



National Audit Office

**REPORT BY THE
COMPTROLLER AND
AUDITOR GENERAL**

**HC 70
SESSION 2010–2011**

9 JULY 2010

Ministry of Defence

A defence estate of the right size to
meet operational needs

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A defence estate of the right size to meet operational needs

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Amyas Morse
Comptroller and
Auditor General

National Audit Office

5 July 2010

The defence estate primarily exists to support defence capabilities. The Department aims to have an estate of the right size, location and quality through an estate of fewer, larger sites in the UK and overseas, which it believes will deliver efficiencies and a better fit with operational needs.

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This report can be found on the
National Audit Office website at
www.nao.org.uk/defence-estate-2010

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Summary

Background

1 The Ministry of Defence (the Department) owns around 240,000 hectares and has rights of access to a further 130,000 hectares in the United Kingdom. The Department manages a further 200,000 hectares overseas. The estate, which is valued at nearly £20 billion, is diverse, with some 4,000 sites including airfields, naval bases and barracks. An estimated £2.9 billion per year is spent on running the estate.

2 The defence estate primarily exists to support defence capabilities. The Department aims to have an estate of the right size, location and quality through an estate of fewer, larger sites in the UK and overseas, which it believes will deliver efficiencies and a better fit with operational needs.

3 Defence Estates is the central organisation tasked with managing the defence estate. Customers – including the Royal Navy, Army and Royal Air Force – articulate their estate needs based on identified operational requirements. Defence Estates is responsible for supplying these needs by delivering estate projects and services, usually through managing the contractors that supply them.

Scope of study

4 Across government there is an immediate need to use the public estate better and more efficiently, in order to release funds for frontline services and secure savings. For the defence estate this means matching operational requirements with estate efficiency. This report is a high-level review of the progress made by the Department in getting an estate of the right size and the information available centrally to support a rigorous assessment of estate efficiency and to drive through structured cost reduction. Specifically, we:

- assessed trends in estate size over the last ten years, including receipts from estate sales;
- examined the Department's high-level plans, including its estate targets and the process by which it has identified the relative importance of sites; and
- identified the information needed centrally to manage the estate, in particular to better support operational needs and reduce costs and to drive through rationalisation.

This review was based on the plans and data held at the centre of the Department, to inform its thinking ahead of the Strategic Defence and Security Review, and in light of the fiscal challenges ahead.

Key findings

5 The Department has reduced the amount of built estate (the estate excluding training land) it owns in the UK between 1998 and 2008 by 4.3 per cent, taking many rationalisation opportunities and generating £3.4 billion in sale receipts between 1998-99 and 2008-09. The Department has reduced its built estate by some 3,400 hectares (from 79,900 hectares to 76,500 hectares between 1998-99 and 2008-09). Overall, it has achieved sale receipts of over £200 million each year, peaking in 2007-08 when Chelsea Barracks in Central London was sold generating nearly £1 billion. The Department's Project MoDEL to rationalise estate in North London was innovative, and used new contract mechanisms to help fund rationalisation.

6 The Department has improved its planning arrangements, including through a new Defence-wide estate plan, but its strategy does not clearly articulate what the right size of the estate is. The Defence Estate Development Plan (Development Plan), first published in 2008, has brought clear benefits to estate planning, providing a long-term focus previously absent from defence estate management arrangements. The plan as currently constituted however, lacks quantified targets or supporting measures to allow progress to be judged, does not articulate what the right size of the estate should be, or how much it would cost. The Department is now producing a supporting strategy for the Development Plan, as well as a balanced scorecard to assess the performance of estate projects and contractors.

7 The Department has a process for classifying whether each of its 571 key sites should be considered "core", and has identified 12 per cent of its sites (comprising 2 per cent of its estate by size) as surplus to defence needs. Customers, or Budget Holders, set out their long-term estate plans for individual sites via Estate Development Plans, each taking into account base commanders' views that are collated in the locally produced Integrated Estate Management Plans. The Department has identified whether each of its 571 key sites within the Development Plan should be considered "core" (needed for defence purposes to at least 2030), "retained" (needed to at least 2015) or "for disposal" (no clear need identified by relevant Budget Holder). There are 525 UK sites in the Development Plan, of which 72 per cent are core, comprising 95 per cent of UK estate land. Retained status is applied to 16 per cent of UK defence sites (three per cent of land). The Department has identified 12 per cent of its sites (2 per cent of land) as having no current operational need and being available for disposal. The classifications of sites may need to be revisited as part of the forthcoming Strategic Defence and Security Review.

8 The Department has insufficient data centrally to demonstrate that it is striking the right balance between meeting operational requirements and minimising the cost of the estate. The same data would be needed to support decisions should the Department decide it needs to drive through further rationalisation and significantly reduce its estates costs in a structured way in response to current financial challenges. Some data are held centrally, other data are produced locally at Budget Holder or site level, but data are incomplete and are stored in different data systems that are difficult to reconcile. The Department is not in a position to analyse centrally the five categories of information we have identified through our discussions with comparators and the Office of Government Commerce, and our own analysis, that the Department needs to identify the scope for further rationalisation. The Department needs to be able to consider, in combination, all of the following categories of information:

- **The relative operational importance** of sites, as sites less critical to meeting defence requirements could present scope for further rationalisation. Centrally, designation of the operational importance of sites is limited to a high level classification of whether they are “core”, “retained” and “for disposal”, but 72 per cent of sites and 95 percent of land are classified by the Customers as core. There are no rigorous central guidelines to provide further prioritisation of their operational importance, or indicators of which “core” and “retained” sites may contain pockets of land most suitable for re-use or disposal. The Department does not have information centrally on the scale of under-used pockets of land within core sites, but it has initiated a pilot project to identify surplus pockets of land within a number of sites.
- **How heavily a site is used**, as sites that are lightly used could be candidates for rationalisation. The Department has utilisation data for some of its offices that shows it has managed its office estate well, but does not know how heavily the rest of its built estate is used. There are significant challenges establishing suitable benchmarks for properties that have no obvious comparators across government, such as airfields, barracks and munitions sites. In addition, some sites, even though they have low use, may still need to be retained because of their location or operational importance. But the Department has not yet devised metrics to facilitate internal comparisons across its estate.
- **Potential receipts**, as sites with a high value could be prioritised for disposal. The Department has identified 200 sites with the greatest potential for receipts, but the majority are currently categorised as core. There are no disposal estimates for the other 371 sites in the Development Plan.
- The Department could look to dispose of the estate assets that cost the most to retain. But it does not have a central view of **running costs**. There is some information collected at site and Budget Holder level, but it is not suited to central analysis.

- Sites that are in poor **condition** or need considerable investment to make them fit for purpose could be candidates for disposal. The Department collects condition data for the 60 per cent of the estate that is managed mainly by its regional maintenance contractors, and for its accommodation, but not for the rest of its estate.

The Department's process for categorising sites is rightly driven by operational requirements, but it does not give sufficient weight to other factors outlined above.

9 The Department does not have any high level metrics it can use to assess how efficiently the estate is being used. In the absence of alternative measures, while we would not necessarily expect a strong correlation between personnel and land, comparing the 4.3 per cent reduction in the size of the Department's built estate with the greater 13.4 per cent fall in the number of personnel based in the UK over the same period raises a question whether there are further opportunities for estate rationalisation. In view of the Strategic Defence and Security Review and changes arising from a re-configuration of the Armed Forces this emphasises the need for the Department to have metrics to determine whether it is making good use of all of the estate and to minimise the capital tied up in the estate.

10 As part of the forthcoming Strategic Defence and Security Review, the Department is considering whether its model of estate management remains appropriate. Whichever organisational structure the Department chooses for managing its estate, the arrangements need to address:

- the lack of a clear translation of its strategic goal into quantifiable targets;
- limited central challenge of the translation of operational requirements into estate needs; and
- the lack of sound information to support rationalisation decisions and assess competing demands across Budget Holders.

The arrangements also need to align with wider developments in government estate management, which emphasise the need for departments to have a strategic view of their estate, understand their estate costs and ensure that resources and space are well used across government.

Conclusion on value for money

11 The defence estate exists to enable the Armed Forces to deliver operational capability. The Department has significantly strengthened its estate planning and achieved considerable disposal receipts. The changes made to date are not, however, sufficient to rigorously drive value for money. The Department has not matched its focus on operational needs with sufficient attention to efficient use of its estate assets and cost reduction. In the United Kingdom, the Department has reduced the number of civilian and military personnel three times faster than it has reduced the built estate and in the absence of other suitable metrics to assess estate efficiency it raises a clear question about whether the built estate can be significantly further reduced in size. The lack of clear rationalisation objectives, inadequate mechanisms, and insufficient central data mean that the Department is not well placed to systematically align its estate to changing operational requirements in combination with structured cost reduction. In the context of the Strategic Defence and Security Review the Department needs to consider what minimum estate will be required to meet the future needs of the reshaped Armed Forces. This requires a much more rigorous appraisal of operational needs, and associated estate costs and utilisation. The Department collectively needs a change in mindset so it gives due emphasis to reducing costs as well as meeting operational requirements.

Recommendations

12 To put the Department in a good position to both align the estate with operational requirements and drive value for money, we make the following recommendations:

- a** **There is a lack of data available centrally to make properly informed decisions about structured cost reduction and the scope for more radical estate rationalisation. The Department's categorisation of sites is based primarily on operational need, and this is insufficient to support both the alignment of the estate with changing operational requirements and structured cost reduction.** The Department should:
- immediately broadly categorise estate sites by operational importance, utilisation, cost to maintain, condition, and potential value, in order to align better the estate with operational needs, and to identify sites and parcels of the land with potential for disposal or re-use across the public sector;
 - review its process of defining estate requirements so that these are prioritised on the basis of operational need and the associated estate costs, supported by a more robust system for categorising estate sites;

- as it develops its balanced scorecard, expand its focus to cover the key categories of information it needs to support its estate decisions. We expect that this should include information on site function, utilisation, condition, potential market value and running costs;
 - use the data collected to challenge customers' estate requirements; and
 - analyse estate performance over time to ensure that it is making good use of the estate and driving down costs, while meeting operational needs.
- b** **The Department has a strategic aim to rationalise its estate so it is of the right size, but it has not articulated this in terms of high level targets taking account of both the value of the assets and operational need.** The Department should articulate what the right size of the estate is and how much this would cost, and also support the strategy with appropriate targets that allow progress on rationalising its estate to be measured, alongside other targets for example relating to quality. Targets need to balance the imperative to drive down costs with meeting operational requirements, as determined in the Strategic Defence and Security Review.
- c** **Data and systems are not in themselves enough to secure structured cost reductions.** The Department should, in developing its model for managing its estate, put in place levers and mechanisms that encourage all parts of the Department and the Services to drive through structured cost reduction aggressively.

Part One

Detailed findings

The defence estate

1.1 The Ministry of Defence (the Department) is one of the largest landowners in the United Kingdom. It owns around 240,000 hectares and has rights of access granted by owners to a further 130,000 hectares, which together account for around 1.5 per cent of the United Kingdom landmass. The Department also manages over 200,000 hectares overseas. The estate, which has a book value of nearly £20 billion as at March 2009¹, is hugely diverse, including airfields, living accommodation, naval bases and training ranges.

1.2 The defence estate primarily exists to support defence capabilities. The Department needs estate that is located in the right areas and of the right quality to support defence activities. Defence requirements, and therefore estate needs, can change with circumstances. For example, the decision to bring personnel back from Germany means that the UK defence estate is having to change to accommodate them. The forthcoming Strategic Defence and Security Review will further impact the shape of the armed forces, and consequently the size and type of estate required to support them. **Figure 1** shows key events that have shaped the defence estate to date.

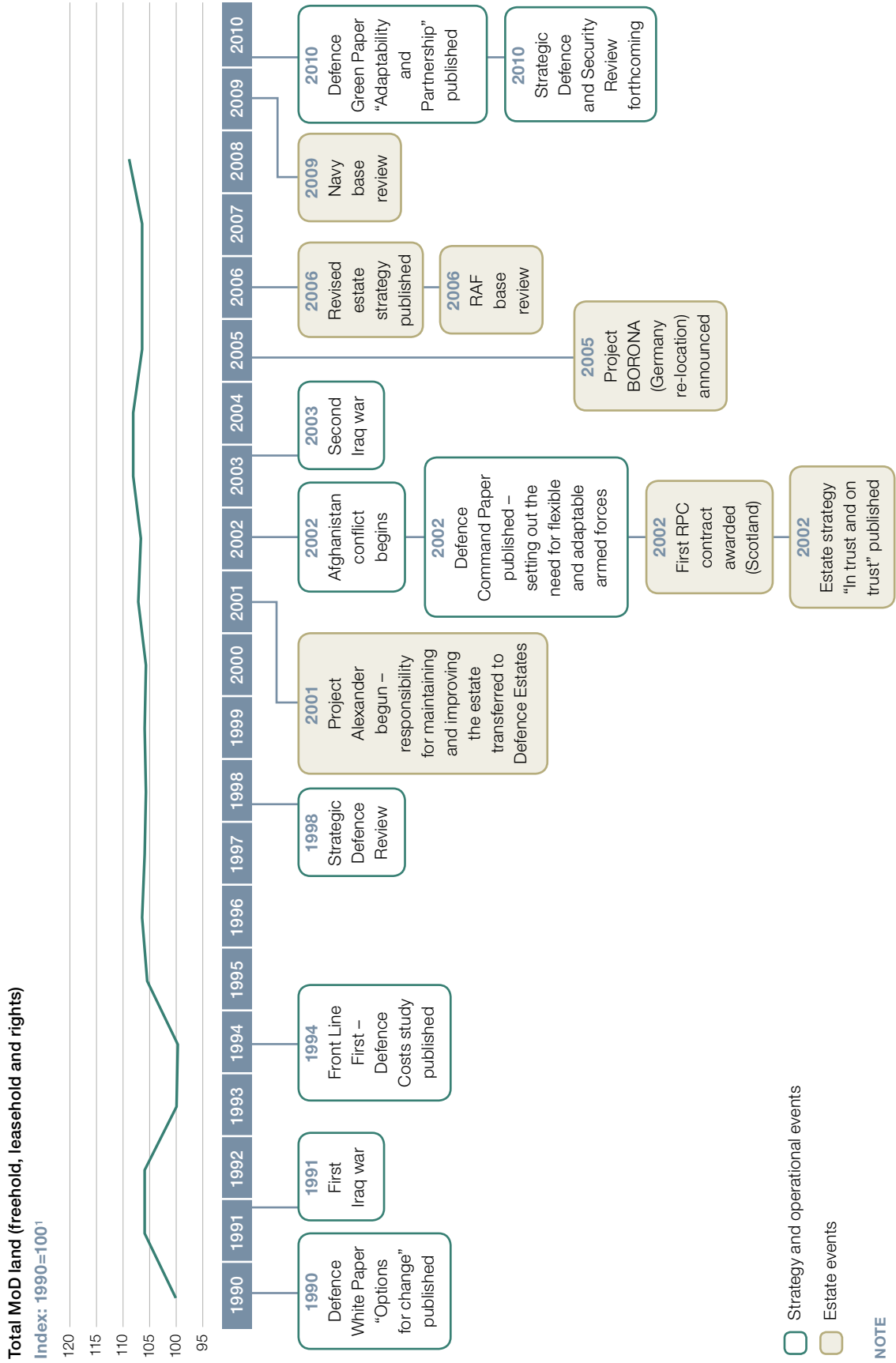
1.3 It is evident that the location and characteristics of many defence estate assets reflect historical circumstances, which means they may not be a perfect fit for current operational requirements. They may be located in the wrong place, require additional costs to maintain and may not be fully compatible with operational needs.

What is estate rationalisation and why is it important?

1.4 For the purposes of this study estate rationalisation is defined as the process by which you get an estate of the “right size” to meet business requirements, at lowest cost. Rationalisation processes can include identifying under-utilised estate for sale or reuse (either within the department or across government), co-locating assets and teams, and making use of economies of scale. Successfully releasing capital value and reducing running costs, while meeting operational needs, does not equate with a straightforward focus on reducing size as there may be considerable variation in market value and running cost by location.

¹ This value was correct for 2008-09. In 2009-10 this figure will increase following the update to International Financial Reporting Standards and the 2008-09 figure will be restated in the 2009-10 Department's Accounts.

Figure 1
Events that may have affected the size and composition of the defence estate



1.5 Estate rationalisation has been endorsed across central government, through policies such as the previous Government's White Paper "Putting the frontline first: smarter government"², which recommended exploring options to co-locate departments and back offices, re-locate offices out of London and harness modern working practices such as hot-desking. The Office of Government Commerce (OGC) states in its report "Better measurement – better management"³ that when managing a hugely valuable asset like an estate, vigilant attention must be given to ensuring that costs are understood and that resources and space are not wasted. In the current tight fiscal climate, all government estate must work harder to release resources. The new government has recently announced it intends to reduce Ministry of Defence running costs by at least 25 per cent.

1.6 A considerable amount of working capital is tied up in the defence estate. The estate has a book value of nearly £20 billion and a one per cent reduction would amount to £200 million, although this would not directly translate into disposal receipts. The annual accounts for 2008-09 showed that the Department spent some £2.9 billion on property management costs, accommodation charges and utilities. It is not easy to separately identify capital expenditure on the estate from the Department's annual accounts, although Defence Estates has estimated that around £1 billion was spent on estate-related projects in 2008-09.

How the Department manages its estate

1.7 The Department has made significant changes to the way it manages its estate in recent years. As the result of a review of estate management (Project Alexander) started in 2001, the Department transferred responsibility for maintaining and improving most of the estate to a central organisation, Defence Estates, which manages the private contractors that deliver estate services (for example maintenance). The parts of the Department that work and live on the estate (other Top Level Budget Holders, including the Royal Navy, Army and Royal Air Force) became the customers of Defence Estates, identifying and articulating their estate requests to Defence Estates and providing the funding so that Defence Estates can supply them. Some estate assets sit outside these arrangements and are managed separately, for example through Private Finance Initiative contracts.

Plans and goals for the defence estate

1.8 Defence Estates 2006 strategy "In Trust & On Trust"⁴ outlines its main aims and objectives for the estate it holds. The overall vision is:

"To have an estate of the right size and quality to support the delivery of defence capability, that is managed and developed effectively and efficiently in line with acknowledged best practice and is sensitive to social and environmental considerations."

² Putting the frontline first: smarter government, CM7753, December 2009.

³ Better measurement – better management, Property Benchmarking Service, Office of Government Commerce.

⁴ The Defence Estate Strategy 2006 – In Trust & On Trust, Defence Estates, Ministry of Defence.

1.9 The 2008-09 Stewardship Report states that there are six strategic aims for the estate⁵. Previous NAO reports have considered progress against the Department's strategic aims for the estate regarding quality and sustainability⁶. This report considers their progress against the following strategic aim:

“An estate of the right size to meet the military need. This will be an estate of fewer, larger sites in the UK and overseas, appropriately located and making the best use of available resources while remaining fully capable of meeting military needs”.

1.10 The Department's aim is to have an estate of fewer, larger sites in the UK and overseas, to be achieved through the development of defence communities by Service, for example Super Garrisons. The Department believes these will deliver efficiencies and either greater functional or formation coherence, while offering greater stability to personnel and increased integration with local economies and civilian society.

1.11 The Defence Estate Development Plan (the Development Plan), first published in 2008, is the Department's main vehicle for translating operational needs into estate requirements⁷. The Department rightly focuses on meeting operational needs, which are identified by the Government and the Services through White Papers and base reviews. Budget Holders calculate corresponding estate requirements that satisfy these operational needs, and communicate these estate requests to Defence Estates. From these Defence Estates compiles the Development Plan, which lists all the defence estate projects planned or underway and all the estate sites it intends to hold in 2030.

1.12 The Development Plan, however, gives insufficient attention to efficiency and cost reduction. There is no indication of progress made to date in meeting operational or efficiency objectives, nor future direction of travel. It does not articulate what the right size of the estate actually is, in terms of how well it meets requirements, either now or in 2030. No targets are set, such as for cost and size of the estate, nor milestones set to assess progress and trends. There are no supporting measures, such as data on value, cost, personnel and utilisation that would help the Department's senior management identify underutilised estate or evaluate alternatives. The Department has acknowledged this weakness and has developed a sub-strategy for the Development Plan that includes some supporting data, but gaps remain against most of the five key types of information we have identified as being necessary to support estate decisions, for example, there is no indicator on how much estate assets will be used. This will restrict the sub-strategy's usefulness in identifying savings.

⁵ The Stewardship Report on the Defence Estate 2008/09, Defence Estates, Ministry of Defence.

⁶ C&AG's report, Managing the Defence Estate, HC 25, 2005-06 and C&AG's report, Managing the Defence Estate: Quality and Sustainability, HC 154, 2006-07.

⁷ The Defence Estates Development Plan 2009, Defence Estates, Ministry of Defence.

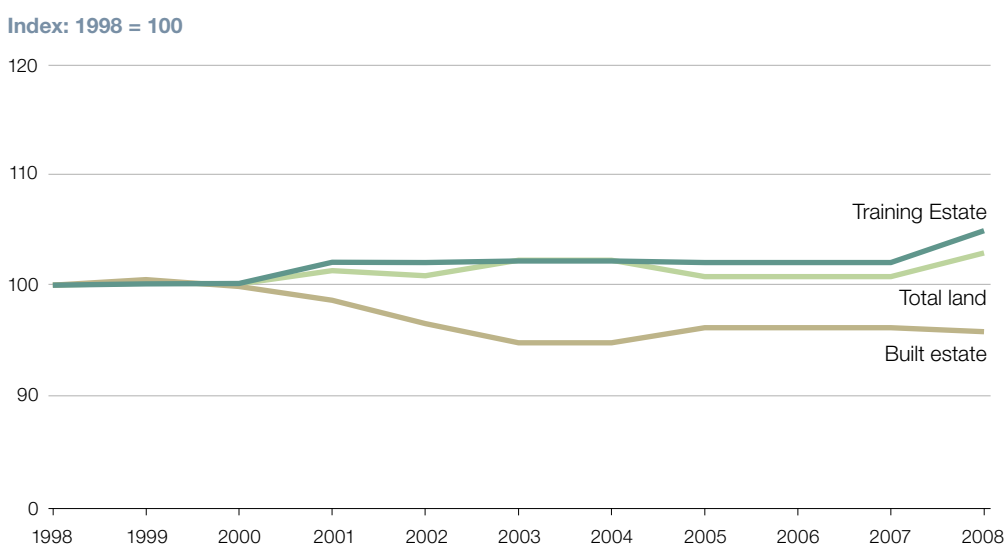
1.13 Despite the lack of metrics, the Development Plan has brought clear benefits to the Department’s estate planning. It clearly sets out, in terms of sites, what the current defence estate is and in broad terms how it will look in 2030. This long-term focus has been absent from previous defence estate management arrangements, and fits better with the long-term nature of estate projects. It also clearly establishes the key policy factors affecting the defence estate, through supporting documents, for example on accommodation strategy. As a public document, it is useful for communicating the Department’s plans to stakeholders, such as local authorities.

1.14 The Department currently owns over 4,000 sites in the UK. The Development Plan lists 525 of the most important defence sites in the UK, which constitute over 96 per cent of the Ministry of Defence’s total land holdings in the United Kingdom. The remaining 3,500 sites not included in the plan are very small, at an average size of just under four hectares. The Development Plan also includes 46 overseas defence sites, taking the total to 571.

Progress in getting an estate of the right size

1.15 Overall, there has been no reduction in the size of the UK defence estate between the last strategic defence review in 1998 and 2008, the latest year for which data are available (**Figure 2**). Data on the overseas defence estate are incomplete, but there has been a decline of more than 20 per cent in the amount of hectares held between 2002 and 2009.

Figure 2
The overall size of the UK defence estate



NOTE
1 Built estate includes only freehold and leasehold.

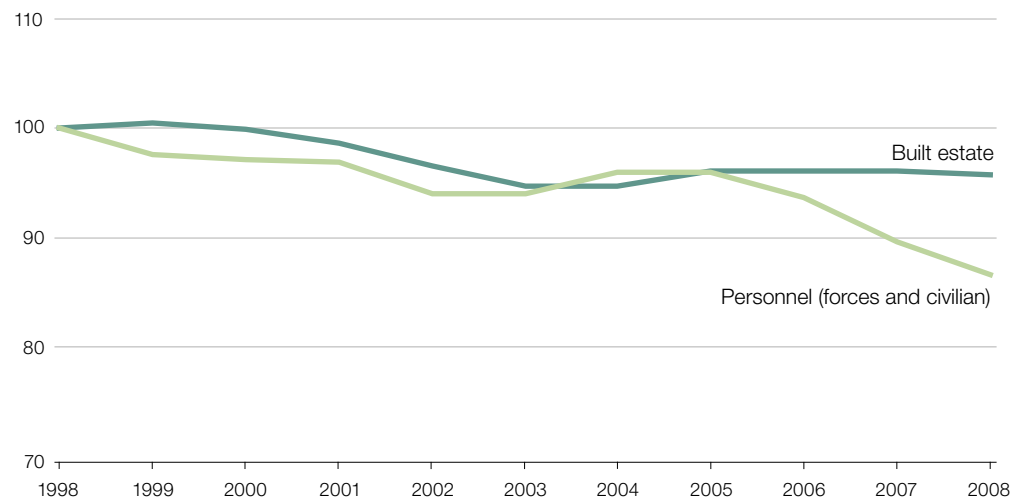
Source: Defence Statistics Year Book 1999-2009

1.16 The Department owns land via either freehold or leasehold, and can also use land to which it has been given rights of access. The Department has greater scope to rationalise sites it owns than sites it has access to but cannot directly sell. Nearly two-thirds of the UK defence estate (240,000 hectares) is owned by the Department and this proportion has remained relatively constant between 1998 and 2008. Excluding land that the Department has access rights to and the training estate, which has been subject to pressure as a result of increased operational activities in recent years, we found that that the Department has reduced the built estate it owns by some 3,400 hectares (from 79,900 hectares to 76,500 hectares between 1998 and 2008), or 4.3 per cent. While we would not necessarily expect a strong correlation between personnel to land, a comparison with the 13.4 per cent fall in UK personnel during the same period raises a question as to whether there are further opportunities for estate rationalisation (**Figure 3**). The reduction in land abroad has added pressure to the UK defence estate, as the proportion of total Ministry of Defence personnel based in the UK increased from 80 per cent in 2002 to 85 per cent in 2009, nevertheless, our comparison strips out this effect by comparing UK-based personnel with UK land holdings. The proportion of personnel based in the UK is likely to increase still further because of the need to accommodate personnel returning from overseas from Germany.

Figure 3

UK built defence estate and Ministry of Defence personnel based in the UK

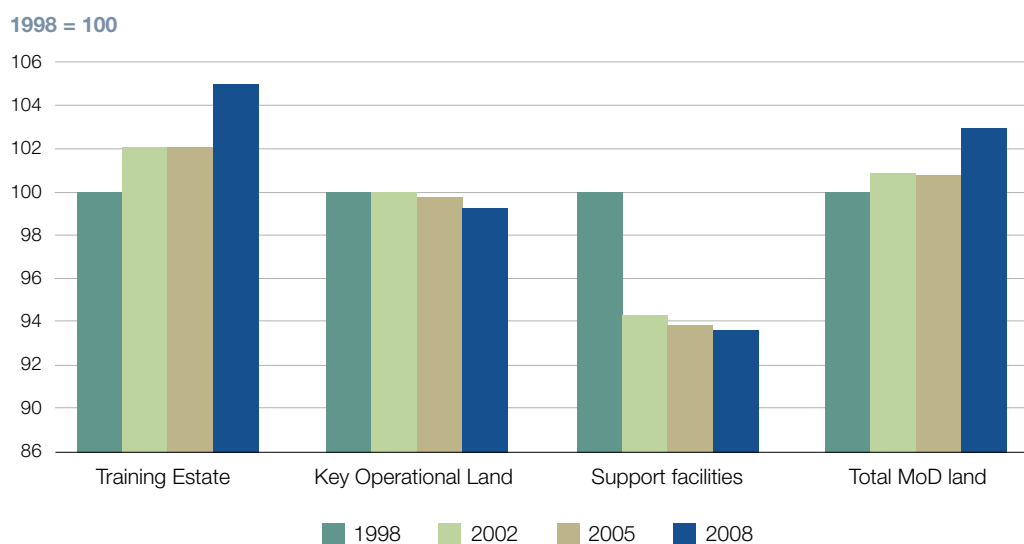
Index: 1998 = 100



Source: Defence Statistics Year Book 1999-2009

1.17 There has been considerable change in the types of estate held by the Department (**Figure 4**). Falls in the size of key operational land and support facilities have been more than outweighed by an increase in the training estate. By type of estate, the amount (in hectares) of the defence estate formed by airfields, naval bases, research and development and radio estate sites all fell between 1998 and 2008, while training areas and ranges, barracks, storage and supply depots and miscellaneous estate all increased in the same period (**Figure 5**).

Figure 4
Trends in estate holdings by category of land



Source: Defence Statistics Handbook

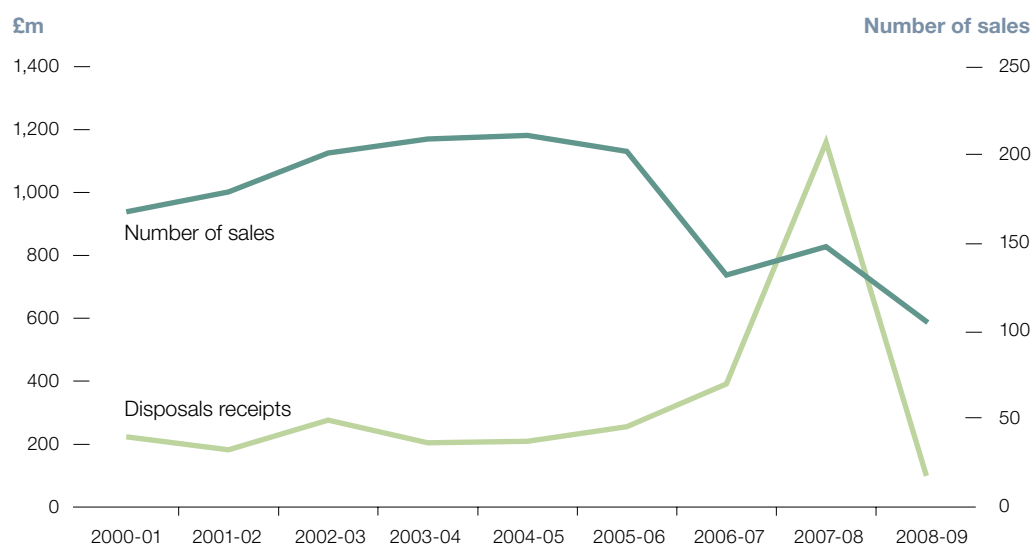
Figure 5
Land by type of use

	1998	2008	Percentage change	Proportion of the estate in 2008 (%)
Training areas, ranges	277.8	291.6	5	78.1
Airfields	27.0	26.2	-3	7.0
Research and Development	22.0	18.4	-16	4.9
Storage, supply depots	10.9	11.7	7	3.1
Barracks, camps	10.8	11.4	6	3.1
Miscellaneous	5.9	6.6	12	1.8
Radio sites	7.2	6.4	-11	1.7
Naval bases	1.3	1.2	-8	0.3
Total	362.9	373.5		

Source: Defence Statistics Yearbook 1999, 2009

1.18 The Department has raised £3.4 billion between 1998-99 and 2008-09 through selling surplus property (**Figure 6**), with average sale receipts over £200 million a year up to 2007-08, when the sale of Chelsea Barracks in central London generated nearly £1 billion. Defence Estates has a dedicated disposal team to manage sales of land and assets identified as surplus by Budget Holders. Where a Budget Holder has identified a site as being surplus to its needs, Defence Estates is notified. Defence Estates then explores whether other Budget Holders could use the site. If there are no suitable alternative uses for an estate site, it is listed for disposal. Defence Estates announced targets for disposal value in their 2006 Strategy, which were exceeded by a combined total of £1 billion in 2006-07 and 2007-08. The disposal target of £305 million for 2008-09 was not met however, with actual sales totalling £110 million. On the time taken to dispose of assets that have been identified as surplus, throughout the period the Department has generally met the Treasury's previous two-year target for disposing of surplus property (**Figure 7**).

Figure 6
Number and value of defence estate sales



Source: Defence Estate Disposals database

Figure 7
Time taken to dispose of surplus estate

Percentage of sites sold within timescales	2005-06	2006-07	2007-08	2008-09
	%	%	%	%
Under two years	86	76	84	85
Under five years	93	90	97	99
More than ten years	2	5	2	1

NOTE

1 Time is from when site is handed over to DE Disposals team to date of legal completion of sale.

Source: National Audit Office Analysis of Defence Estate Disposals database

1.19 The Department has identified and taken many rationalisation opportunities individually, usually through responding to operational requirements (for example, consolidating defence intelligence in one site at Wyton) but also through wider business change projects (for example co-locating Defence Equipment and Support headquarters at Abbey Wood). Defence Estates also identified an innovative approach to rationalisation in the form of Project MoDEL. The project sought to consolidate staff and functions it had in six London facilities into an expanded RAF Northolt. A new “Prime Plus” contract was developed to provide the financing, which allowed the development of new and refurbished buildings to be financed through the expected sale proceeds from released sites. This project has generated £231 million (plus the associated Chelsea Barracks receipts) in direct sales, and is intended to generate further savings from the co-location of personnel in one location.

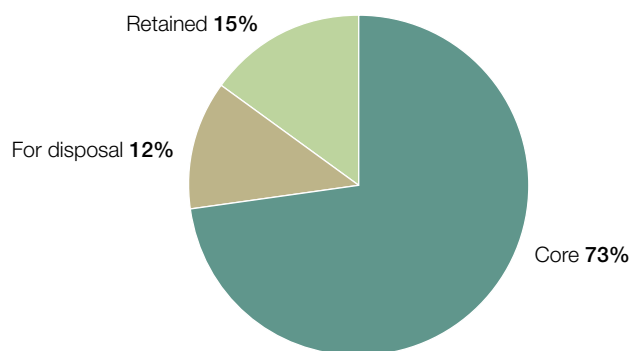
Deciding what estate it needs

1.20 The Department believes that there is a limit to how far it can rationalise the estate and make better use of existing estate without compromising operational needs or other policies, such as on improving accommodation. It also believes some estate is required as a buffer to help provide the flexibility to respond to changing needs. The Department has rated the 571 sites contained in its Development Plan depending how important they are assessed to be in meeting operational needs and providing flexibility. The ratings assigned are:

- **Core** – needed for defence purposes to at least 2030.
- **Retained** – needed for defence purposes to at least 2015.
- **For Disposal** – no clear current operational purpose identified by parent Budget Holder, and is therefore surplus to defence needs.

Seventy three per cent of the 571 defence sites in the UK and overseas are considered core, 15 per cent have been given retained status and 12 per cent have been identified as surplus to defence needs (**Figure 8**).

Figure 8
Sites (UK and overseas) by status

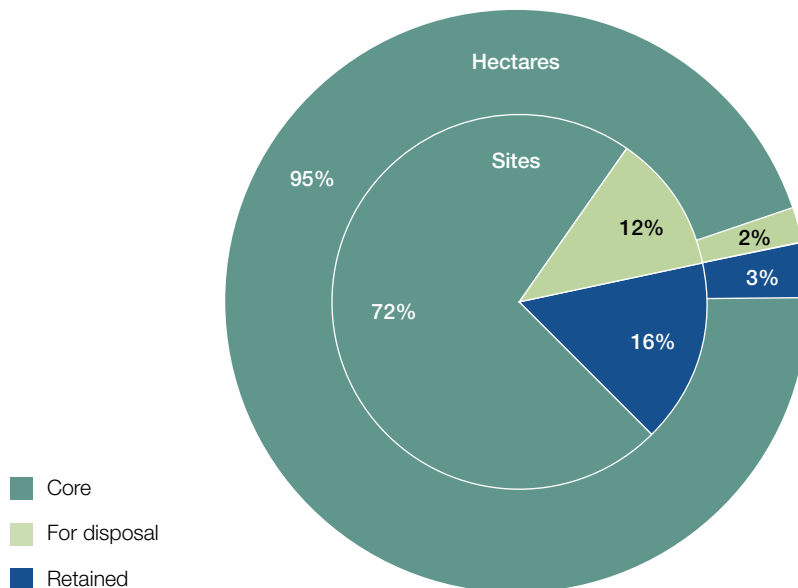


Source: Defence Estates Development Plan 2010

1.21 In the UK there are 525 sites, of which 72 per cent are rated as core, accounting for over 95 per cent of defence estate land in the UK (**Figure 9** overleaf). Retained status is applied to 16 per cent of UK defence sites (three per cent of land). The Department has identified 12 per cent of its sites (2 per cent of land) as having no current operational need and being available for disposal. UK core sites are on average seven times larger than sites categorised as retained or for disposal. There is a similar pattern in the international estate (**Figure 10** overleaf). Disposing of overseas estate usually does not secure disposal receipts as the assets have to be returned to the host nation. This increases the pressure to find cost savings in the UK.

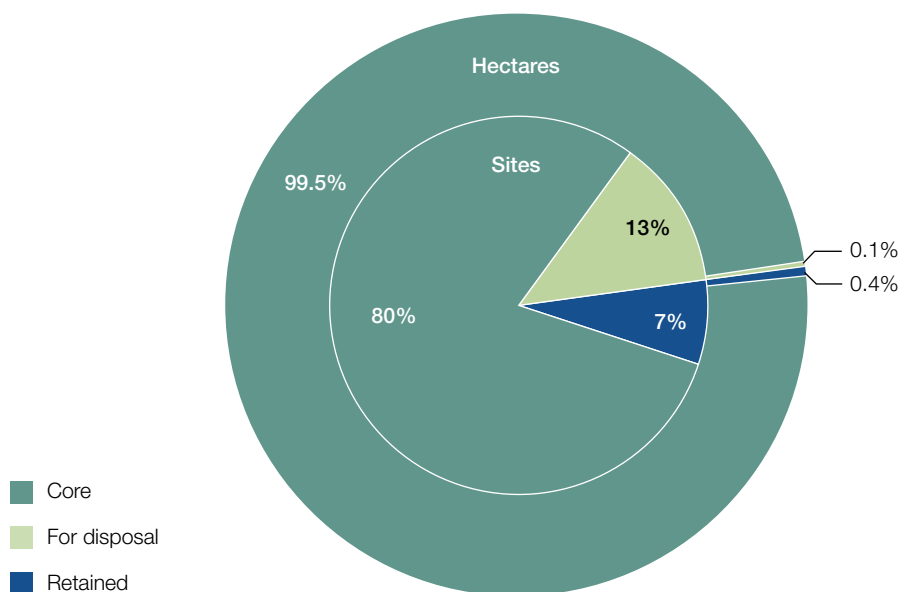
1.22 Training ranges and estate is the largest single category of land in the defence estate at over 290,000 hectares, accounting for nearly 80 per cent of the defence estate. The training estate, which has been under pressure from the rate of recent operational activities, increased by 5 per cent during 1998 and 2008. Stripping out the defence training estate from these graphs indicate that the large majority of the UK and overseas defence estate is still considered core (**Figure 11** and **Figure 12** on page 21). The current system for classifying estate is effective in ensuring land is available to support operational requirements, but is too broad to be useful in driving down costs or informing decisions about estate rationalisation.

Figure 9
UK defence estate by status (sites and hectares)



Source: National Audit Office analysis of Development Plan, 2010

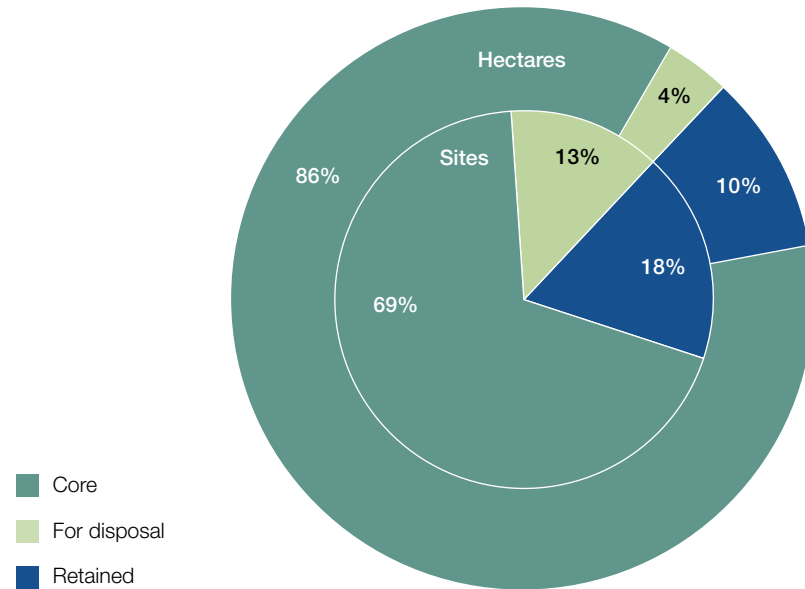
Figure 10
Overseas defence estate by status (sites and hectares)



Source: National Audit Office analysis of Development Plan, 2010

Figure 11

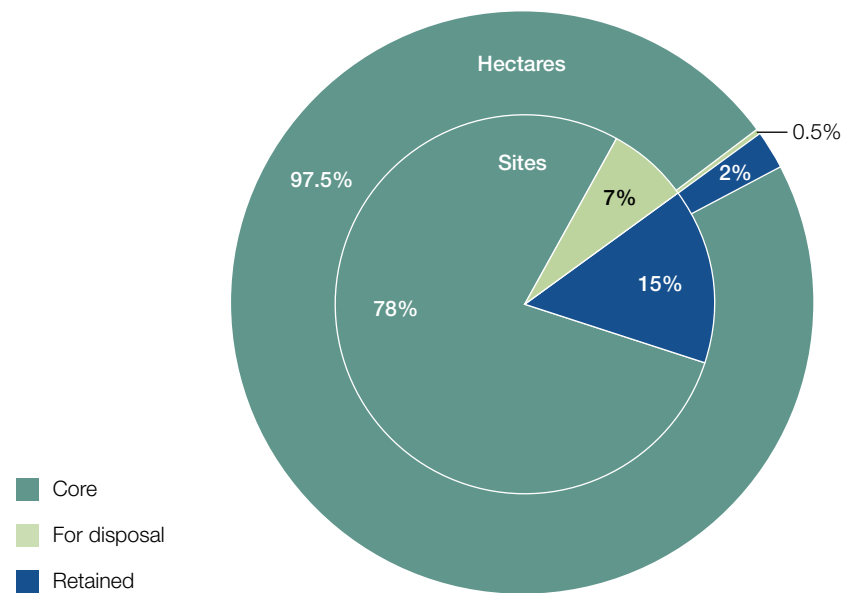
The UK estate without training estate (sites and hectares)



Source: National Audit Office analysis of Development Plan, 2010

Figure 12

The overseas estate without training estate (sites and hectares)



Source: National Audit Office analysis of Development Plan, 2010

1.23 Possible reasons why so many sites are rated as core include:

- The process for categorising sites is driven, rightly, by operational requirements, but insufficient weight is given to other factors such as cost. The current process does not ask customers to:
 - assess relative operational priority within the category of core sites;
 - indicate to what extent there are opportunities to re-use or dispose of pockets of land in “core” and “retained sites” which are not of operational importance;
 - consider how well the site is utilised or potential disposal receipts; and
 - take into account the cost of maintaining the estate – broadly speaking every one percent of the estate costs £29 million a year to run.
- Budget Holders determine if a site is core through a set of agreed questions. The questions are vague, however, (see **Figure 13**) and most estate sites can satisfy them.
- Budget Holders generate their estate requirements internally and communicate these requirements to Defence Estates. There is little central visibility in how these estimates are generated. Defence Estates is not well placed to weigh up and challenge Budget Holder assessments of estate requirements and determine relative priorities within Budget Holders. Some Budget Holders said that core sites might still be considered as candidates for rationalisation if a better alternative was identified.

Figure 13

Central questions that determine site status

- 1 Does the site have a defined Defence function?
- 2 Is the Defence function for a minimum of 15 years?
- 3 Does the existing function have to be in this precise location?
- 4 Is the existing function an essential operational or support function in relation to Defence tasks, around which other Defence functions may cluster?
- 5 Is the site so large/significant that a replacement site would be very difficult to find, or would be unaffordable?
- 6 Could the site be redeveloped or significantly adapted to other Defence functions to provide space for additional staff?

Source: *Defence Estates*

- The lack of data on utilisation means that even lightly-utilised sites might be considered core if they satisfy a defence requirement or if they would be costly to replace if needed in future. This may be appropriate, but the Department should know the consequences of maintaining this flexibility. During our discussion with comparators, we were told that under-utilised buildings may be retained in order to provide future flexibility, but that this flexibility is costed, both in terms of ongoing running costs and the opportunity cost of disposal receipts. To help assist in this regard, in 2009 the Department initiated Project Bracken to help identify surplus pockets of land within a number of sites.

Information to assess estate efficiency and benchmark performance

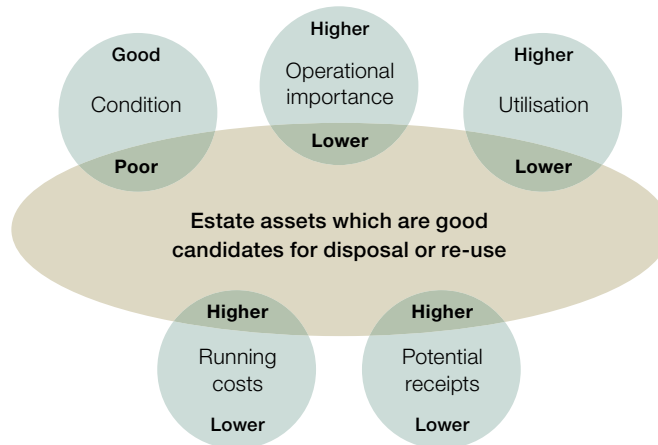
1.24 Through discussions with comparators and the Office of Government Commerce, and our own analysis, we have identified five types of information that the Department needs to know centrally, for each estate asset, in order to support operational needs, reduce costs and inform decisions about estate rationalisation (**Figure 14** overleaf):

- **How important it is operationally** – a site not critical to meeting defence requirements could be identified as a rationalisation opportunity.
- **A broad estimate of how much it is worth** – a site that if sold would generate large revenues would be a suitable candidate for rationalisation.
- **How much it costs to run** – sites with high running costs could be identified as rationalisation opportunities.
- **How heavily it is utilised** – a lowly-utilised site could be a suitable candidate for rationalisation.
- **The condition it is in** – a site that is in poor condition and that needs a lot of investment to make it fit for purpose, could be a suitable candidate for disposal.

A lack of information on any of these dimensions would mean the Department makes estate decisions without having sufficient evidence to identify spare capacity and decide which sites to keep and which to rationalise or re-use. Other organisations we spoke to all emphasised the importance of having good data on value and utilisation in order to manage estate effectively and identify savings.

Figure 14

The asset information needed to drive cost reduction



Source: National Audit Office

1.25 The Department collects some information for its estate sites. For example, Budget Holders routinely produce Estate Development Plans that thoroughly assess, for a specific site, its condition, use and opportunities for rationalisation. But data are often incomplete, inaccurate, or not held centrally, which means that a strategic analysis of the entire defence estate is very difficult (**Figure 15**). Work on populating the Estate Performance Measurement System (EPMS), which the NAO reviewed in 2007⁸, has now been discontinued as the Department deemed it too complex and not fit for purpose – the data system underpinning EPMS may now be used to support a new Balanced Scorecard to assess the performance of estate projects and contractors.

1.26 The Department recognises that it does not have the data it needs to manage its estate effectively and is taking steps to improve its collection and use of data. For example, it is currently investigating how it can benchmark with other organisations how well it is using some non-office estate assets, like workshops, messes, and sports halls. Defence Estates is developing a balanced scorecard that will allow it to assess how effectively it is managing projects and contractors. For the new scorecard to be useful in driving long-term cost reduction it also needs to have comprehensive data on how much the estate is needed, how much it is worth, how much it costs to run and how much it is being used.

Figure 15
Data needed to drive efficiency

Information required	Are data collected locally	Are the data comprehensive?	Are data available centrally?
Operational importance	●	●	●
Potential sale value	●	●	●
Running cost	●	●	●
Utilisation data	●	●	●
Condition	●	●	●

● Yes ● Partly ● No

Source: National Audit Office analysis based on data analysis, document review and interviews – please see Appendix Three for supporting information

1.27 The Department has managed offices effectively: the National Audit Office found in 2007 that the Department had the fifth lowest cost per square metre out of 16 Departments⁹. The OGC has emphasised the need for departments to collect information that is accurate, complete and readily accessible to decision makers, and it established the Property Benchmarking Service in 2005 to help support this. From April 2008, central government departments and their arms length bodies were required to measure the efficiency, effectiveness and environmental sustainability of administrative office occupations over 500 sqm using a series of benchmarks (see **Figure 16** overleaf). The OGC's State of the Estate report¹⁰ shows that the Department performed well in 2009, with a total property cost score of 123 exceeding the benchmarked average of 100. The model is only for offices though – only 25 Ministry of Defence buildings were included in the benchmarks.

1.28 The Department collects information on the use of its training estate, but it does not have an indicator for senior management which provides a high level view of whether the training estate is being used at optimum level. There are significant challenges establishing suitable benchmarks for properties that have no obvious comparators across government, such as airfields, barracks and munitions sites. The challenges of managing such a diverse estate are considerable – during our discussions with other organisations, comparators told us they also found it challenging establishing benchmarks against which to assess performance for non-office estate, but that they are still pursuing them. Nevertheless, all organisations we consulted emphasised the need for reliable information to make informed decisions about estate rationalisation.

⁹ CAG's report, Improving the efficiency of central government's office property, HC 8, 2007-08.

¹⁰ The State of the Estate in 2009 – A report on the efficiency and sustainability of the Government Estate, Office of Government Commerce.

Figure 16

The OGC Performance Framework Model for Offices

Key component	Metrics	Specific data collected
Efficiency	Cost efficiency	Rent/sqm Rates/sqm Maintenance costs Other costs e.g. charges
	Space efficiency	Workstation density Capacity utilisation
Effectiveness	Workplace productivity	Facilities Environment Functional suitability
	Condition, compliance, flexibility	
Environmental sustainability	Environmental impact	Carbon/Full Time Equivalent Water m3/Full Time Equivalent Non-recycled waste/Full Time Equivalent

Source: Office of Government Commerce, *Better measurement, better management*, 2006

Challenges to rationalisation

1.29 The Department perceives a number of barriers to identifying and disposing of surplus estate, including:

- **Insufficient funds to carry out rationalisation projects.** This risk was recognised in our previous report on *Managing the Defence Estate*¹¹. For example, co-locating regional headquarters into one larger base may reduce running costs and increase sale receipts, but requires upfront investment.
- **Lack of incentives within the Department to identify sites for disposal.** While there are some incentives, such as release to re-provide, they are insufficient to encourage all players to identify and release surplus estate. Base commanders do not see any direct benefit in identifying sites for disposal.

11 C&AG's report, *Managing the Defence Estate*, HC 25, 2005-06.

- **The characteristics of land** can limit what estate can be disposed of, for example:
 - **Heritage and scientific considerations.** As at March 2009, the defence estate contained 797 listed buildings and 737 scheduled monuments, with a further 333 scheduled monuments on land which the Department has a licence to train on. The Department also has management responsibility for 172 Sites of Special Scientific Interest. The Department has a duty of care to historic buildings and scheduled monuments and the listed status of buildings can impact on the ability to change use.
 - **High costs of clean-up** – sites used for military purposes, such as training ranges, can be polluted or dangerous, entailing either costly clean-up before being sold, or being sold at a discount.
 - **Land may be inaccessible** – each site is made up of one or more discrete pieces of land called “Land Parcels”. So while a Site may be considered core, some of the land within it may be earmarked for disposal.

Appendix One

Methodology

Fieldwork was carried out between January 2010 and May 2010. The main methodologies we used were:

Methodology

Data analysis – we analysed data collected by the Ministry of Defence on estate size, assets, cost, disposal receipts, and personnel numbers. This data was taken from a variety of databases – including the Estate Performance Measurement System, Estate Performance Tool, Bracken, Defence Property Gazetteer, Land Asset Register – and from DASA. To ensure data accuracy we checked outliers with data providers, interviewed staff and reviewed data handling guidance. Where gaps in the data existed, we drew attention to the gap but did not create data ourselves.

Discussions with other organisations – we spoke to a range of other public and private sector organisations about estate management, including:

- Office of Government Commerce
- Shell
- Shareholder Executive
- Network Rail
- The Crown Estate
- Ministry of Justice
- HM Treasury

We discussed how these organisations managed their estate and collected and used data, to improve our understanding of how organisations manage large and/or specialised estates including land and property assets. We did not compare actual performance.

Document review – we reviewed the Defence Estate Development Plan, Integrated Estate Management Plans, Expenditure reports, Budget Holder estate documents, White Papers and Defence Estate board papers.

Interviews with staff – we interviewed key staff from the Ministry of Defence, Defence Estates and from the users of the estate (Budget Holders).

Reason for carrying it out

This allowed us to establish the current size, composition, use and value of the defence estate, and the direction of travel over time.

This allowed us to assess how the Ministry of Defence estate practices compared with its peers, in particular how it collected and used performance data to help it manage estate effectively. It also allowed us to identify what good performance in estate management looks like.

This allowed us to ascertain reasons why the estate is at its current size and composition, identify barriers to effective estate management and rationalisation, and analyse their collection and use of information.

This helped us identify key issues, ascertain reasons why the estate is at its current size and composition and discuss their collection and use of information.

Appendix Two

Table of Figures

Data presented are for all sites in the Defence Estate Development Plan as at January 2010. This does not include the 3,500 smaller sites that the Department also owns.

Budget Holder	Core	For disposal	Retained	Total
Air				
Number of sites	51	11	17	79
Total size of sites (hectares)	18,196	1,260	2,880	22,335
Average size of sites (hectares)	357	115	169	283
Central				
Number of sites	19	6	5	30
Total size of sites (hectares)	1,563	154	93	1,809
Average size of sites (hectares)	82	26	19	60
Defence Estates				
Number of sites	5	5	0	10
Total size of sites (hectares)	31	565	0	596
Average size of sites (hectares)	6	113	0	60
DE Defence Training Estate				
Number of sites	78	3	4	85
Total size of sites (hectares)	273,719	4,784	3,095	281,598
Average size of sites (hectares)	3,509	1,595	774	3,313
Defence Equipment & Support				
Number of sites	60	4	22	86
Total size of sites (hectares)	27,304	46	2,310	29,660
Average size of sites (hectares)	455	12	105	345
Fleet				
Number of sites	18	2	3	23
Total size of sites (hectares)	3,527	19	43	3,589
Average size of sites (hectares)	196	10	14	156

Budget Holder	Core	For disposal	Retained	Total
Land				
Number of sites	128	30	33	191
Total size of sites (hectares)	16,451	782	2,497	19,730
Average size of sites (hectares)	129	26	76	103
Permanent Joint Head Quarters				
Number of sites	1	0	0	1
Total size of sites (hectares)	18	0	0	18
Average size of sites (hectares)	18	0	0	18
Trading Fund				
Number of sites	19	1	0	20
Total size of sites (hectares)	797	1	0	798
Average size of sites (hectares)	42	1	0	40
UK total				
Number of sites	379	62	84	525
Total size of sites (hectares)	341,604	7,610	10,917	360,131
Average size of sites (hectares)	901	123	130	686
International				
Number of sites	37	6	3	46
Total size of sites (hectares)	204,640	201	854	205,695
Average size of sites (hectares)	5,531	34	285	4,472
Grand total (UK and International)				
Number of sites	416	68	87	571
Total size of sites (hectares)	546,244	7,811	11,771	565,826
Average size of sites (hectares)	1,313	115	135	991

NOTE

1 Totals may not tally due to rounding.

Source: National Audit Office analysis of the Defence Estate Development Plan, 2010

Appendix Three

Collection of estate information

Data required	Are the data collected locally?	Are the data comprehensive?	Are the data available centrally?
Operational importance	<p>Yes.</p> <p>The Development Plan does contain some detail on what an asset is used for, but is not comprehensive. Budget Holders produce much more detailed analysis in their Estate Development Plans for their estate sites.</p>	<p>No.</p> <p>The data held centrally in the Development Plan are not useful in determining what is based on an estate site. Budget Holders produce more detail in their plans, but this is not collected centrally.</p> <p>3,500 smaller defence estate sites are not included in the Development Plan.</p>	<p>Partly.</p> <p>Data are available centrally, but is of limited use due to the lack of granularity.</p> <p>The database is a “live” database and no back records are kept to allow trend analysis.</p>
Potential sale value	<p>No.</p> <p>Data on asset value is kept in the Departmental Property Gazetteer.</p> <p>The Department estimates predicted sale value through an A-G banding system.</p>	<p>No.</p> <p>The database is not completely accurate as it is not updated as often as required.</p> <p>The Department has done this for 200 sites only and most of these are core. Furthermore, the estimates of value are based on current use, rather than changes of use should planning permission be obtained.</p>	<p>Partly.</p> <p>Data on book value are available centrally. However values are attached to parcels of land which are difficult to reconcile to defence site level as unique identifiers are often inaccurate.</p> <p>Estimates are held centrally, but over half the sites in the Development Plan are not estimated.</p>
Running costs	<p>Yes.</p> <p>Regional Prime Contractors collect running cost data for estate they are responsible for.</p>	<p>No.</p> <p>Regional Prime Contractors are responsible for 60 per cent of sites.</p>	<p>No.</p> <p>The Estate Performance Measurement System has not been set up to collect data from the Regional Prime Contractors, and there is a lack of data on the remaining 40 per cent of the estate.</p>

Data required	Are the data collected locally?	Are the data comprehensive?	Are the data available centrally?
Utilisation	<p data-bbox="397 439 440 461">Yes.</p> <p data-bbox="397 483 719 562">Some utilisation data are collected at site level, especially for the training estate.</p> <p data-bbox="397 584 719 730">There is an estimate of spare capacity on the Estate Planning Tool for individual assets, but this is not a robust measure as it is an estimate.</p> <p data-bbox="397 752 719 887">Data are not of a good or consistent quality, and the data that are collected are not routinely inputted onto the central data systems designed for the purpose.</p>	<p data-bbox="751 439 794 461">No.</p> <p data-bbox="751 483 1058 528">There is little utilisation data for other types of specialist estate.</p>	<p data-bbox="1102 439 1161 461">Partly.</p> <p data-bbox="1102 483 1437 528">The Department collects data on the office estate.</p> <p data-bbox="1102 551 1437 607">The Department is able to view and analyse training estate data.</p>
Condition	<p data-bbox="397 909 440 931">Yes.</p> <p data-bbox="397 954 719 1088">Regional Prime Contractors collect condition data for assets on the estate. The Department has recently undertaken a condition survey of its housing.</p>	<p data-bbox="751 909 794 931">No.</p> <p data-bbox="751 954 1058 1066">Regional Prime Contractors manage 60 per cent of the estate. There are no data on the sites they do not manage.</p> <p data-bbox="751 1088 1058 1155">The Department has recently undertaken a condition survey of its housing.</p>	<p data-bbox="1102 909 1161 931">Partly.</p> <p data-bbox="1102 954 1437 999">Yes, for those sites managed by prime contractors.</p>



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