

Figure 6

The number of pinch-points in the regular Armed Forces, by trade group, at April 2017

The largest number of pinch-points were in engineering trades



Notes

- 1 The Ministry of Defence determines which trades are classified as pinch-points.
- 2 The category 'other' represents several trades, including infantry, chefs and weapons specialists.

Source: National Audit Office analysis of Ministry of Defence data

2.6 The Commands also recorded the 'usable strength' for some trades. They did not have a common definition of 'usable' strength but, broadly, this is the number of regulars who are medically fit to be deployed on military operations. Overall, the Armed Forces consider that 80% of regulars are medically fit to deploy. The impacts of shortfalls in useable strength depend on the nature and type of operation, and these are managed by the Commands. As such, Head Office does not routinely monitor or report this data.

2.7 In 2006, we reported on the Armed Forces' shortfalls in regulars and the pinch-points in specific trades.¹⁷ The Department had 88 pinch-points in 2006 – when it was involved in overseas operations in Afghanistan, Iraq and Bosnia. We note that a number of the pinch-points continued to exist in 2017, including shortfalls in engineering trades and intelligence roles.

Changing threats can affect the requirement for skilled personnel

2.8 In January 2018, the Department announced the Modernising Defence Programme and plans to report in summer 2018. As part of this, it is assessing the changing demands of modern warfare, including the need to enhance its capabilities in new domains – such as cyber, the electromagnetic environment and space – and respond to changing threats, including chemical, biological, nuclear and radiological.

2.9 The Department continually assesses the changing character of warfare and the capabilities that are required. The new threats will require the Armed Forces to increase and develop new skills in specialist areas – such as cyber and electronic warfare, artificial intelligence and missile defence – possibly at pace. The Department is expanding its cyber capability. It is developing a cross-Command view on the cyber skills it requires and the challenges it faces in recruiting this specialist expertise. It is considering the need to adapt its workforce model to create cyber career structures, improve training and develop a joint cyber force.

Understanding the causes of shortfalls

2.10 In recent years, the Armed Forces have experienced higher than expected numbers of regulars leaving and lower than expected numbers joining. In particular:

- **Retention**

In the 12 months to December 2017, 7,500 trained regulars left the Armed Forces voluntarily before the scheduled end of their employment period. The overall level of voluntary outflow was 5.6%, but this was significantly higher in some pinch-point trades.

- **Recruitment**

The Commands missed their recruitment targets in 2016-17 and face particular difficulties in securing the skills they need in the pinch-point trades. In the 12 months to September 2017, the Army was 31% below target, the Navy was 16% below and the RAF was 8% below.

¹⁷ Comptroller and Auditor General, *Recruitment and Retention in the Armed Forces*, Session 2005-06, HC1633-I, National Audit Office, November 2006.

2.11 The Department has identified a number of external factors that affect its ability to recruit and retain personnel. These include:

- **The economic cycle**

The Department's analysis shows that applications to join the Armed Forces fall when the economy improves. People are also more likely to leave the Armed Forces when the economy is stronger, because there may be more opportunities and higher wages in the private sector.

- **National skill shortages**

There are national shortages in some areas in which the Department is recruiting, resulting in greater competition for these skills. For example, our report on science, technology, engineering and mathematics (STEM) skills included an estimate that 700,000 additional STEM technicians will be needed to meet employer demand by 2024.¹⁸

- **Generational changes**

Research suggests that people who reached young adulthood in the early 21st century are more willing to change jobs more often than older generations.¹⁹ This means they may be less willing to commit to long-term careers, including those in the Armed Forces.

The Department has faced these issues for many years and some, such as economic factors, are cyclical in nature. It now faces the challenge of competing for more specialist skills in competitive recruitment markets.

2.12 The Department's previous initiatives to reduce the size of the Armed Forces have also contributed to the skill gaps. The 2010 Strategic Defence and Security Review sought to address a £38 billion overspend. It proposed a reduction of 17,000 regulars, including 12,130 redundancies.²⁰ Within these redundancies, 6,120 were in engineering, logistics and aircrew trades, which had pinch-points in 2017. The Department did not assess the impact of the redundancies on its skills gaps, or the lessons learned from the programme, which meant it was unable to assess the longer-term cost-effectiveness of this process.

18 Comptroller and Auditor General, *Delivering STEM skills for the economy*, Session 2017-2019, HC 716, National Audit Office, 17 January 2018.

19 Montana, P.J., Petit, F. (2008) 'Motivating Generation X and Y on the Job and Preparing Z', *Global Journal of Business Research*. Strauss, W., Howe, N. (2000) *Millennials Rising: The Next Generation*.

20 HM Government, *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review*, Cm 7948, October 2010. Following the review, the Department announced a further reduction in the target size of the Army to 82,000

2.13 The Department understands the main reasons why people want to stay in, or leave, the Armed Forces. The most commonly cited reasons for staying were job security and the provision of medical services. The reasons for leaving were the impact on family and personal life, job satisfaction and external job opportunities. The Commands also understand the main causes of shortfalls, drawing on their specialist knowledge of trades and their day-to-day management of personnel. They also monitor the external influences; for example, the RAF monitors commercial airlines' recruitment activity to assess the threats to the retention of pilots. The Commands also run scenario-based analysis to forecast inflow and outflow rates. This enables them to determine annual recruitment targets, assess progress in closing shortfalls and estimate when they will have the number of regulars they need.

2.14 The Department does not, however, fully exploit its data to analyse the causes of shortfalls in specific trades. For example, it does not analyse its survey data by pinch-points to establish trends or factors that are specific to these trades. The Commands also perform exit interviews, but do not systematically assess this data. The Department has begun to explore how it can analyse its data to develop a deeper understanding of the causes of shortfalls. In January 2018, it commissioned research to explore the potential to make greater use of data analytics. It also proposes to apply a diagnostic tool to assess the causes of shortfalls across trades.

Understanding the consequences of shortfalls

2.15 In April 2017, the Commands assessed that 22 of the 30 operational pinch-point trades were having at least a 'high impact' on operations. This means they have regularly placed additional demands on regulars - such as cancelling leave or training – to maintain outputs (**Figure 7** overleaf).²¹ In 11 of these trades, Commands were routinely taking these mitigating actions in order to sustain operations. For 33 of the 72 manning pinch-points, the Commands had to place additional demands on regulars to sustain the trade. The impact of the shortfalls has become more severe over the past year.

2.16 The Department closely monitors data on pinch-points. It has implemented a range of initiatives to address the shortfalls, seeking to improve recruitment and encourage regulars to stay. It forecasts the potential shortfalls over the next five years and assesses the potential impacts on its operations. It expects to resolve just 6 of the 102 pinch-points in the next five years. Of the remaining 96 pinch points:

- 35 (36%) are expected to become less severe;
- 38 (40%) are not expected to change; and
- 23 (24%) are expected to become more severe, based on the current military commitments and mitigation strategies in place.

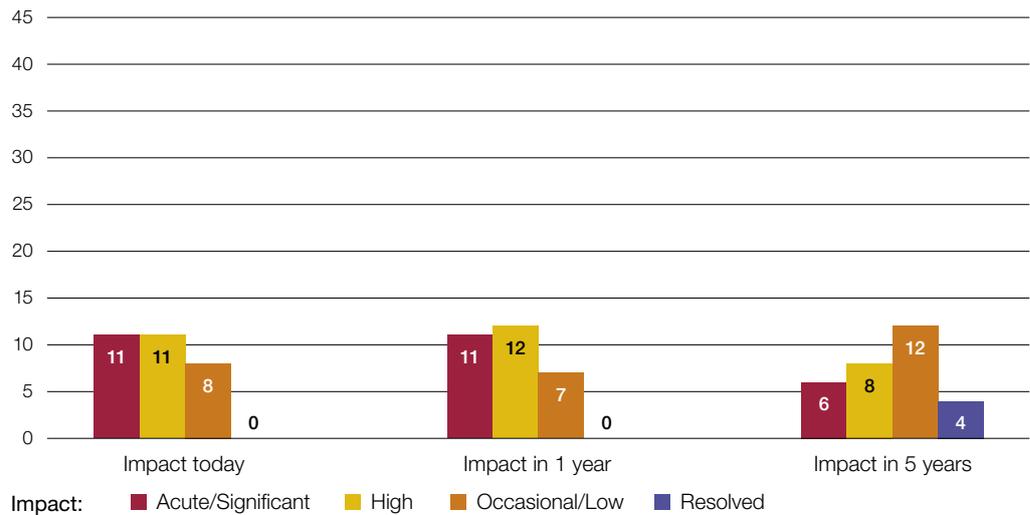
²¹ The Commands assess how the shortfalls will affect their operations, today, in one year and in five years.

Figure 7

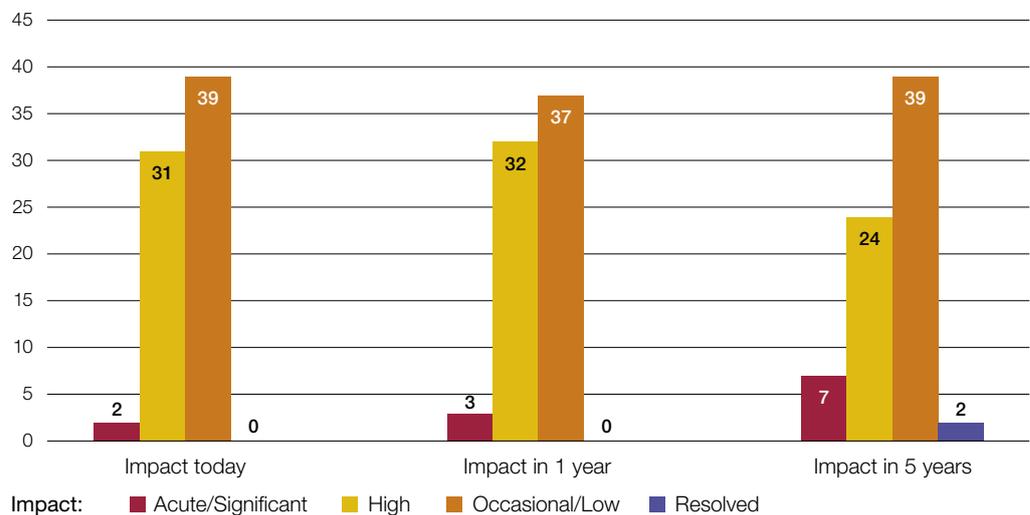
The Ministry of Defence’s assessment of the impact of pinch-points, as at April 2017

The Department expects to fully resolve 6 of 102 pinch-points within the next five years

Operational pinch-points



Manning pinch-points



Definition of impact

Low impact: low impact on operations and/or sustainability of the trade.

Occasional impact: occasional impact on operations and/or sustainability of the trade that requires some mitigation (eg harmony breaches, cancellation of leave or cancellation of training).

High impact: regularly having an impact on operations and/or sustainability of the trade that requires (more often than not) some mitigation (eg harmony breaches, cancellation of leave or cancellation of training).

Significant impact: operations and/or sustainability of the trade, can only be conducted because significant mitigation is applied as business as usual (eg harmony breaches, cancellation of leave or cancellation of training).

Acute: where non-availability of fewer than 10 individuals would stop a military capability.

Source: National Audit Office analysis of Ministry of Defence data

2.17 The Commands continually assess the consequences of shortfalls on operations and personnel:

- **Operations**

The Commands monitor their delivery of defence outputs. They deploy regulars according to operational priorities and report risks to their boards. We have seen evidence of a Command assessing the consequences of shortfalls on defence tasks, but the details remain classified. Because these responsibilities are delegated, Head Office has less visibility of the secondary effects of shortfalls, such as having fewer staff to take on instructor roles to train regulars.

- **Personnel**

The Commands use a range of metrics to monitor their personnel, such as 'harmony' guidelines (guidance on the number of days spent away from home), sickness rates and voluntary outflow. The overall level of harmony breaches is low; however, higher rates exist in some trades.²²

2.18 The Department could collect more granular data to understand how close it is to its harmony guidelines for specific trades, and develop a better understanding of the extent of the pressure on personnel. The Department's 2017 attitude survey shows, for example, that the Department is facing potential retention problems. It showed that 61% of regulars rated morale as low, compared with 33% in 2010. The survey also showed that 25% of regulars intended to leave before the end of their engagement period, and 7% wanted to leave as soon as possible.

2.19 The Commands also highlight the 'people risks' in their risk registers and escalate them to Head Office. In September 2016, the Defence Board identified two people risks: a shortage of critical skills and the ability to attract and retain sufficient, capable and motivated people. In April 2017, the Department subsumed these risks into one: "workforce is not aligned to planned outputs". It assessed there was a high likelihood of the risk occurring, particularly in pinch-point trades, and that this could potentially have an impact on operations. The Defence Board has commissioned actions to mitigate the risks and consequences.

2.20 If needed, the Commands also perform deeper analysis of the consequences of workforce shortfalls. In 2016, the Navy undertook a detailed assessment of the impact of shortfalls on its operations and ability to deliver agreed defence tasks. It concluded that its position was unsustainable. It asked the Defence Board to authorise revisions to its commitments and launched a 10-year personnel recovery programme to address critical concerns.

²² The Department sets 'harmony' guidelines on the amount of time personnel should spend away. The data shows: Navy – 0.4% of personnel spent over 660 days away over three years; Army – 1.6% over 498 days away; RAF – 0.5% over 468 days away.

Part Three

The current approach to developing capability

3.1 This part reviews the Ministry of Defence's (the Department's) strategic approach to developing the skills it needs in its regular forces. We focused primarily on Head Office's role and reviewed whether it had established an appropriate framework for the Commands to recruit regulars and manage their workforce. It reviews:

- the responsibilities for developing capability in the regular forces;
- how the Department manages workforce funding;
- the Department's workforce model; and
- within the framework established by Head Office, how the Commands have tackled skills gaps.

Responsibilities for developing capability

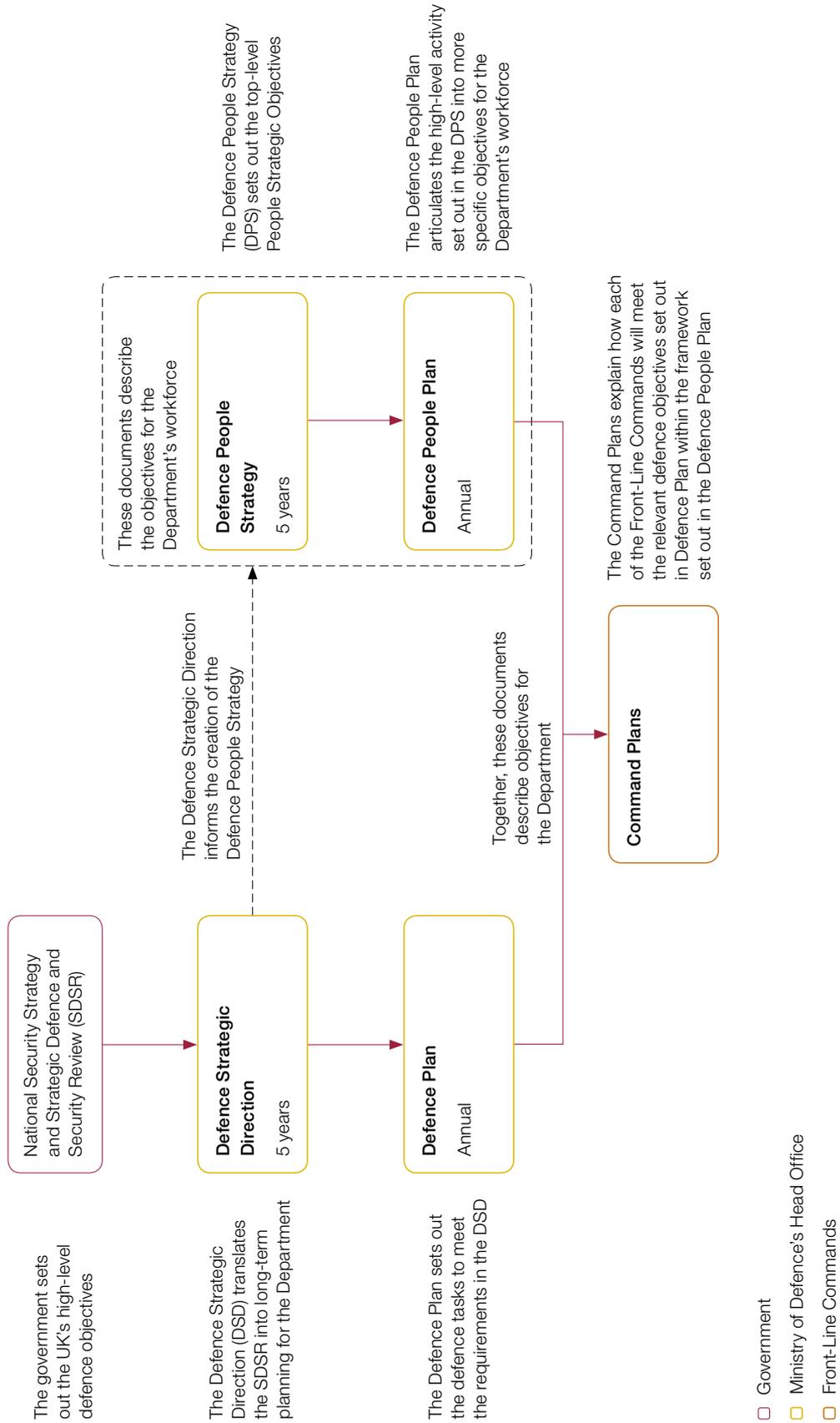
3.2 The Department's Head Office develops the defence strategy and sets the overall policy framework within which the Commands operate. It delegates budgets to the Commands and holds them to account for completing agreed defence tasks. The Navy, Army and Royal Air Force (RAF) are responsible for developing their capabilities, including recruitment, training and managing their workforce. Joint Forces Command does not recruit its own military personnel.

3.3 The Department has developed a framework to achieve its people-related objectives and escalate people-related issues. Under this:

- the Department translates its high-level defence commitments into workforce objectives (**Figure 8**). Head Office has established a People Strategy and People Plan, and the Commands have plans for achieving their defence tasks and developing the capability they need; and
- the Commands escalate issues through their boards to the People Committee, which provides strategic direction and guidance on people issues, and to the Defence Board, the most senior board within the Department.

3.4 The responsibilities for achieving workforce objectives are spread across the Department. It set 13 overall workforce objectives, which are broken down into 45 sub-objectives. In January 2018, the Department was on track to meet 14 of these sub-objectives.

Figure 8
 The Ministry of Defence's framework for managing its workforce
 The Department has translated its strategic objectives into workforce plans and targets



Source: National Audit Office

3.5 The Chief of Defence People (CDP) is the defence authority for personnel, but does not have authority over the Commands. He is responsible for setting the people strategy, and the policies and processes for the Commands to manage their workforce. The CDP manages cross-cutting people risks, conducts research into specific issues, and advises the People Committee. He does not, however, hold the Commands to account or direct them in their approach to developing their capability. The Department plans to review the CDP's role as part of the Modernising Defence Programme.

3.6 In addition, the Department's 'skills champions' do not have central funding or authority to develop a targeted response to closing the skill gaps. The Department established six skills champions to develop a better understanding of the skills that it needs.²³ The engineering skills champion is the most established and performs an advocacy role. The champion monitors developments in the profession, highlights engineering issues to senior management and builds external relationships with industry, academia and colleges to help improve recruitment.

3.7 Head Office has not undertaken strategic workforce analysis to assess the Department's ability to respond to the changing workforce demands (paragraph 2.9). The Department has enduring pinch-points in critical trades, including some that exist in all Commands, and faces new demands for specialist skills to respond quickly to the changing character of warfare. The People Committee considered the Department's approach to developing digital and cyber skills in November 2017, but there is scope for a more strategic analysis of cross-cutting trades which have shortfalls, or where the demand for specialist skills is growing. The Department could, for example, undertake more systematic assessments of: whether its career structures and remuneration packages are suited to specialist groups; the potential for targeted campaigns; its ability to compete in specialist recruitment markets; the scope for greater collaboration with other national security forces; and the scope to flex the designation of roles so that it can make full use of its whole force.

Managing financial pressures

3.8 In 2016-17, the Department spent £9.6 billion on its military workforce, approximately 27% of its defence budget (**Figure 9**). The average spend-per-head on service personnel has increased by 11% in real terms since 2012-13.²⁴ This increase was largely driven by changes to pension payments in 2015-16, along with above inflation increases on the average salary for regulars during a period when service personnel were subject to the government's 1% pay restraint. The Department told us this was due to the increased proportion of service personnel in senior ranks. It expects the average spend-per-head will decrease up until 2025-26 due to the introduction of the new pay model. It forecasts that expenditure on military personnel will rise in line with inflation forecasts to £10.3 billion by 2020-21.

²³ The skills champions cover: engineering, cyber, pilots, logistics, intelligence and medical.

²⁴ The inflation adjustment is based on HM Treasury's GDP deflator series published in January 2018.

Figure 9

Military workforce expenditure since 2012-13

The average spend per head on military personnel has increased

| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|--|---------|---------|---------|---------|---------|
| Defence spending (£bn) | 34.3 | 34.6 | 34.4 | 35.1 | 35.3 |
| Service personnel costs (£bn) ¹ | 9.6 | 9.2 | 8.6 | 9.3 | 9.6 |
| Number of regulars ² | 175,810 | 165,720 | 156,510 | 152,060 | 149,980 |
| Spend per head (£) – inflation adjusted | 58,000 | 57,700 | 56,500 | 62,600 | 64,200 |

Notes

- 1 Consists of salaries, pension contributions, national insurance payments and personnel costs on operations, for all regular and reserve personnel, including trained and untrained. Personnel spend on reserves is immaterial when compared to spend on regulars.
- 2 Represents average trained and untrained regular personnel during financial year.
- 3 Spend per head figures are adjusted for inflation using HM Treasury's GDP deflator series published in January 2018. Other figures are not adjusted for inflation.
- 4 Data has been rounded based on source figures.

Source: UK Armed Forces monthly service personnel statistics: Ministry of Defence, Finance & Economics Annual Bulletin Departmental Resources Statistics October 2017

3.9 Overall, the Department's budget is under significant pressure. In January 2018, we concluded that the Department's 10-year plan for equipment and support was unaffordable and it needed to find savings of at least £8.1 billion by 2027.²⁵ In 2016, we reported that the defence estate was unaffordable, and there was a shortfall of at least £8.5 billion over the next 30 years to replace parts of the defence estate.²⁶ These financial pressures can affect the Department's ability to manage its workforce and develop capability. For example:

- The lack of funding has reduced the quality of service family accommodation.²⁷ Satisfaction with the standard of this accommodation has fallen from 60% in 2014 to 46% in 2017.²⁸
- A new system for training aircrew was implemented to reduce training costs, but this restricts the Department's ability to train the number of pilots it needs. The Department requires 180 new pilots a year but can only train 132 using this system.
- Following a period of wider public sector pay restraint, regulars' satisfaction with pay and pension benefits is at lowest recorded levels.

Head Office is responsible for ensuring costs are properly understood to make informed investment decisions. We therefore reviewed how the Department was managing its workforce budget.

25 Comptroller and Auditor General, *The Equipment Plan 2017 to 2027*, Session 2017-18, HC 717, National Audit Office, January 2018.

26 Comptroller and Auditor General, *Delivering the defence estate*, Session 2016-17, HC 782, National Audit Office, November 2016.

27 HC Committee of Public Accounts, *Service Family Accommodation*, Ninth Report of Session 2016-17, HC 77, July 2017.

28 Armed Forces Continuous Attitude Survey 2017.

Commands have flexibility over the use of their budgets

3.10 The Department does not have a ring-fenced personnel budget and Head Office's budget delegations to Commands have not specified the level of expenditure allocated for personnel.²⁹ Under the delegated model, the Commands have freedom to make choices about the use of their budgets, balancing the need of expenditure on personnel, training, equipment and other support. They are, therefore, able to reprioritise the funding allocated for personnel to meet shortfalls in other areas or to achieve operational priorities.

3.11 The Commands and Head Office monitor recruitment and retention trends in-year to establish whether funding will be used. In 2017-18, due to the shortfall of regulars, the Commands did not spend £261 million allocated for personnel. Head Office could not, though, establish how the Commands had reallocated this funding and did not consider whether Commands have maintained an appropriate emphasis on developing the capabilities needed in their workforce.

Commands 'discretionary' workforce expenditure

3.12 The Commands determine how much they will spend on recruitment, marketing and training. However, Head Office did not have the management information needed to understand the trends in this expenditure. Our review of the data that was available showed:

- Commands have maintained expenditure on recruitment. They spent £1.05 billion between 2011-12 and 2015-16 (**Figure 10**). Data for 2016-17 were not available.
- Cross-Command trend data on marketing expenditure were not available. The Department's Internal Audit has highlighted that reductions in marketing expenditure in the Navy and RAF have adversely affected recruitment and delayed manpower recovery.³⁰
- Head Office could not determine how much the Commands had spent on training regulars, which meant it could not establish whether they had reduced training expenditure in response to financial pressures.

The Department's workforce management model

3.13 The Navy, Army and RAF are responsible for recruiting and training regulars to develop the skills they need. They have relied primarily on a 'base-fed' workforce model, which involves recruiting regulars at a relatively young age and training them to develop the skills and experience required to perform military roles (**Figure 11** on page 32). This enables the Commands to manage their workforce and set out clear career paths. It can, however, take many years to develop the necessary skills and experience; for example, it takes the Navy around 12 years to train a chief petty officer.

²⁹ The level of workforce funding is based on the assumption that the Commands will meet their forecast headcount for the first three years and then their headcount targets for the next seven years.

³⁰ Defence Internal Audit, Navy – Interdependency of Gains to Strength (GTS) with Recruiting & Training, December 2017.

Figure 10

Expenditure on Armed Forces recruitment since 2011-12

The Commands have maintained expenditure on recruitment

| | 2011-12 (£m) | 2012-13 (£m) | 2013-14 (£m) | 2014-15 (£m) | 2015-16 (£m) |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Navy | 32.0 | 33.2 | 36.0 | 39.2 | 41.3 |
| Army | 134.6 | 122.8 | 137.7 | 144.6 | 132.7 |
| RAF | 38.7 | 35.4 | 36.2 | 39.1 | 42.2 |
| Total | 205.3 | 191.4 | 209.9 | 222.8 | 216.1 |

Note

1 Total may not sum due to rounding.

Source: Ministry of Defence

3.14 Our review of the Department's recruitment and retention data showed:³¹

- the Commands have missed their targets for the last three years by between 8% and 31% (**Figure 12** on page 33). Missed recruitment targets over several years result in gaps in the lower ranks that continue into higher ranks as staff are promoted.
- The Department has shortfalls across several junior ranks (**Figure 13** on page 34).
- The Commands have missed their targets for the number of regulars completing their initial training (they were 23% below target in 2017) which means they need to increase numbers in coming years.
- The proportion of regulars leaving voluntarily has been high in recent years, with some ranks experiencing rates several times the Armed Forces average. This includes five ranks in pinch-point trades, in which voluntary outflow rates are in excess of 15%. Outflow rates also peak for staff with 5 to 10 years of service, showing that the Commands are losing staff with the skills and experience they require.

3.15 As a result, posts can remain vacant for long periods. For example, as at January 2018, the RAF had over 2,000 posts and Joint Forces Command had over 1,300 posts that they were unable to fill.

³¹ We did not review the effectiveness of Commands' training as part of this study.

Figure 11
The Ministry of Defence's base-fed workforce model for regulars
Shortfalls in the lower ranks can persist into higher ranks under the base-fed model

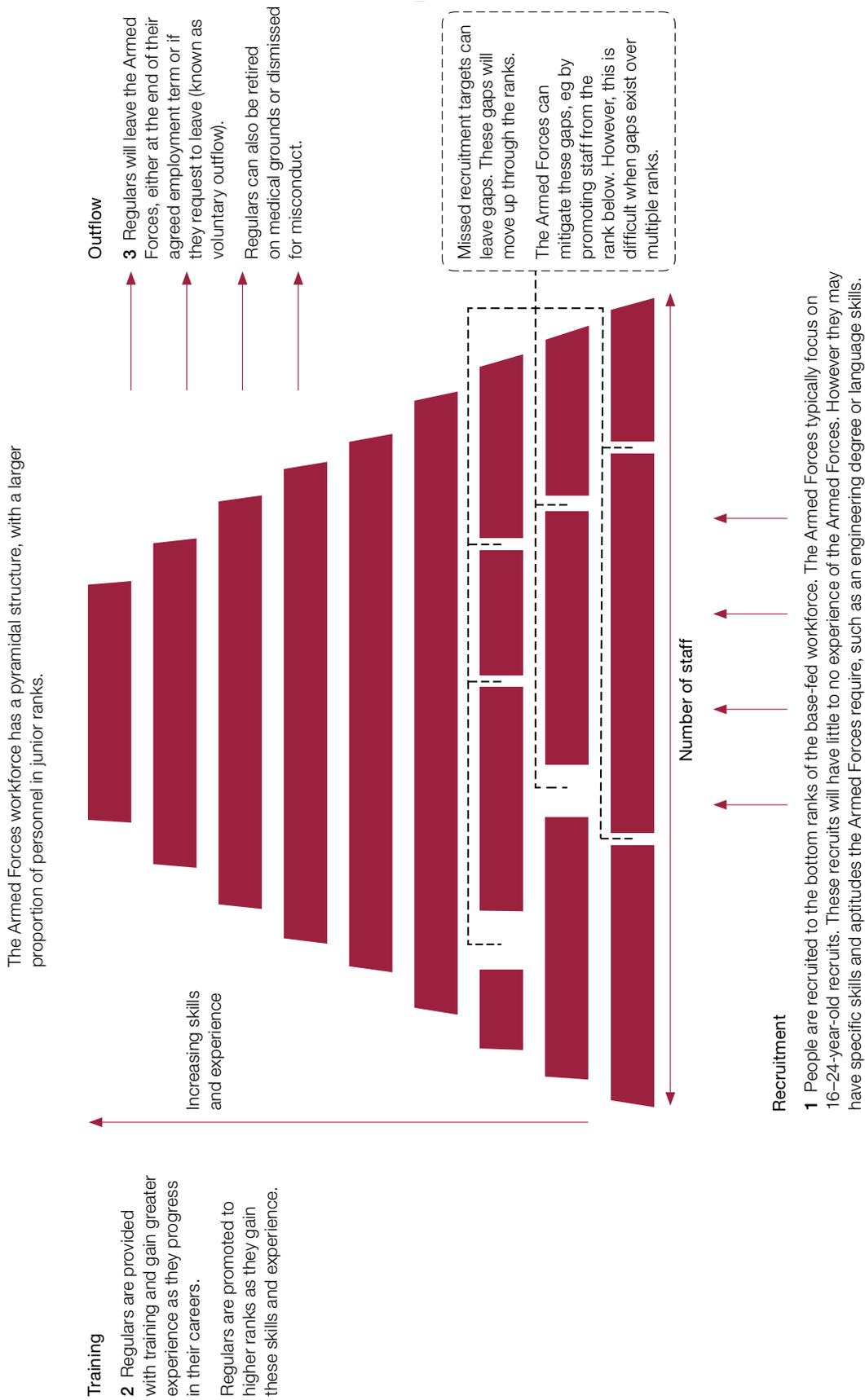


Figure 12

The Commands' performance against recruitment targets

The Navy, Army and Royal Air Force have missed recruitment targets over each of the last three years¹

| | 2014-15 | 2015-16 | 2016-17 |
|-------------------------|---------|---------|---------|
| Navy² | | | |
| Target | 3,260 | 3,571 | 3,715 |
| Actual | 2,983 | 3,052 | 3,133 |
| Difference | -277 | -519 | -582 |
| Deficit (%) | -8 | -15 | -16 |
| Army³ | | | |
| Target | 9,934 | 10,002 | 10,851 |
| Actual | 7,771 | 8,040 | 7,487 |
| Difference | -2,163 | -1,962 | -3,364 |
| Deficit (%) | -22 | -20 | -31 |
| RAF | | | |
| Target | 2,402 | 2,748 | 2,610 |
| Actual | 2,096 | 2,443 | 2,390 |
| Difference | -306 | -305 | -220 |
| Deficit (%) | -13 | -11 | -8 |

Notes

- 1 Target and actual figures include both officers and other ranks.
- 2 Navy data includes Royal Marines.
- 3 The commissioning of Army officers occurs in the training year following enlistment as this is a year-long course. The Royal Military Academy Sandhurst training year has three intakes in May, September and January.

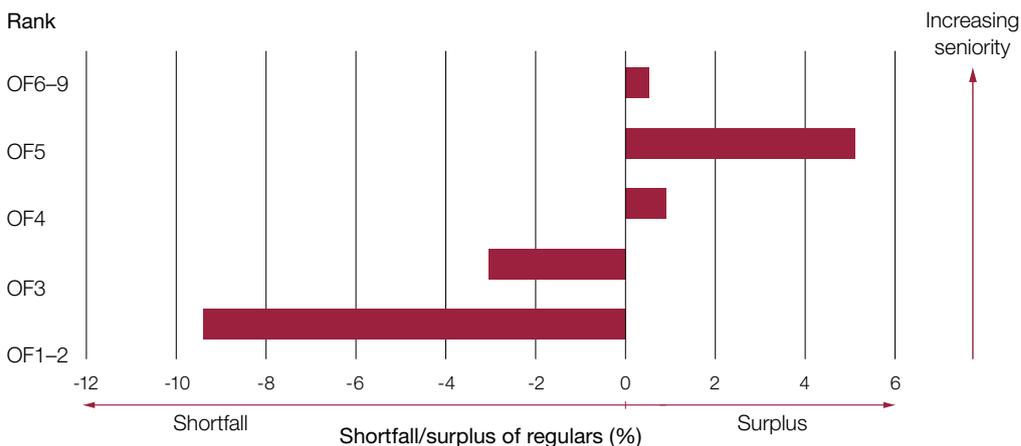
Source: National Audit Office analysis of Ministry of Defence data

Figure 13

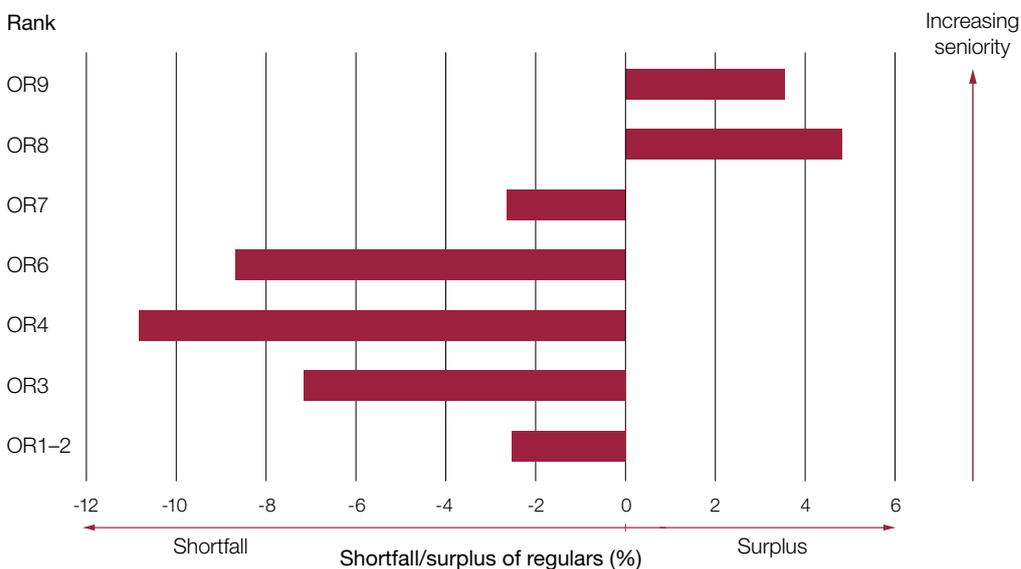
The percentage shortfalls, by rank, of the regular Armed Forces at April 2017¹

The Navy, Army and Royal Air Force (RAF) have shortfalls in the lower ranks

Shortfalls in officer ranks



Shortfalls in other ranks



Notes

- 1 The UK Armed Forces use the NATO rank system (OF - Officers, OR - Other Ranks) in order to compare ranks across Commands. For example the OF5 rank equates to Captain in the Navy, a Colonel in the Army and a Group Captain in the Royal Air Force. The OR6 rank equates to Petty Officer in the Navy and a Sergeant in the Army and Royal Air Force.
- 2 Data at April 2017.
- 3 Navy data does not include Royal Marine data.
- 4 Ranks OF6 to OF9 have been combined to match available source data from the Ministry of Defence.
- 5 The NATO rank of OR5 has no direct equivalent within the Navy, Army and Royal Air Force.

Source: National Audit Office analysis of Ministry of Defence data

Addressing the shortfalls

3.16 As at April 2017, the Commands forecast they would resolve the shortfall of regulars in just 6 of the 102 pinch-point trades within the next five years (paragraph 2.16). The Commands continually review whether their actions to mitigate the shortfalls are effective and forecast when they are likely to be resolved. In April 2017, they assessed that their mitigating actions were ‘on track’ to address the shortfalls in 22 of the 102 pinch-point trades. Over half of their mitigation measures were, however, ‘unclear or unproven’, meaning the Commands did not know how they would address a shortfall of 4,200 regulars.

3.17 The Department has used financial incentives to improve recruitment and retention. Since 2012-13, it has paid almost £664 million in financial incentives, in addition to salaries, to help attract new recruits and retain the personnel it needs (**Figure 14**).³² These payments are intended to tackle recruitment and retention problems in specific trades and ranks. The Department’s research shows the payments have been effective in reducing the number of leavers for the period they were paid, but shortfalls remain in these trades and there is no downward trend in the level of payments. The Department is aware that it cannot continue to rely on reactive financial measures to stabilise levels of personnel, but there is a risk that voluntary outflow may increase if payments are removed.

Figure 14

Incentive payments made to military personnel since 2012-13

| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 5 year total |
|--|---------|---------|---------|---------|---------|--------------|
| Recruitment and Retention Payments | | | | | | |
| Value (£m) | 112.1 | 107.5 | 105.2 | 106.2 | 105.2 | 536.2 |
| Number of recipients | 17,935 | 17,397 | 16,918 | 16,281 | 15,552 | |
| Golden Hellos and Transfer Bounties | | | | | | |
| Value (£m) | 3.7 | 3.2 | 4.1 | 3.9 | 5.8 | 20.7 |
| Number of recipients | 1,399 | 1,247 | 1,182 | 842 | 1,068 | |
| Financial Retention Incentives | | | | | | |
| Value (£m) | 13.1 | 16.7 | 30.5 | 29.5 | 17.1 | 106.9 |
| Number of recipients | 534 | 468 | 1,449 | 899 | 1,430 | |
| | | | | | | 663.8 |

Note

1 Incentive payments above a certain threshold are the result of recommendation by the independent Armed Forces Pay Review Body.

Source: Ministry of Defence

32 Golden Hellos are payments made to encourage new recruits to join hard-to-fill trades. Transfer bounties are payments designed to encourage current military staff to transfer to a different trade. Recruitment and Retention payments – regular payments made to staff to improve recruitment and retention in specific trades. Financial Retention Incentives are one-off payments to encourage current military staff to remain in service in their current trade

3.18 The Navy, Army and RAF have adopted a wide range of non-financial measures to address the shortfalls, exploiting the freedoms available within the Department's workforce management framework. Each Command had developed a manpower recovery plan and implemented initiatives to improve recruitment and training, for example:

- specialist recruitment teams to attract candidates in hard-to-recruit trades. Their activities includes providing advice on marketing campaigns, engaging with schools and universities and supporting candidates throughout the recruitment process;
- changes to the application process to improve the conversion rate from application to joiner;
- initiatives to streamline training pipelines to reduce the time it takes to develop skills; and
- initiatives to attract back regulars who have left the Armed Forces (rejoiners) and recruit directly into more senior roles (lateral entry).

3.19 Our review of the Department's pinch-point data also showed the Commands had implemented their own tactical measures to address shortfalls and recover levels of personnel. The most common responses were to revise entry criteria, including aptitude and education levels, and to review training requirements, including streamlining the training pipeline.

3.20 The Commands' initiatives, which supplement their more traditional approaches using the 'base-fed' workforce model, are in their early stages. For example, the Department could only identify 50 new recruits through lateral entry programmes (which are direct entry into specialist or more senior regular roles). The Command structure also creates barriers to innovation; for example, each Command undertakes its own recruitment campaigns even though they may be competing for similar skills or tackling the same issues (for example, increasing diversity). There is also limited movement between Commands; since 2009-10, there has been an average of 71 transfers each year.

3.21 Joint Forces Command is responsible for developing and managing some of the capabilities needed across the Armed Forces, including Defence Intelligence. It does not recruit its own military personnel and is dependent on the other Commands to provide regulars to fill its roles. It requires personnel with more specialist skills, such as cyber, but the other Commands have their own shortages in these areas. Joint Forces Command has begun to adapt the Armed Forces' standard working practices to provide more flexibility in managing and retaining the people it needs. For example, it is reassessing its personnel mix to determine whether it needs regulars to perform the roles it requires.

Part Four

Developing the future response

4.1 Since 2010, the Ministry of Defence's (the Department's) Head Office has implemented two new workforce management change programmes to adapt its workforce policies. Its aim is to improve its ability to recruit and retain the skilled personnel that it needs. This part assesses progress and covers:

- the Department's workforce initiatives between 2010 and 2015;
- the development of new workforce initiatives since 2015; and
- its longer-term skills strategy.³³

4.2 We based our review on our guide to successful programmes.³⁴ We reviewed: the programmes' rationale and objectives; the Department's progress in implementing the programmes; and the extent to which the Department has achieved its intended outcomes.

Workforce initiatives between 2010 and 2015

4.3 The 2010 Strategic Defence and Security Review (the Review) stated that the terms and conditions under which the Armed Forces serve (known as the 'offer') were costly, complex and did not align with the needs of service personnel. In 2010, the Department introduced the New Employment Model, a workforce change programme, to adapt the workforce policies that the Commands operate under. It aimed to deliver an affordable package of changes to make the 'offer' more attractive and provide greater flexibility in managing the regular forces.

³³ The Department also implemented change programmes for reserves (Future Reserves 2020) and in specific commands (Army 2020).

³⁴ National Audit Office, *Framework to review programmes*, September 2017, available at: www.nao.org.uk/wp-content/uploads/2017/09/Framework-to-review-programme.pdf

4.4 The programme's over-arching objectives were to "maximise recruitment and retention"; "produce a modernised offer that better supports service personnel"; and "address personnel cost drivers". It focused on four areas of the offer: accommodation; value and reward; terms of service; and career management. The Department consolidated its ongoing workforce projects into a programme of 30 projects.³⁵ Significant changes included:

- a new pay model (Pay 16) to remove accelerated incremental progression, and increase differentiation by targeting rewards to personnel in trades with greater complexity, skill or specialist requirements;
- an Armed Forces Help to Buy Scheme to enable service personnel to borrow up to 50% of their salary to buy their first home; and
- changes to the accommodation charges that service personnel pay.

4.5 The Department has reduced the scale of the programme. It implemented 19 projects but 11 others were not started or were cancelled or deferred. The Department reassessed what it could achieve in the timeframe (**Figure 15** on pages 40 and 41). For example, it delayed introducing new flexible working arrangements because these required legislative changes that could not be achieved within the programme's timetable. Instead, it trialed a pilot project on part-time working across the Navy, Army and Royal Air Force (RAF).

4.6 In 2014, the Department set out the programme's success criteria but did not set targets to quantify the level of improvement the programme was aiming to achieve.³⁶ It established a set of proxy indicators to support a subjective assessment of the benefits. In April 2016, the Infrastructure and Projects Authority concluded that the programme did not have tangible metrics for measuring success. In July 2017, the Department updated the business case and introduced new performance indicators. The Department has committed to annual stock-takes to assess the programme's impacts and has now quantified targets for recruitment and retention, compared with a 2014 baseline.

4.7 In July 2017, the Department concluded that it was too early to identify the programme's impact. It highlighted the difficulty of establishing the effect of the changes when peoples' behaviour is influenced by a range of factors and motivations. It concluded that the programme had increased choice for service personnel but acknowledged some changes could have a negative impact.

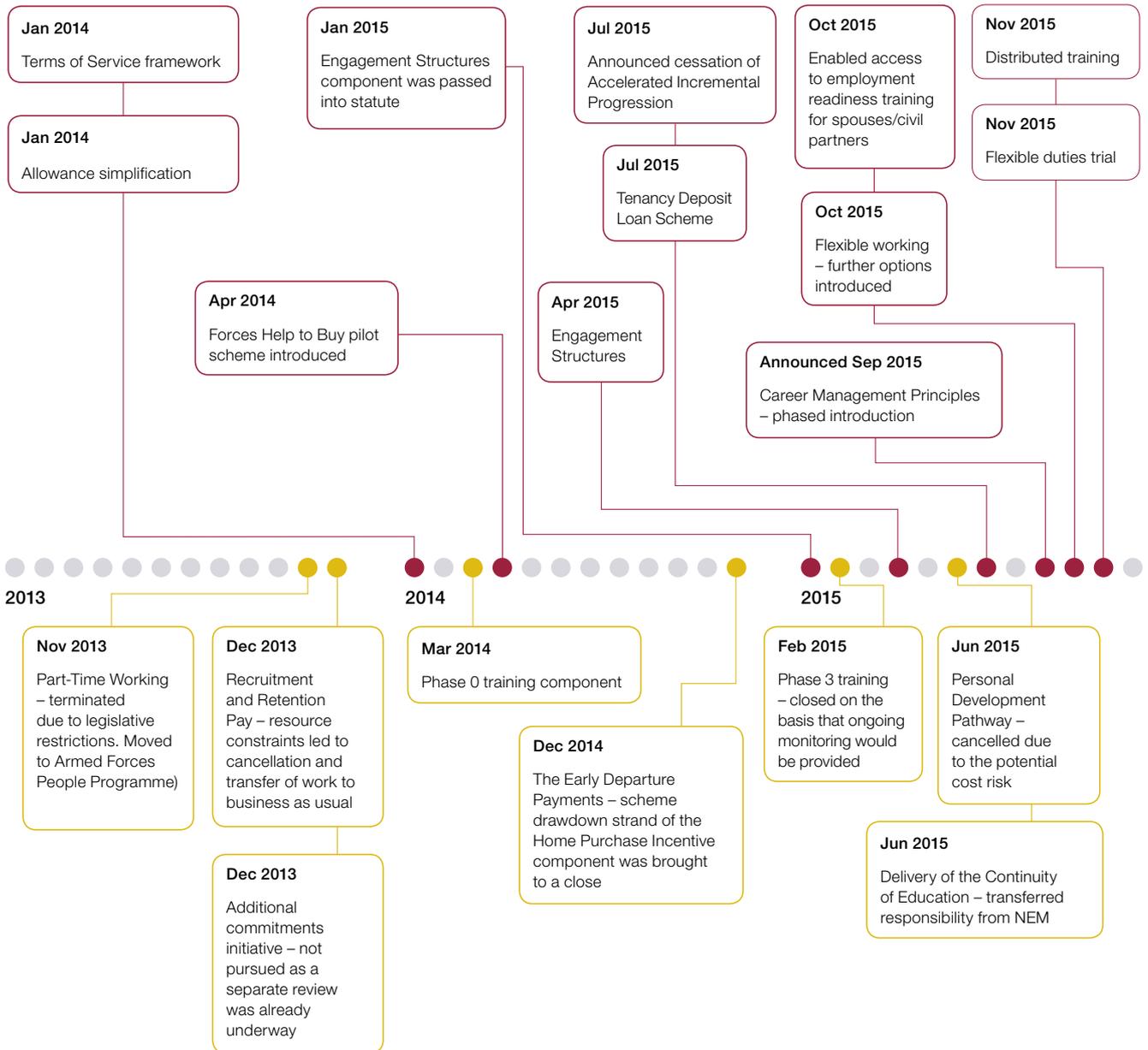
³⁵ There were 30 projects related to regulars and five related to reserves.

³⁶ In October 2014, the Department produced the programme's outline business case.

Figure 15

The Department’s New Employment Model (NEM) programme: timeline

The Department implemented 19 projects to adapt workforce management practices affecting regulars; 11 of these projects were not started or removed

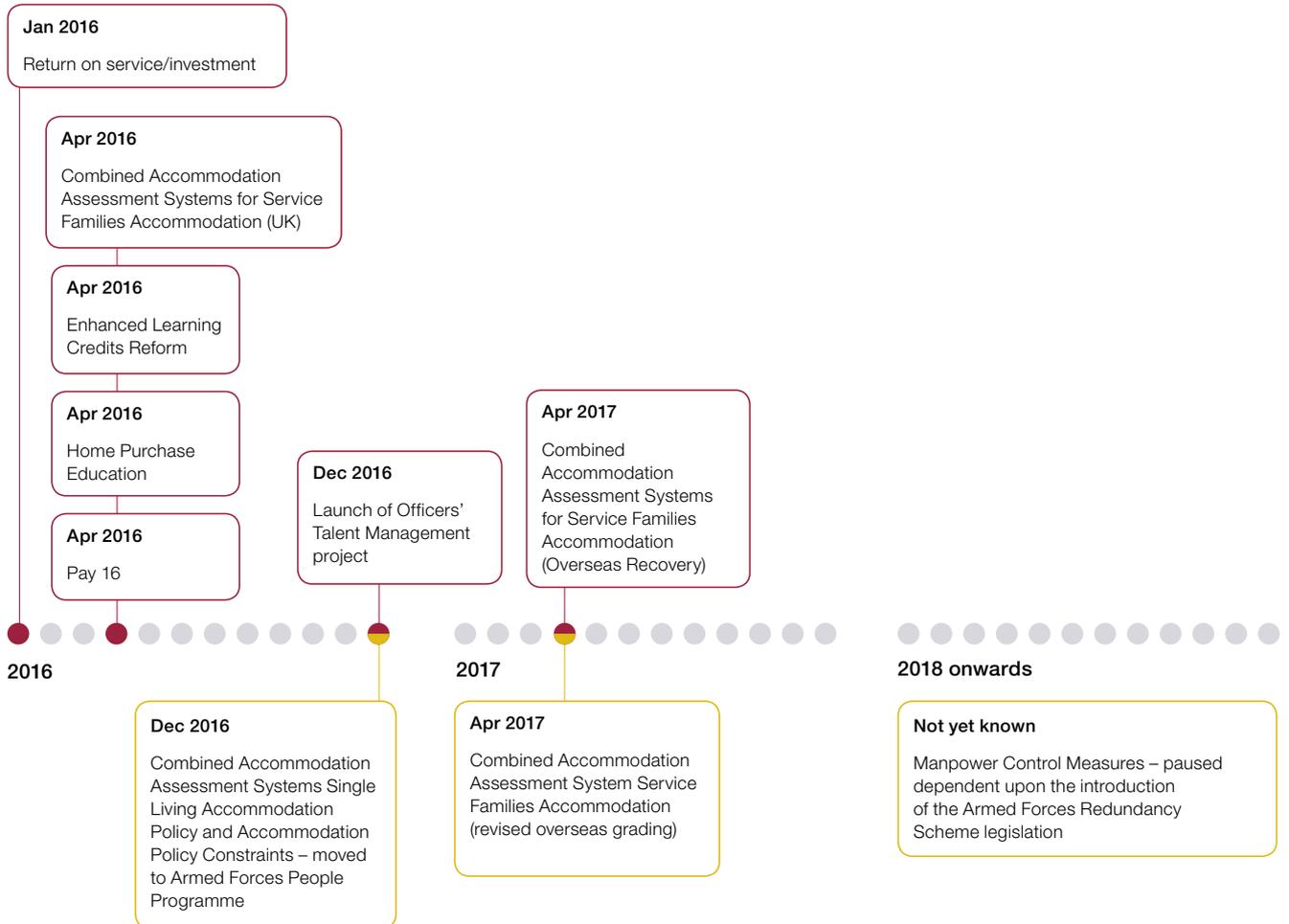


□ Elements of the NEM programme introduced □ Elements of the NEM programme that were not started or removed

Note

1 The Department implemented an additional five projects that affected reserves only.

Source: National Audit Office analysis of Ministry of Defence documents



4.8 Our review of the Department's evaluations showed:

- the effect of changes resulting from the new pay model could be masked by the Department's policy to protect service pay, and there could be a risk to retention if pay protection were stopped;³⁷
- four projects had low levels of take-up – for example, only 197 people had accessed the pan-civil-service Tenancy Loan Scheme by April 2017; and
- two projects may have a negative impact on some personnel – for example, the changes to service family accommodation charging will correct previous inaccuracies and result in 81% of families in this type of accommodation paying more.³⁸

4.9 The programme has resulted in a number of changes to the 'offer' and enabled the Department to adapt some of its workforce management practices. For example, the Armed Forces Flexible Working Bill has now passed through Parliament and will be implemented in April 2019. However, the Programme has not yet achieved its core objectives. In particular:

- **Maximising recruitment and retention**

The Commands have continued to miss their recruitment targets (paragraph 3.14) and the level of voluntary outflow increased from 3.8% in March 2010 to 5.6% in December 2017.

- **A modernised offer to support service personnel**

In 2017, 57% of regulars in the Navy and Marines were satisfied with the offer, a similar level to 2016. But regulars' satisfaction with pay, service life and accommodation have all decreased since 2010 and were at the lowest recorded levels (**Figure 16**).

Figure 16

Armed Forces continuous attitude survey results, 2017 against 2010

Satisfaction with the aspects of the 'offer' to Armed Forces personnel has fallen since 2010

| Survey question | 2010 (%) | 2017 (%) | Change (%) |
|--|----------|----------|------------|
| How satisfied are you with: | | | |
| • Rate of basic pay? | 52 | 33 | -19 ↓ |
| • The value for money of current service accommodation? ¹ | 63 | 60 | -3 ↓ |
| • Service life? | 60 | 42 | -18 ↓ |

Note

1 Figures represent satisfaction with all types of service accommodation.

Source: Armed Forces Continuous Attitude Survey 2017

37 Pay protection ensures no one takes a pay cut on implementation of the new pay model.

38 HC Committee of Public Accounts, *Service Family Accommodation*, Ninth Report of Session 2016-17, HC 77, July 2017.

4.10 In December 2017, the Department forecast that the programme would achieve savings of £152 million, which is in line with the forecasts in the 2014 business case. This includes £86 million from increased service family accommodation receipts. By 2017, the Department had spent £150 million on implementing the programme. This included introducing the new pay model (Pay 16), which will cost over £100 million for transitional pay protection for service personnel. The Department expects to reach break-even point in 2020-21.

Workforce initiatives from 2015

4.11 Following publication of the 2015 Strategic Defence and Security Review, the Department implemented the Armed Forces People Programme. This built on the changes made in the New Employment Model programme. It aimed to ‘modernise’ the employment offer to service personnel while remaining affordable in the future (**Figure 17**).

Figure 17

Armed Forces People Programme – overview of projects

| Project | Rationale | Objectives | Progress/savings target |
|--|---|--|--|
| <p>Flexible Engagement System</p> <p>Providing new flexible working options to service personnel.</p> | <p>The current arrangements are out of date, inflexible, not attractive, do not help diversity and are inefficient.</p> | <p>To create greater flexibility in the way that regulars and reserves serve, enabling regulars to temporarily alter their terms of service.</p> | <p>At implementation stage.</p> <p>No savings target allocated to this project to improve retention.</p> |
| <p>New Joiner Offer</p> <p>Providing a revised employment ‘offer’ to service personnel.</p> | <p>The current offer is failing to attract sufficient numbers of the people the Armed Forces need. At the same time the cost of the offer continues to rise.</p> | <p>To improve recruitment and retention, particularly of key skills (and improve the ability to respond to future skill shortages), by developing the most efficient method of targeting rewards at service personnel.</p> | <p>Scoping policy options.</p> <p>Savings: £660 million over 10 years but the options under consideration are unlikely to deliver this. The Ministry of Defence (the Department) is currently considering the way ahead for the project.</p> |
| <p>Future Accommodation Model</p> <p>Delivering a more sustainable and modern accommodation offer.</p> | <p>The accommodation model is becoming less attractive to service personnel, less affordable and restricts business agility.</p> | <p>To update the current accommodation offer to better meet the needs of service personnel and their families and the operational and financial needs of the Department.</p> | <p>Options development with a pilot scheduled to commence in late 2018.</p> <p>Savings: £519 million over 10 years.</p> |
| <p>Enterprise Approach</p> <p>Seeking to collaborate with industry on the critical skills challenge faced on a sector-wide scale.</p> | <p>Within the national context of skills challenges, the Department and industry face similar shortages. Collaboration, rather than competition, could prove more beneficial.</p> | <p>To increase the number and subsequent availability of skilled personnel across the whole force to support the delivery of future defence capabilities.</p> | <p>Concept phase.</p> |

Source: National Audit Office review of the Armed Forces People Programme business cases

4.12 The Department expects to begin introducing changes from 2019. As at January 2018, two projects – Future Accommodation Model and New Joiner Offer – had savings targets totalling £1.2 billion. However, the Department assessed that none of the options it was considering when designing the projects would achieve these targets. The Department is confident that the Future Accommodation Model will deliver benefits. Its aim is to reduce the future cost of investments and widen entitlements to service accommodation. The New Joiner Offer project is being reviewed, and defence ministers will consider the approach in April 2018.

Developing a longer-term response

4.13 The Department is engaging with a wide range of external organisations to generate interest in joining the Armed Forces. For example, it is:

- developing relationships with industry and establishing arrangements to allow people to move more freely – in both directions – between the Department and industry;
- participating in the national agenda on science, technology, engineering and mathematic (STEM) skills. The Department is engaging with other government departments and strategic partners to promote the choice of STEM subjects in schools and encourage young people to consider STEM-based careers;³⁹
- engaging with schools and strengthening its cadet forces; for example, the Army has established ‘outreach’ programmes to engage with young people; and
- committing to the government’s apprenticeship programme. It currently offers options, ranging from apprenticeships for school leavers to degree apprenticeships for college leavers. There are approximately 20,000 apprentices in the Armed Forces.

4.14 In January 2016, the Department published its high-level approach to skills development, focusing on 11 areas.⁴⁰ In May 2018, the Department’s People Committee will review Head Office’s early plans to develop a skills strategy. The Department proposed a more comprehensive approach to tackling its critical skills shortages over the next 10 years. This will involve a deeper analysis of the causes and a more strategic approach to identifying the levers or activities that will help to reduce the shortages.

³⁹ The Department for Education, the Department for Business, Energy & Industrial Strategy, STEM Learning, Tomorrow’s Engineers and Primary Engineer.

⁴⁰ Engineering (particularly nuclear, maritime, weapon and aviation), cyber, ICT technologists/digital, science, project management, commercial, finance, medical, intelligence analysts, logistics and pilots.

Appendix One

Our audit approach

1 This study examined the approach of the Ministry of Defence (the Department) to developing the capability of its regular forces, and how it is adapting to meet new challenges created by the changing character of warfare. We examined the Department's:

- approach to establishing its workforce requirements;
- understanding of its capability gaps;
- current approach to developing the skills that it needs; and
- initiatives to reform workforce management.

2 We drew on our previous reports on workforce management to determine good practice when reviewing the Department's approach. We also used our framework for reviewing programmes to assess the Department's implementation of its workforce change programmes – the New Employment Model and the Armed Forces People Programme (Part Four).⁴¹

3 Our audit approach is summarised in **Figure 18** overleaf. Our evidence base is described in Appendix Two.

⁴¹ National Audit Office, *Framework to review programmes*, September 2017, available at: www.nao.org.uk/wp-content/uploads/2017/09/Framework-to-review-programme.pdf

Figure 18

Our audit approach

The objective of government

The Ministry of Defence (the Department) requires the right number of regular Armed Forces personnel, with the right skills, to meet the UK's defence objectives and operate complex equipment effectively.

How this will be achieved

The Department seeks to recruit, train and retain regulars with the skills that it requires. It must provide an attractive employment offer to potential and current personnel to recruit and retain regulars.

The Department is currently missing its workforce headcount targets, and does not expect to meet its target of 144,200 regular personnel by 2020. The mix of skills required is also changing. There is a greater need for technical and digital skills, which will continue to increase as the character of warfare changes.

External factors, such as increased competition for skilled personnel, and internal factors, such as budgetary pressures, mean that the Department faces a challenge to recruit and retain enough skilled personnel to achieve the government's defence objectives.

Our evaluative criteria

Does the Department have a full understanding of its capability gaps and the consequences of the shortfalls?

Is the Department's current approach to addressing its skills gaps appropriate?

Does the Department have credible plans to meet future workforce requirements?

Our evidence
(see Appendix Two for details)

- Review of the Department's workforce planning documents and governance arrangements.
- Analysis of the Department's performance against workforce targets.
- Analysis of the Department's management information, including its data on the shortfalls in the number of trained regulars, performance against recruitment targets and levels of outflow.
- Analysis of workforce expenditure and incentive payments to recruit and retain staff.
- Review of business cases, project mandates and scoping documents covering the Department's workforce change programmes.
- Review of the Commands' (the Navy, Army, RAF and Joint Forces Command) approaches to developing the capabilities of regulars.
- Interviews with staff from the Department (including Head Office, the Navy, Army, RAF and Joint Forces Command).
- Review of previous National Audit Office workforce management studies.

Our conclusions

The Armed Forces have significant skill shortfalls in many critical areas. The Commands have responded to these shortfalls by prioritising essential defence tasks, but the reliance on placing increasing demands on regulars is not sustainable in the long term. The Department also faces the growing challenge of responding quickly to changes in how warfare is conducted. This will increasingly require new specialist technical and digital skills, and will bring it into greater competition with the private sector.

Head Office and the Commands are implementing a range of measures to address recruitment and retention problems. Despite these efforts, the Department does not expect to resolve the majority of the shortfalls in the next five years. In view of this, the Department must: fundamentally reassess how to fill its skills gaps; exploit its existing innovative initiatives more widely; and adapt its long-established approaches to managing the development of workforce capabilities to deliver the required skills. Unless it does this, the Department will not have the personnel it needs to respond rapidly to changing demands and make effective use of new equipment, with attendant damage to value for money.

Appendix Two

Our evidence base

1 Our independent conclusions on whether the Ministry of Defence (the Department) is ensuring it has sufficient, skilled regulars in the Armed Forces were reached following our analysis of evidence collected between September 2017 and February 2018.

2 In considering the Department's approach to establishing its workforce requirements:

- We reviewed the Department's strategic planning documents, in particular the 2010 and 2015 Strategic Defence and Security Reviews that describe the Department's assessment of its future needs; its objectives over the following decade; and the equipment and workforce it requires to meet these objectives.
- We held semi-structured interviews with the Department's staff and reviewed internal planning documents to determine the process by which government and the Department set budgets and identified workforce needs, including the basis on which headcount targets were set.
- We reviewed the Command Plans for the Navy, Army and Royal Air Force (RAF), which describe how each Command plans to meet the objectives set out in the most recent Strategic Defence and Security Review in November 2015.
- We analysed the Department's published workforce data to assess performance against workforce targets. This included performance against headcount and diversity targets on gender and ethnicity. We also reviewed the data to provide time-series data on the number of regulars versus its target, and annual inflow and outflow rates.

3 In considering the Department's understanding of its capability gaps:

- We analysed the Department's internal data on shortages in regulars that have a detrimental impact on operational effectiveness and the sustainability of the trade group. This included quantitative breakdowns of the level of shortages by trade; the consequences of shortfalls; and the Department's mitigating actions. We also used quantitative and free-text analysis to provide greater insight on the severity of impacts, the nature of the mitigating actions and an understanding of how effective these mitigations will be.

- We reviewed the Department's internal assessments and reports on its capability gaps, including the management information that was provided to its People Committee. We also reviewed the Department's documents on the causes of capability gaps and its response for three critical trades – engineers, pilots and intelligence analysts.
- We reviewed the Department's research on external factors, such as economic conditions, which can affect its ability to recruit and retain personnel.
- We reviewed the results of the Department's continuous attitude surveys that record workforce-related data, such as reasons why staff leave the Armed Forces. We also reviewed how the Department makes use of this and other data (such as harmony data and exit interviews) to monitor the impacts on regulars.
- We reviewed how the Commands – the Navy, Army, RAF and Joint Forces Command – monitored the impact of shortfalls and their approach to managing the consequences. This included reviews of classified documents.

4 In considering the Department's current approach to developing the capability it needs:

- We reviewed the Department's documents that set out its governance arrangements and approach to managing its workforce. We reviewed the mandates and minutes of People Committee and Defence People and Training Board meetings to establish how senior staff considered workforce-related issues and risks. We reviewed the Department's arrangements against the main principles of workforce management, drawing on previous NAO reports on these issues.
- We conducted semi-structured interviews with senior personnel within Head Office, as well as staff within the Navy, Army, RAF and Joint Forces Command who are responsible for managing the regular workforce. We also conducted more detailed interviews with skills champions and other departmental staff responsible for engineers, pilots and intelligence analysts.
- We analysed the Department's financial data on workforce expenditure, including its management information on Commands' use of workforce-related budgets. We sought to collect cross-Command data on the level of expenditure on training, recruitment and marketing. We also established the Department's spending on recruitment and retention incentive payments; and reviewed its assessment of the effectiveness of these payments.
- We reviewed our previous value-for-money reports to identify examples of how the Department's initiatives and cost-saving measures have affected its ability to recruit, train and retain personnel.
- We reviewed the Department's workforce-related scrutiny documents, including reports by Defence Internal Audit and the reports prepared for the Defence Board, and Armed Forces Pay Review Body.

- We evaluated the effectiveness of the Department's base-fed workforce model, reviewing data on Commands' performance against recruitment targets, training, outflow and the level of unfilled posts. We drew on our analysis of workforce shortfalls and Commands' approaches to developing capability to establish how they were seeking to develop the capability they need, within the framework that they are required to operate.

5 In considering the Department's initiatives to reform workforce management:

- We reviewed business cases, project mandates and post-project evaluations on the Department's workforce change initiatives: the New Employment Model and the Armed Forces People Programme. We used our framework for reviewing programmes to assess the Department's approach to implementing these initiatives.
- We reviewed external scrutiny documents of these workforce initiatives by government's Infrastructure and Projects Authority (IPA).
- We reviewed internal documents to establish the Department's progress in engaging across government, schools and industry to generate interest in joining the Armed Forces. We also reviewed internal drafts of the skills strategy.

Appendix Three

Case studies: pilots, engineers and intelligence analysts

1 As part of the study fieldwork, we reviewed the Ministry of Defence's (the Department's) approach to developing the skills that it needs in more detail in three crucial and highly marketable skill areas: pilots, engineers and intelligence analysts. We reviewed the Department's documents, conducted interviews with staff and met with the skills champions for the specialisms. We provide an overview of the issues affecting each trade and the Department's mitigating actions in **Figure 19, Figure 20** on page 52 and **Figure 21** on page 53.

Figure 19 Engineers

The main causes of shortfalls are:

- an increased requirement for engineers;
- a challenging recruitment environment; and
- difficulties in retaining staff.

Overview

Approximately 30% of the Armed Forces are engineers and technicians. Between July 2015 and September 2016, the requirement for engineers increased by over 1,300 personnel in response to commitments made in the 2015 Strategic Defence and Security Review.

The Department competes with industry for scarce engineering skills. There is a UK-wide demand for 107,000 level 4 engineers but there are only 66,000 in the UK. The Commands require over 47,000 engineers and technicians but, as at September 2016, they were more than 3,000 below this requirement (7%) across the regular Armed Forces.

As at November 2016, the Commands had achieved, on average 70% of their engineering recruitment targets. In some specific trades, this was as low as 58%. Voluntary outflow is typically higher than the Armed Forces average (5.6%), because of attractive offers from industry for these skills. For example, voluntary outflow in some ranks in Army engineering trades was as high as 23% in the 12 months to April 2016.

As a result, there is an increasing shortfall of engineering skills. Between July 2015 to September 2016, the deficit of engineers increased across each Command:

- Navy: -4.9% to -6.2%.
 - Army: -2% to -6.5%.
 - Royal Air Force (RAF): -0.8% to -7.5%.
-

Figure 19 *Continued*

Engineers

Mitigating actions include:

- **Skills champion** – the Department has appointed a skills champion to help address issues affecting engineers within the Navy, Army, RAF and civil service. The champion is a senior rank within the RAF and has a small team. Funding and personnel for this team are provided from the Commands' budgets and are not guaranteed. The role of the engineering skills champion is well developed and the most advanced of the skills champion roles we have reviewed. The skills champion has undertaken:
 - youth engagement – attending UK-wide events to encourage pupils to study STEM subjects¹;
 - graduate recruitment – forming closer links with universities to encourage graduates with engineering degrees to go into STEM-related careers;
 - work with apprentices – ensuring unsuccessful applicants for industry apprenticeships are not lost to STEM careers;
 - professionalisation – developing plans to update the 'offer' to engineers and technicians, supporting them to get professional accreditation for their skills;
 - reviewing pay structures – considering an improved remuneration package; and
 - government engagement – working to promote 2018 as the year of engineering.
- **Specialist recruitment teams** – the Commands have set up specialist recruitment teams to target engineering skills. The RAF's specialist engineering recruitment team was established in 2014 to provide advice and support on engineering recruitment, such as advice on marketing campaigns and engagement with universities. As at 2016-17, the RAF had achieved 100% of its recruitment targets for aerospace and communication electronics engineers.
- **Retention payments** – the Department has introduced several retention payments for engineering trades.

Note

1 Science, technology, engineering and mathematics.

Source: National Audit Office review of Ministry of Defence data

Figure 20

Pilots

The main causes of shortfalls are:

- an increased requirement for pilots; and
- an inability to train sufficient personnel.

Overview

The 2015 Strategic Defence and Security Review (the Review) made several commitments that increased the need for pilots. For example, it accelerated the purchase of the F-35 stealth aircraft, committed to the new Poseidon Maritime Patrol aircraft and extended the life of several existing aircraft.

The Royal Air Force (RAF) has a higher demand for pilots than the Navy and Army; but it was approximately 22% below its requirement in April 2017. The RAF requires 180 pilots to be trained each year to meet the new commitments announced in the Review but is unable to train more than 132 per year at present. At the current rate, the RAF estimates that it will be another 20 years before it has enough pilots. It estimates it will still take 10 years even if it achieves its target of training 180 pilots per year.

The Navy and Army also face shortages in pilots as a result of difficulties in training sufficient personnel, as well the demands of providing front-line pilots to become training instructors.

Mitigating actions include:

- **Skills champion** – the RAF has recently appointed new skills champions to tackle the shortages in the RAF. The RAF is the lead Command for all Armed Forces pilots; however, the champions do not have oversight over the Navy and Army. The posts are funded for four years but may be extended up to nine years.
- **Updated pay model** – the Department has introduced a new pay model for pilots to improve retention. At present, pilots would be promoted to non-flying roles as part of their career progression. The pay model allows pilots to remain flying and be paid at similar levels to those personnel who have been promoted to non-flying roles.
- **Retention payments** – the Department has introduced several retention payments for aircrew.
- **Increase training capacity** – the Department is looking to widen the training opportunities, including making use of commercial training opportunities or training alongside aircrew of partner nations.
- **Attracting rejoiners** – the Department has several specialist recruitment and collaboration teams which are attempting to recruit pilots who have previously left the service.

Source: National Audit Office review of Ministry of Defence data

Figure 21

Intelligence analysts

The main causes of shortfalls are:

- an increased requirement for intelligence analysts; and
- difficulties in retaining personnel.

Overview

Intelligence analysts cover a wide range of different specialisms, including signals intelligence, imagery intelligence or linguists. The Navy, Army and Royal Air Force (RAF) have intelligence-gathering teams and recruit their own staff to fill these roles.

Defence Intelligence is the main provider of strategic defence intelligence to the Armed Forces and is run by Joint Forces Command (JFC). Defence Intelligence must source the regulars it needs from the Navy, Army and RAF.

The 2015 Strategic Defence and Security Review increased the requirement for many intelligence analyst trades. Some trades within the RAF were required to double or treble recruitment targets in order to meet this new demand. The demand for intelligence analyst skills, especially for linguists, often changes rapidly – depending on emerging threats – but it can take years to train regulars with the skills that are needed.

The skills possessed by intelligence analysts are often in high demand from industry and other government intelligence-gathering agencies. The level of intelligence analysts leaving voluntarily is often above the average for the Armed Forces. For example, the level of voluntary outflow rates for RAF linguists was 8.9% in April 2017, and the rate can often be much higher within some ranks.

The result is that many ranks and trades have gaps. The Armed Forces has only 74% of the required strength within the intelligence analyst pinch-point trades and some groups have experienced harmony breaches of almost 25%.

Mitigating actions:

- **Skills champion** – the skills champion does not have a tri-service oversight of issues affecting regulars in these trade groups. The group consists of a wide range of skills and there appears to be no common definition of the trades that should be included under intelligence analysts.
- **Improving recruitment** – the RAF has set up specialist recruiting teams to improve recruitment and is offering 'golden hello' payments in niche areas.
- **Retention payments** – the Department has introduced retention payments for intelligence roles.

Source: National Audit Office review of Ministry of Defence data

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