National Audit Office

Optimising the defence estate

Ministry of Defence

REPORT

by the Comptroller and Auditor General

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Key facts

2%

reduction in the size of the Ministry of Defence's (the Department's) built estate since April 2015

£0.65bn

the Department's forecast of net benefits from its Defence Estate Optimisation Portfolio by 2040, down from its initial forecast of £2.4 billion made in 2016[1]

£4.3bn

the Department's funding over the 10 years to March 2031 to fund its Defence Estate Optimisation Portfolio

The Department has reduced the size of its estate:

£391 million receipts from estate sales in 2015-16, mainly from the sale of the Old War Office in London which raised £357 million. These sales did not count against the Department's commitment to raise £1 billion between April 2016 and March 2021.

£538 million receipts from estate sales between 2016-17 and 2020-21, compared with the 2015 Spending Review commitment to raise £1 billion in disposal proceeds during this period.

The Department forecasts that its Defence Estate Optimisation Portfolio will achieve:

69 number of sites the Department plans to sell between 2021-22 and 2040-41 through the Portfolio.

£2.7 billion forecast savings in estate running costs by 2040-41, if all planned disposal programmes are achieved, which form a significant element of the net benefits of the Portfolio.[1]

The Department's target to reduce the size of its built estate was set in 2015 and has not yet been updated to reflect changing operational requirements:

16% the Department's current forecast reduction in the size of its built estate by 2040-41 if all planned disposals are completed, compared with its target of a 30% reduction over this period.

Not known optimal size of the estate to meet current and future operational needs, although the Department has begun to assess this in the light of the Integrated Review.

Note

1 The Department's estimate of the net benefits of its Defence Estate Optimisation Portfolio is calculated as the Net Present Value (NPV) of its infrastructure costs and benefits. This is based on the sale proceeds from site disposals, less the re-provision costs and the corresponding net change in future estate running costs, plus cost of disposal. As the costs, income and savings occur over 25 years, it calculates the NPV by applying an annual discount rate to each cash flow so that costs and benefits can be compared on a consistent basis. This calculation includes the residual value of the assets to reflect the ongoing beneficial use to the Department beyond the 25-year timeframe. The NPV is calculated in line with HM Treasury guidance.

Summary

1 The Ministry of Defence (the Department) has access to one of the largest estates in the country, accounting for 1.5% of the UK landmass.[1] In March 2020, the value of the Department's estate was £35.6 billion.[2] Its estate is crucial to delivering the country's defence capability as it is where some 230,000 military and civilian personnel live, work and train. The Department needs to manage the estate effectively within its budgetary limits and, in 2019-20, spent £4.6 billion (12% of its budget) on its estate. The Department must also retain some flexibility in its estate so it can respond to changes in operational requirements and evolving security threats, as recently set out in the Integrated Review of Security, Defence, Development and Foreign Policy (Integrated Review).

2 The Department's estate is spread throughout the country. It includes the 'built' estate, which consists of 900 sites with roughly 96,000 buildings, including offices, houses and storage units. The Department spends about 85% of its estate maintenance budget on this part of the estate. Around 40% of the Department's infrastructure is more than 50 years old and it regards 30% as not being in an acceptable condition. The Department also holds a 'rural' estate, including its training facilities and ranges, which accounts for 68% of its owned or leased land but is less costly to maintain.

3 In 2016, the Department published its strategy to optimise the defence estate. This set out its vision to provide a built estate "that is affordable and optimised to enable Defence capabilities, outputs and communities both now and in the future". The Department recognised that its estate is too large and that its scale, nature and location had not evolved enough to accommodate the Armed Forces' future needs. It proposed disposing of sites it no longer needed to help meet its 2015 Spending Review commitment to reduce the size of its built estate by 30% (23,200 hectares) by 2040-41. The Department's strategy also supported its commitment to meet government-set targets to raise £1 billion by the end of March 2021 through disposals, and to release enough land by March 2020 on which to build 55,000 homes.

1 The Department has access to approximately 344,200 hectares of land in the UK. It owns or controls 233,000 hectares of this land and has access rights to a further 111,200 hectares.

2 This is the net book value of the estate on 31 March 2020, according to the Department's Annual Report and Accounts 2019-20.

4 To fulfil its objective of optimising the use of its estate, the Department set up a 25-year investment strategy known as the Defence Estate Optimisation (DEO) Portfolio. The DEO Portfolio is the Department's main estate transformation programme, which aims to achieve a more efficient, smaller estate. It consists of a series of building projects to rehouse personnel and equipment, moving units to new locations and disposing of vacated sites. In 2016, the Department expected the DEO Portfolio would reduce the size of the built estate by 25%, and that other sales would reduce it by 5%. The Portfolio team works with the Top-Level Budgets (TLBs) which are responsible for managing and rationalising their own estate.[3] The Department's Defence Infrastructure Organisation (DIO) provides TLBs with advice and support on estate management, including disposals.

5 Between 1987 and 2016, we reported six times on the Department's management of its estate, highlighting a lack of progress in aligning the estate with military need. Our 2016 report concluded that the Department had started to improve its management of the estate but that the success of its latest estate optimisation strategy was uncertain, with a risk that it would not achieve its expected financial benefits. This study examines the Department's progress since 2015-16 in delivering this estate optimisation strategy and disposing of sites that are no longer needed. It sets out:

- the defence estate and Department's estate optimisation strategy (Part One);
- the Department's progress since 2015-16 in reducing its estate (Part Two); and
- whether the Department has established the necessary conditions to achieve its estate optimisation objectives (Part Three).

6 Our study focuses on the Department's rationalisation of its UK estate. Its management of the overseas estate is not within our scope. In addition, we do not evaluate the Department's approach to estate maintenance.[4] Our methodology is set out in Appendix One. Our main methods included analysing departmental data, conducting interviews, and a review of relevant published material, including national statistics. We undertook our study between October 2020 and March 2021. Unless otherwise stated, data are as of March 2021.

3 Top-Level Budgets include: Air Command, Army Command, UK Strategic Command, Navy Command, the Defence Nuclear Organisation, and the Defence Infrastructure Organisation.

4 The Department's approach to estate maintenance is discussed in Comptroller and Auditor General, *Improving Single Living Accommodation*, Session 2019–2021, HC 1129, National Audit Office, February 2021.

Key findings

The Department's estate

7 **The Department has reduced the size of its built estate by 2% since 2015-16 and expects to only meet around half of its target of a 30% reduction by 2040-41**. Its strategic vision since 2016 has been to have the right estate in the right locations to support current and future defence capabilities. The Department committed to reducing the size of its built estate by 30% (23,200 hectares) by 2040-41.[5] Since 2015-16, it has reduced its built estate by 1,600 hectares (2%). This follows slow progress in reducing the size of the estate over a much longer period. In March 2021, the Department had planned 69 site disposals over the next 20 years through the DEO Portfolio. The sale of these sites will not be sufficient to meet the 2040-41 target, even if they all take place. It now forecasts that the DEO Portfolio will reduce the size of the built estate by 13% (10,100 hectares) by 2040-41, and that other sales will reduce it by a further 3% (2,000 hectares). The Department's estate reduction target does not include the overseas or rural estate, including training areas and ranges (paragraphs 1.6, 1.7, 2.15 to 2.17, 3.10 and 3.13).

8 **The publication of the Integrated Review provides the Department with an opportunity to reassess the future size and shape of its estate**. It accepts its built estate is too large but has not yet determined whether the target of a 30% reduction in size, set in the 2015 Strategic Defence and Security Review, is still the right one. The target was intended to incentivise site disposals although, at the time, the Department considered this to be ambitious as much of its estate was already being used. The Integrated Review, published in March 2021, provides the Department with more clarity on future military capabilities, force structure and location. This means that the Department now has the opportunity, for the first time in many years, to reassess its requirements and set revised targets for estates rationalisation. The TLBs will develop infrastructure plans to support the long-term management of the estate, reviewing changing demands and future need to support military capabilities and personnel. There is also scope for the Department to reassess the whole of its holdings, including the rural and overseas estates, to identify additional opportunities for rationalisation (paragraphs 1.5, 1.7 to 1.10, 3.13, 3.14 and 3.24).

5 The Department accepted the government-set target in the 2015 Strategic Defence and Security Review.

9 **Reducing the size of the defence estate is a complex task, with planned site disposal projects taking an average of six years to complete**. As the Department uses most of its estate, it cannot sell sites without rehousing personnel and moving equipment to alternative locations. This can be a complicated, costly and lengthy process, involving the redevelopment of other sites. The time needed to complete the whole process depends on the nature of the site being sold, the scale of relocation to other sites and choice of disposal strategy. Our review of planned site disposals showed that, on average, the Department expects that it will take five years and seven months from the initial assessment phase to the site(s) housing relocated personnel being ready. The surplus site must also be prepared for disposal, which involves working with local authorities to achieve planning permission, dealing with any decontamination, marketing the site, and completing the sale. While the Department starts these tasks before relocating personnel affected by the disposal, it expects to take an average of six months to complete the sale of vacated sites. The Department may extend timeframes on certain projects to increase disposal receipts. It is also exploring the potential to speed up site disposal projects (paragraphs 1.11 to 1.15).

Progress since 2015-16

10 **The Department's initial plans to reduce the size of its estate were not realistic or achievable**. In 2016, the Department's emphasis was on trying to meet its target to reduce the size of the built estate by 30% and it developed a disposal programme led by its strategic business partner. However, the plan was based on immature data and the timing of disposals did not reflect the complexity of site preparation and relocating affected personnel. Forty-five of the 91 intended site disposals did not have detailed plans and the Department did not know if its suppliers had the capacity to deal with the required amount of work. For those sites which had them, the plans to complete works at the sites receiving relocated equipment and personnel were based on unrealistic timings, as they used high-level assumptions about the work required and time needed. The Department expected the disposal programme to evolve over time, but it did not identify the over-optimism in the programme when it approved the approach and could not test the realism of delivery targets. Subsequent changes in UK and US military requirements have also led the Department to retain 11 of 91 sites originally included in the programme (paragraphs 2.3, 2.5 to 2.7, 2.9, 2.7 and 3.16).

11 **The Department recognised that its approach of using a strategic business partner was unsuccessful**. In 2017, following a review of its approach, the Department renegotiated its strategic business partner contract with a termination date of 2019. It concluded that the contract had not transformed DIO and would not deliver anticipated savings in DIO costs of £5 billion over 10 years from 2014. It also decided that the TLBs should play a more active role in estate optimisation and therefore delegated responsibilities for estate management to them.
It retained a renegotiated contract with the strategic business partner until 2019 as it needed access to the partner's skills and knowledge of estate optimisation plans (paragraphs 2.3, 2.4, 2.7 and 3.16).

12 **The Department has redesigned its approach, shifting away from prioritising disposals to optimising the use of its estate**. It has revised its DEO Portfolio plan three times. In 2018, it sought to reduce the Portfolio's complexity by resequencing disposals. In March 2020, after responsibility for estates management was delegated, the TLBs reassessed the potential to rationalise their estates and agreed a revised programme of disposals with the Portfolio team. The Department also spent two years assessing funding options after the government's 2018 decision to withdraw the private finance model left a shortfall of £2.8 billion in the DEO Portfolio. During this period, it deferred some disposal programmes within the Portfolio as future funding was uncertain. In December 2020, the Department approved a revised disposal programme following the 2020 Spending Review. It is now placing greater emphasis on optimising how it uses the estate, reflecting TLBs' assessments of their estate needs (paragraphs 2.2, 2.6, 2.7, 2.9, 2.11 and 2.12).

13 **The Department did not achieve its disposal targets**. It sought to achieve two government-set targets (for disposal proceeds and release of land for housing). These were intended to incentivise estate disposals although, when they were set in 2015, the Department did not know whether they were achievable. The Department has missed both targets. It raised £538 million between 2016-17 and 2020-21, against its target of £1 billion. However, it did delay two sales, totalling £85 million, from 2020-21 until 2021-22, due to the difficulties of relocating people during the COVID-19 pandemic. Had these gone ahead as planned, the Department would have raised £623 million. In addition, the Department raised £391 million from disposals in 2015-16. These were mainly due to receipts of £357 million from the sale of the Old War Office, although they did not count against its £1 billion target. By March 2020, it had also released land for approximately 9,200 houses, 17% of the target of 55,000 units set by the Ministry of Housing Communities & Local Government (paragraphs 2.16 to 2.21 and 2.23).

14 **The Department will not reduce expenditure on estate running costs as much or as quickly as expected**. Its rationale for reducing the size of the estate was to cut running costs. In 2016, the Department expected that the DEO Portfolio would save £4.1 billion by 2040-41. However, due to its revised disposal programme, the Department has now estimated that it will save £2.7 billion in running costs by 2040-41, a fall of 33%. As of March 2021, it had achieved running cost savings of £9 million from the Portfolio and £27.9 million from other sales. Overall, its expenditure on managing the estate has increased by 24% since 2015-16 to £3.1 billion in 2019-20, reflecting increased investment in maintenance after management of the estate was delegated to the TLBs. Having an estate larger than necessary contributes to the Department's wider budgetary pressures, at a time when it is making important choices on the military capabilities that it needs to deliver its defence objectives (paragraphs 1.6, 1.15 to 1.18 and 2.23).

15 **The Department forecasts that its estate optimisation programme will deliver net savings over the next 25 years, although these have fallen by 73% since 2016 and remain uncertain**. In September 2020, the Department forecast that the net benefits of the DEO Portfolio – measured in terms of sales income and reductions in future running costs – would be £0.65 billion over the next 25 years, down from its original forecast of £2.4 billion.[6] The reduced forecast reflects its revised estimates of higher costs to house displaced personnel, reductions in anticipated sale receipts and delays in achieving disposals, which means savings will not be realised as soon as initially anticipated. Furthermore, our review of the Department's cost model found that most of its cost estimates were based on preliminary studies rather than actual data on costs; additional costs falling to the TLBs were excluded; estimates did not include the additional cost of meeting recent sustainability targets; and the risk of cost increases was likely to be underestimated. While there will always be an element of uncertainty in cost forecasts, particularly when they cover a long period, collecting better data on costs would enable the Department to reassess the potential benefits of its estate optimisation programme (paragraphs 2.22 to 2.24 and 3.8).

The Department's preparedness to meet its estate optimisation objectives

16 **The Department has revised responsibilities for delivering the DEO Portfolio**. In May 2020, the Department introduced new arrangements for managing the DEO Portfolio. The Portfolio team oversees the strategy and supports the Portfolio Board, which has overall responsibility for its delivery. The TLBs manage their estates and undertake works to enable disposals, supported by DIO. The TLBs have incentives to achieve disposals as they are responsible for estates maintenance and the forecast savings have been deducted from their future budgets. Senior responsible owners in TLBs are mandated to achieve programme milestones but, as site disposals progress, it is not yet clear if the TLBs have sufficient discretion to manage the complex sequence of moves and activities that enable disposal projects to proceed. The TLBs need to undertake remedial work at sites before their closure, move equipment and personnel to new sites and fund some works to house them, while managing ongoing operational requirements at the sites receiving personnel (paragraphs 3.2, 3.3, 3.7 and 3.11).

6 The Department's estimate of the net benefits of its DEO Portfolio is calculated as the Net Present Value (NPV) of its infrastructure costs and benefits. This is based on the sale proceeds from site disposals less the re-provision costs and the corresponding net change in future estate running costs, plus cost of disposal. As the costs, income and savings occur over 25 years it calculates the NPV by applying an annual discount rate to each cash flow so that costs and benefits can be compared on a consistent basis. This calculation includes the residual value of the assets to reflect the ongoing beneficial use to the Department beyond the 25-year timeframe. The NPV is calculated in line with HM Treasury guidance.

17 The Department has resolved the immediate funding gap in its estate optimisation Portfolio but recognises that affordability is likely to remain a challenge. In 2021, it resolved the funding shortfall in the DEO Portfolio – caused by the withdrawal of private finance – and has committed to a budget of £4.3 billion over the 10 years to March 2031. This budget includes the DEO Portfolio generating sales income of £1.2 billion. These proceeds need to be realised as planned or else there will be timing mismatches between the need for, and availability of, funding for relocation and site preparation works. New site assessments show that initial forecasts of the cost of relocation work are likely to be underestimated, which means there is a risk that the Department has not made sufficient provision in future budgets for this work. Alternatively, the Department may need to restrict site refurbishments on affordability grounds. Furthermore, while the four-year Spending Review has provided certainty over the Portfolio's funding to 2024-25, there is less certainty on the Department's budget after this period. The Department will need to make difficult prioritisation choices about allocating funds, balancing investment in the estate with the development of new military capabilities (paragraphs 2.4, 2.13, 2.24 and 3.4 to 3.8).

18 The Department has agreed a revised disposal programme with the TLBs. In December 2020, it reset the DEO Portfolio following TLBs' assessments of the potential to rationalise their estate holdings. The Department is now planning to complete 27 site disposals over the next five years and 69 by 2040-41. By March 2021, it had completed 45 initial assessments and 209 surveys on sites within the Portfolio, together with more detailed assessments for 47 of the 92 re-provisioning projects to establish the scale of work required at sites that will house relocated personnel and equipment. The TLBs have also agreed interim mandates to take this forward. The revised programme means that the DEO Portfolio's contribution to reducing the built estate by 30% (23,200 hectares) has fallen from 19,300 hectares (25%) to 10,100 hectares (13%) (paragraphs 1.7, 3.10 and 3.11).

19 **The Department continues to face significant practical challenges in delivering the DEO Portfolio**. Drawing on our wider work on the government estate and implementing major projects, we assessed whether the Department was well prepared to deliver its strategy of optimising the estate. We found that it continues to face several challenges. In particular:

- **Skills and capabilities**. Since the termination of the strategic business partner contract in 2019, the Department has continued to employ contractors to provide the skills that it needs, such as quantity surveyors and project management experts. The Department is building its in-house capability and had recruited 53 new staff by March 2021. It aims to have recruited 91 staff by 2023-24, at which point it does not plan to use contractors for core activities, including quantity surveyors, designers and project managers (paragraphs 3.16 to 3.20).
- **Management information**. The Department has recognised the weaknesses in the completeness and quality of its management information on the cost and condition of its estate. By 2025, it plans to have introduced an asset management system to help address this. It also expects that a new infrastructure data and management information strategy will improve its estates data and enable the TLBs to make more informed decisions on where to invest and which sites to sell (paragraphs 3.23 to 3.25).
- **Managing interdependencies with the wider estate strategy**. The DEO Portfolio is one strand of the Department's wider estate strategy and the need for sites will be affected by a range of factors, including internal initiatives on future military accommodation. For example, the Portfolio will need to revise its planning assumptions as the Department decides how to roll out the Future Accommodation Model (offering Armed Forces personnel different housing options), which is currently at pilot stage. In addition, the Portfolio team will need to carefully manage the sequencing of disposals as any delays in selling sites will affect the availability of funding in future years. This involves managing the many uncertainties in the disposal process (paragraphs 3.5 and 3.15).
- **Government sustainability targets**. The Department needs to manage the estate in accordance with the government's sustainability policies, and the DEO Portfolio is a key element of the Department's plan for achieving its net zero target by 2050. However, the Portfolio's cost estimates do not consider the additional costs of increasing the standard of buildings to a net zero standard. The Department is working with its technical experts to assess the scale of cost increases, but its initial estimate is that construction costs will increase by 20% to 30% at least (paragraph 3.26).

Conclusion on value for money

20 In 2016, the Department launched its estate optimisation strategy, which highlighted the crucial role of the estate in supporting military capability. Yet in the five years since we last reported, the Department has continued in the cycle of re-organising and re-planning its estates disposal programme and has made limited progress in rationalising its estate. It has cut the size of the built estate by just 2% and reduced its estimate of DEO Portfolio's net benefits from £2.4 billion to £0.65 billion. Despite this, some of the changes over the past year mean that the Department is now better placed to rationalise its estate. In particular, it has resolved the funding shortfall on its estate disposal programme and has agreed site disposals with the TLBs. More broadly, the Integrated Review also provides the Department with clarity on future military capabilities and force structure, which will influence the size and location of the estate it needs.

21 The Department must now seize the opportunity to rationalise its estate and carry out planned disposals. It is still too early to judge whether its changes, such as the revised governance arrangements, will prove successful and the complexity and time needed to complete site disposals remain a significant challenge. Also, it is not yet clear whether cost pressures will grow as the Department better understands the costs of providing sustainable new accommodation on sites receiving relocated personnel. So far, the Department has yet to demonstrate it can deliver value for money from its estate. Continuing pressures on the use of the defence budget mean the need for a more affordable estate that supports military personnel and capabilities remains as strong now as it was in 2016.

Recommendations

22 Our recommendations are intended to support the recent progress that the Department has made in better positioning itself to rationalise its estate. It should:

a **reassess the potential for estates optimisation and set revised targets for a realistic disposals programme in the light of the revised defence priorities set out in the Integrated Review and defence command paper**. The publication of the Integrated Review and defence command paper now provide the Department with an opportunity to reassess the potential to reduce the size of its estate, including its leasehold, rural and overseas estates. The Department has begun to consider the implications as part of its revised strategy for defence infrastructure. As part of this, it should establish a revised performance framework, including new and realistic targets for estate optimisation which are based on the size and location of the estate that is needed, and for forecast savings in running costs. The targets should be based on a clear understanding of what size estate the Department needs to fulfil its objectives, while reflecting the need for flexibility and resilience;

b **review the effectiveness of the DEO Portfolio's governance arrangements**. Given that it is one year since the new arrangements for managing the DEO Portfolio were introduced, the Portfolio team should assess whether these provide appropriate oversight and the ability to influence disposals. The Department told us that the existing arrangements on TLB delegations are under review. It should be prepared to test its governance arrangements against the principles that we saw work well for Carrier Strike and Army recruitment, which had a common strategic direction and strong leadership, delegated authorities to manage projects and clear accountabilities for achieving shared objectives;

c **analyse the factors that slow down estate optimisation and tackle the practical challenges that hamper progress in rationalising the estate**. Delivery of the Department's Portfolio will be challenging as disposing of sites involves a lengthy, complex process of preparing sites and moving equipment and personnel to new sites. The DEO Portfolio team should conduct analysis to better understand and tackle the root causes of delays. It should use this work to stress-test whether future delivery schedules on planned site disposals are achievable and identify potential risks to future funding flows. The Portfolio team should also work closely with the TLBs to ensure that site preparation work is undertaken at the right time to support estate optimisation. At a programme level, the Department should develop a clear view of the interdependencies that need to be managed, such as other accommodation initiatives and sustainability targets; and

d **build a more detailed understanding of its estate and the full cost of achieving disposals**. The Department is implementing an asset management strategy to improve its management information on its estate. As part of this, it should collect detailed information on the time and cost needed to dispose of sites, including the resources needed to relocate units and prepare sites for disposal. It should use these data to improve the reliability of forecasts produced by its cost model, which would help test if its estimate of future funding requirements is realistic and identify the uncertainties that the DEO Portfolio needs to manage.