

Ministry of Defence  
**Progress in Reducing Stocks**



REPORT BY THE COMPTROLLER AND AUDITOR GENERAL  
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# executive summary

- 1 In 1998 the Ministry of Defence (the Department) estimated that it held stocks valued at £19 billion - £11 billion non-munitions and £8 billion munitions<sup>1</sup>. The Strategic Defence Review concluded that there was scope for significant reductions in stocks in the post Cold War environment and that savings in logistics should be used to fund the required enhancements to military capability to support joint expeditionary forces. The Review set a 20 per cent (£2.2 billion) stock reduction target for non-munitions stocks. This target was incorporated in one of the Department's Public Service Agreements, and was to be achieved by April 2001. The Department has reported to Parliament that it has achieved the target by a considerable margin. Significant reductions have been made but because of weaknesses in the measurement regime we are not fully able to validate performance.
- 2 This report examines the Department's performance in reducing its stocks and whether there is scope for further stock reductions. It follows our 1998 Report: A Case Study of Stores Management in the Ministry of Defence. The methodology we adopted is set out in Appendix 1.
- 3 The Department has made significant progress in reducing stocks but there is considerable scope for further reductions. Our recommendations should contribute to the Department's efforts to reduce surplus stocks.

## The Department has made significant progress in reducing stocks (Part 1)

- 4 The Department has undertaken specific actions which have resulted in significant stock reductions. The three-year target period 1998 to 2001 covered the establishment of the Defence Logistics Organisation. In the first two years the Department instigated action, including a review of the top 1,000 high value items held by each of the three Services (Sea, Land and Air). This has resulted in reductions of more than one quarter of these items, valued at £595 million. In addition stock managers reviewed their holdings, concentrating on obsolete stocks. Since the establishment of the Defence Logistics Organisation in April 2000, the Service environments have set targets for stock disposals monitored monthly. Results were impressive with Air achieving more than £1 billion reductions in the six months to March 2001.
- 5 The Department has reported stock reductions of £2.8 billion, exceeding its target by £600 million. These figures need to be interpreted with caution. The Department faced a very considerable challenge in transforming the three single Service organisations into a modern and truly joint management system. At the time the reduction target was set, stock information was not totally reliable, the basis of the target was not clearly defined and there was no consistent understanding of what should be counted as a reduction. The target was set on a net book value basis, taking into account depreciation of stock

<sup>1</sup> The figures are taken from the Department's Strategic Defence Review Cm 3999 July 1998 paragraph 185 and are based on the Department's Balance Sheets at April 1998. They are net book values after depreciation and provisions (see Figure 4).

value due to age or usage, but performance has been monitored and reported in gross book value terms. At the outset many stock items were over-valued and reducing the price of stock has contributed to the Department's overall stock reductions. For example £400 million of Air's £755 million stock reduction by June 1999 was achieved by writing down stock values with no change in actual volumes of stock held. On the other hand a number of items had nil or notional prices and the Defence Logistics Organisation has undertaken a great deal of work to establish appropriate prices which has resulted in price increases of some £100 million. We have commended the efforts to validate prices in our financial audits.

- 6 The Department decided at the time that although it could have done more work to establish baselines and agree a uniform approach, this would have taken time and would have inevitably delayed progress in achieving stock reductions. The Department has recognised the problems arising from the stock reduction exercise in its lessons learned report for future target setting. It has made great efforts to improve stock systems and data and our annual financial audits have identified significant improvements, although as our audit of the 2000-01 consolidated accounts reported, further progress is still required and new systems will not be fully operating for a number of years. The difficulties in measuring achievements mean that the Department cannot identify the precise extent to which stock reductions have resulted from disposing of surplus stock or from revaluing stock. There have been significant disposals of stocks and taken together with the initiatives to improve financial and management data, this amounts to very significant progress.

## There is significant scope for further reductions (Part 2)

- 7 The Department has established a clear strategic direction for better inventory management and is developing its sustainability policy in line with the need for rapid, mobile expeditionary forces. In some areas this policy could lead to a requirement for new stocks to be built up but in other areas there would be scope for significant stock reductions.
- 8 The Defence Logistics Organisation has set a strategic objective to reduce the cost of its outputs by 20 per cent by 2005. Stock reductions contribute to reducing costs and the Defence Logistics Organisation has set an overall 5 per cent target for stock reductions in 2001-02 and 2002-03, with the intention of setting similar targets for following years. As a result of the implementation of Resource Accounting and Budgeting across the Department, the Defence Logistics Organisation is introducing charges for assets and stocks to provide real incentives to teams to reduce their stock holdings. At the same time it is driving forward the work to transform the supply chain with a series of business improvement initiatives.
- 9 Large volumes of slow moving stock indicate significant scope for further reductions beyond those targets. The Department's own analysis of Air stocks, the largest Service environment, shows stocks valued at £1 billion classified as 'inactive' and a further £1 billion having a stock turn of more than 60 years. Our analysis of the Department's stock holdings showed that stocks valued at £12 billion (65 per cent of the total stock) are slow moving, where the Department holds more than 10 years of stock. We estimate that the annual cost to the Department of holding such stock is £870 million. For some items there will be good reasons why the Department has such slow moving stock particularly in peace time - it may be that when procuring new equipments all the associated spares were included. However, these arguments are less relevant to the Department's £2.7 billion slow moving consumable items







where many are readily available from industry. Part of the explanation for the slow moving consumable items stems from the legacy systems and processes which were operating prior to the establishment of the Defence Logistics Organisation and which will take some time to converge. The Department has recognised the need to change fundamentally the purchase of consumable items, for example through the establishment of the Non-Project Procurement Office.

- 10 From our detailed examination of high value items, worth about a tenth of the total inventory, we identified a number of cases of potential over-stocking. For example, Land holds 4,000 radiation detection units worth £10 million. Whilst these units could be used they are a throwback to the Cold War and lack the sensitivity needed for the modern battlefield. Air holds 440 years worth (at peace time rates of consumption) of fuel tanks worth £41 million. During military operations the tanks would be used at a faster rate but the Department has not yet completed its analysis to determine future requirements. In order to meet sustainability and readiness targets there is a requirement to hold stocks during peacetime but there is a need for stocks to be regularly monitored and for operational users to keep their requirements under review. We also identified errors in the inventory with 1,175 brass nuts being valued at £83 million when they should have been valued at £1.17. The Department has undertaken extensive validation exercises on stock prices but errors do still arise and are corrected when identified.
- 11 Slow moving stock could indicate that holdings exceed those required. This could reflect a change in requirements since items were originally purchased, particularly for items bought in bulk to last the full expected life of the equipment to which they relate, for example a fleet of aircraft. In recent years the Department has operated in a very different international environment and equipment numbers have fallen, with consequential reductions in the requirement for spare parts. Also forecast stock turns may not present a complete picture of the likely usage of items since they reflect historic demand and may not allow for changes in usage patterns.
- 12 In addition there are other strategic justifications for holding stock, irrespective of normal peacetime usage. These include the need to hold war reserves of complex stock which cannot be procured during likely warning times, and commercial decisions on the need to buffer against production lines being closed for key inventory items. Much work is underway to segment the inventory and adopt a more intelligent understanding of its dynamics. For example the Support Chain Integrated Business Team is developing critical success factors for inventory management.
- 13 The explanations for continued holdings of surplus stocks are various and stock reduction has not necessarily been a high priority in the past. While there has been a strong strategic push to reduce stocks since its establishment, the Defence Logistics Organisation faces many competing demands and is striving hard to meet the requirements of the front line deployed in many operations. And the pressure to minimise stocks is not as great as in the commercial world, although the introduction of Resource Accounting and Budgeting is having real impacts by highlighting the cost of holding stock and getting management attention. There remains a need on the part of stock managers to balance the drive for economy with meeting demands from customers and dealing with operational contingencies.
- 14 There is nevertheless much good practice in the Department that has wider application in the drive to reduce stocks. The Defence Logistics Organisation is undertaking important work on sustainability that is needed to gain a full appreciation of the demand for stocks, although analysis here is compromised

by the poor data on the reliability and usage of equipments. Good work is being achieved through headquarters initiatives such as the Support Chain Integrated Business Team and Heads of Specialisation who together provide a focus for expertise in inventory management, amongst other logistics disciplines. Project teams responsible for stock are reviewing stock holdings and using innovative techniques to identify further reductions. For example new partnering arrangements with industry have significantly reduced repair times for marine diesel engines leading to £5 million stock reductions. Other teams are driving down repair and maintenance costs and so reducing the demand for spares.

- 15 More innovative contracting is also leading to stock reductions. The Non-Project Procurement Office was set up to manage general stores. Better contracting has led to significant savings. In its first year of operations it reduced the number of its suppliers from 150 to just six, making savings of some £40 million on new contracts valued at £350 million. Other partnering agreements are resulting in the Department reducing its stocks and transferring stock holding activities and risks to contractors.



# Recommendations

**16** The Department recognises that whilst surplus stocks remain on the books, they represent a drain on resources which could otherwise be used to help make good current capability gaps or fund future procurements. Much effort is being expended on tackling these issues. We have identified examples of good practice as well as our own suggestions for areas of future work that should help the Department dispose of significant volumes of stocks.

- The Department should revisit its stock reduction targets and ensure that these take full account of the large volume of slow moving stock, particularly the high volumes of consumable items.
- In setting targets the Department should clearly define the target, establish robust baselines and ensure consistency in measuring achievements.
- As the Department's new stock systems will not be fully operating for a number of years project teams need to improve their management information so as to drive down surplus stocks. The Department also needs to improve its data on repair activity and failure rates so as to accelerate its work on sustainability.
- The Department should disseminate the good practices of some areas where teams have a full grip on the inventory - how much stock, where it is, its condition, value and costs of holding stock - as summarised in **Figure 1**. The good work of the Non-Project Procurement Office, together with the results of successful stock reduction projects, should continue to be widely disseminated in an effort to encourage cultural change, balancing the drive for economy in managing the inventory with meeting customer demands.

## 1 Summary of good practice initiatives included in report

Good Practice	Impact on Stocks
1. Setting targets (Part 1 and 2.4)	Setting targets for reducing stock and operating a robust performance monitoring regime should focus attention on driving down surplus stocks
2. Better inventory analysis	
<ul style="list-style-type: none"> <li>■ Reviewing high value and slow moving items (1.5 and 2.12-2.22)</li> </ul>	Systematic review of high value and slow moving items has led to identification of surplus stocks
<ul style="list-style-type: none"> <li>■ Front line user review of requirements (2.21)</li> </ul>	Timely review of requirements by front line users can lead to stock being declared surplus and disposal action initiated
<ul style="list-style-type: none"> <li>■ Detailed inventory analysis (2.29)</li> </ul>	Detailed analysis of stockholdings helps identify surplus stocks as demonstrated by the Helicopter Engines Integrated Project Team
3. Improving logistics systems	
<ul style="list-style-type: none"> <li>■ System convergence (2.10)</li> </ul>	Reduces inefficiencies, including duplication of stockholding that exists at present with many independent systems
<ul style="list-style-type: none"> <li>■ Asset tracking (2.10)</li> </ul>	Contributes to better use of existing assets
<ul style="list-style-type: none"> <li>■ Stock optimisation tools (2.28)</li> </ul>	Helps identify surplus stocks
<ul style="list-style-type: none"> <li>■ Reliability centred techniques (2.35 and 2.36)</li> </ul>	A more efficient maintenance process for equipments means lower stocks of spares required to achieve target performance
4. Innovative contracting	
<ul style="list-style-type: none"> <li>■ Contractor Logistics Support (2.16)</li> </ul>	Transfer of stock management risk to industry
<ul style="list-style-type: none"> <li>■ Non-Project Procurement Office (2.31)</li> </ul>	Faster stock turn should mean lower levels of stockholding are needed
<ul style="list-style-type: none"> <li>■ Direct Supply (2.32)</li> </ul>	In many cases industry premiums for direct supply are cheaper than the costs of holding stock
5. Logistics expertise (2.34)	
<ul style="list-style-type: none"> <li>■ Support Chain Integrated Business Team/Heads of Specialisation</li> </ul>	Source of expertise and guidance for Integrated Project Teams. Also sponsor of better practice ideas