The Risk of Fraud in Property Management
Report by the
Comptroller and Auditor General

Ministry of Defence

The Risk of Fraud in Property Management

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Comptroller and Auditor General

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Executive summary

Introduction

1 The Ministry of Defence (the Department) have spent an average of some £900 million annually over the last five years on property management on the defence estate in the United Kingdom. The estate is diverse and includes a built estate with more than 45,000 buildings on over 2,500 sites. Expenditure is managed by over 200 Property Managers, supported by Establishment Works Consultants who provide technical support and advice, and by Works Services Managers who engage and monitor sub-contractors to carry out necessary works. The risk of fraud and corruption (fraud) in property management is intrinsically high. The Department have made broad estimates suggesting that property management expenditure of up to £180 million a year – 20 per cent of the total – may be at risk of fraud, although there is no evidence of actual losses on this scale.

2 This Report examines the Department’s management of the risk of fraud in property management on their United Kingdom estate, excluding the parts run by agencies with Trading Fund status. The report is in three parts addressing: the Department’s policy, strategy and organisation on fraud; an assessment of controls and risk; and fraud investigation and lessons learned.

3 The Department are considering possible changes to their arrangements for property management, along the lines of ‘prime contracting’. This would involve passing to a single contractor financial responsibility for delivering works services including major construction work in one geographical region. And, as part of the introduction of resource accounting and budgeting, the Department are considering removing the current internal expenditure limit of £240,000 (plus VAT and fees) on each individual property management job, above which work is currently managed under different project arrangements. The Department are developing systems and checks to ensure that the risk of fraud is controlled in this new environment. Our report has been designed with these potential changes in mind. Although some may need to be adapted to the new structures, all of our recommendations will be as relevant to the new regime as they are to the current one.
Policy, strategy and organisation

4 The Department expect high ethical standards in their staff and their contractors. They have a clear policy that fraud will not be tolerated, that all suspected cases will be investigated, and that prosecutions will result in all cases where evidence of fraud is sufficiently strong to merit court action. We found that this policy was understood by Departmental staff, although it had not been communicated formally to the Department’s contractors: the Department are now preparing to circulate appropriate guidance to contractors. The Department do not, however, have a coherent strategy for implementing their policy, and have not carried out an assessment of the risks of fraud across the Department on which such a strategy could be based. Complicated organisation responsibilities for fraud reporting and investigation have made it difficult to discern the roles of the various fraud units, and to network experience in this specialised area. This problem is now being addressed by the Department.

5 Despite the absence of a coherent Department-wide strategy, the Department have in place a number of practices – such as separation of duties between those authorising and paying for works, open competition for staff recruitment and a rotation of serving staff, and well-defined accounting and audit arrangements – designed to minimise the likelihood of fraud. These practices have not, however, been reviewed in the light of increased contractorisation and improvements in information technology and the streamlining of organisations – which lead to both threats to, and opportunities for, fraud risk management.

6 For the defence estate, the Department have produced a business strategy which amongst other things sets out their plans to move towards prime contracting with the construction industry and recognises that, in so doing, they will need to place a high priority on deterring and preventing fraud. The Department also recognise, however, that property management expenditure is an area already at high risk from fraud. Small teams in the Department, including staff in the Defence Estates agency and Defence Fraud Analysis Unit, have attempted to highlight the importance of fraud risks in this area and to counter fraud. The Department acknowledge that in the past a fragmented approach has not achieved a high degree of success. As a response to this lack of success, the Defence Estates agency, Defence Fraud Analysis Unit and Ministry of Defence Police have improved their collaborative working. This culminated in the Defence Estates agency setting up a high level Fraud Prevention Steering Group – chaired by the Chief Executive of the Defence Estates agency with representatives from budget holders, the Defence Fraud Analysis Unit, Ministry of Defence Police and the Defence Estates agency. The primary functions of the Group are:
to co-ordinate the efforts of the different units in the Department who are combating fraud in the property management area;

to develop and implement a strategy for fraud deterrence and detection; and

to promote greater awareness of potentially fraudulent activities.

7 On property management expenditure, where contractors carry out, manage and monitor the majority of the work, we found that the Defence Estates agency’s contractual arrangements do not make clear the responsibilities of contractors to protect the Department from fraud. And there was no effective incentive or encouragement for commercial Works Services Managers or Establishment Works Consultants to prevent, detect or report fraudulent practices. In line with wider Departmental and Government initiatives on “smart” procurement and improving interfaces with the construction industry, the Department are looking to develop a partnership with a small number of “prime contractors” who will procure and manage maintenance work and new works for them on a regional basis. The Department recognise the need to consider fraud prevention and detection when implementing these changes, including encouraging contractors to work with them to combat fraud, but have yet to develop fully their proposals.

8 In order to take full advantage of an internal environment which is generally hostile to fraud, and to build on their current initiatives to further combat fraud, we recommend that the Department:

Summary recommendations

■ make sure their policy on fraud is well understood by property management contractors (paragraphs 2.2 to 2.6);

■ undertake a broad-based fraud risk assessment to inform a Department-wide fraud strategy (paragraphs 2.7 to 2.12); and then

■ locate more detailed risk assessments, for areas such as property management, within the broader framework (paragraphs 2.7 to 2.12 and 3.1 to 3.7);

■ set targets and monitor outcomes against key facets of the strategies (paragraphs 2.7 to 2.12);
- further simplify and clarify fraud reporting and networking responsibilities (paragraphs 2.13 to 2.22);

- further simplify investigation arrangements for fraud, making best use of those branches with appropriate skills and resources to perform important initial investigations (paragraphs 2.23 to 2.25); and

- examine ways of incentivising contractors, particularly in property management, to prevent and detect fraud (paragraphs 2.26 to 2.34).

**Risk assessment and controls**

9 In the absence of an up-to-date fraud risk assessment – a key element of any good practice fraud management model – we created a model of the property management transaction control regime to help define those risks, and how to mitigate them. We validated and refined the model in workshops with a group of the Department’s staff and tested some of the assumptions generated against actual processes and transactions at three sites. The model permits the quantification of the value of property management transactions exposed to a variety of fraud risks. The results show that at an average establishment some £580,000 (15 per cent) annually of property management expenditure could be lost to fraud, given the current level of control. This points to a figure of around £135 million expenditure on property management being potentially at risk from fraud, a figure of a similar order of magnitude to the Department’s own estimate. We found that the control regime for property management is not designed to counter a specific set of fraud risks, and local variations in the operation of controls, as to level and frequency, are not based on any objective analysis. Lower value transactions (below £1,000) are particularly vulnerable, both in the design of the controls and their operation. And more generally, the Department have not provided guidance in the way important controls – such as inspections of work required or carried out – should be operated. The Department intend to build on our risk assessment and risk model to improve the design of property management control over fraud risks.

10 The combination of our modelling work and our site visits also show that property management staff have a perception that expenditure is better controlled than it is in fact. Sample-based checks are applied less frequently than required. We observed other standard checks which are not being applied – such as checking work invoiced under term contracts to the standard rates. And we found check results which are not followed up – as, for example, where there are significant differences between Establishment Works Consultants’ estimates for jobs and the
values actually tendered. These findings suggest that not all property management staff fully understand the purpose of various controls, or how controls must be operated to provide the necessary assurance.

We recommend that the Department should:

- build on our risk assessment and risk model to improve the design of property management control over fraud risks (paragraphs 3.1 to 3.7);

- ensure that controls are operated to the depth and frequency necessary to provide the assurance the Department need, in particular:
  
  - that all requests for work have an adequate statement of requirement and are adequately specified by the Works Services Manager. And that requests are authorised and cost estimates are reliable, to control what work is done and how much is paid for it (paragraphs 3.14 to 3.26);
  
  - that Works Services Managers, property management staff, Establishment Works Consultants or building occupants, as appropriate, inspect work and that the nature and outcome of inspections is properly recorded (paragraphs 3.11 to 3.13, 3.23 and 3.41 to 3.50);
  
  - that Property Managers more actively review approved tender lists, the distribution of work between sub-contractors, and the operation of tender board controls (paragraphs 3.27 to 3.40);
  
  - that basic financial checks on over-billing are conducted to prevent simple over-charging or duplicate payments (paragraphs 3.51 to 3.60); and
  
  - that sample checks conducted by Establishment Works Consultants are completed and written up on time, and that Property Managers act on the results (paragraphs 3.61 to 3.63).
make better use of the expertise of Establishment Work Consultants by contracting them to help the Department to design a suitable audit strategy for checking the performance of the Works Services Manager, and by charging the Property Manager with monitoring closely whether that strategy is being carried out.

The Department’s response to fraud and lessons learned

One of the key elements in the effectiveness of fraud investigation is to ensure that staff know to whom they should report their suspicions. The Department’s arrangements for reporting have been complicated, with several potential reportees, the relevance of whom varied with the nature of the suspected fraud. The formation in 1999 of the Defence Fraud Analysis Unit brought together two of these reportees, and provided a focus for anti-fraud activity, but awareness of the new arrangements has not yet filtered through to all property management staff. Although there has been a substantial programme of presentations and the Defence Fraud Analysis Unit have a fraud ‘hotline’ answering service, we found that many Property Managers could not easily identify the most appropriate branch to contact, and, furthermore, that they found it difficult to distinguish between fraud, poor performance and sharp practice.

Another key source of information on possible fraud could come from examining the patterns and relationships in property management expenditure. The Department have just started to explore the data they possess, but we found that there are gaps in the data held – for example, no information on sub-contractors – and difficulties in extracting and analysing relevant data, and in making comparisons between establishments. The Department also periodically review property management at individual establishments, and have recently enhanced the scope of such reviews to cover empirical analysis of actual property management transactions. One of the first such reviews uncovered evidence of potential overpayments to contractors: the review team considered that one contractor had over-billed to the extent of 27 per cent of valid charges, although the commercial Works Services Manager has challenged a number of statements made by the review team.

The investigation of suspected fraud falls ultimately to the Ministry of Defence Police, who have a dedicated Fraud Squad, or to the relevant Service police. But initial enquiries may fall to Internal Audit’s Defence Fraud Analysis Unit, or, in the property management area, to a small Defence Estates agency team. Fraud investigation is a specialist area that benefits from specialist skills, and even then securing sufficiently strong evidence for successful prosecution is
difficult: of recent cases meriting pursuit, only half were taken forward to formal action, and there have been just five prosecutions, four of which were successful. None of the prosecutions arose from property management cases. On recoveries, the Department have recovered £68,000 against losses of £190,000 documented for the four cases resulting in convictions. In total, they have £1.1 million of individuals’ assets restrained pending future court proceedings. The Department are undertaking civil recovery actions in a number of ongoing cases, but they do not have ready information on the total losses they are pursuing by these means. Nor are there data on the cost or nature of various investigations, or of the cost-effectiveness of investigation approaches or routes. The Department’s Fraud Prevention Steering Group are now looking at ways of being more proactive in investigating possible fraud and taking recovery action.

More generally, the Department recognise that their central information on suspected fraud is weak. And, because there is no defined fraud strategy and associated targets, there are no performance indicators either. In response to these weaknesses, the Department have set in train work to create a central database of all suspected frauds. Ad hoc reviews, such as those of Internal Audit, provide limited indications of the quality of control systems – but where they have summarised their work, as in 1997, they have declined to provide positive assurances on the operation of those controls.

Lack of information also hinders the networking of experience between various stakeholders within the Department and outside. Although each of 13 Top Level Budget Holders appointed a fraud focal point in 1998, they have held only three meetings since that date and formal terms of reference have still to be agreed. By contrast, the Defence Fraud Analysis Unit have started a series of discussions with other government departments and the private sector. Sharing of experiences is particularly valuable to Property Managers – almost a fifth of whom had never attended any fraud awareness training, and almost half of whom had not done so for over two years.

We recommend that the Department should:

- further develop criteria, based on their experience of investigatory work, to help shape the investigation of cases from an early stage, and to identify the best route to secure appropriate judgements and recoveries (paragraphs 4.17 to 4.21);

- analyse the costs and results of the various investigatory routes and approaches, to help improve the cost-effectiveness of investigations (paragraphs 4.14 to 4.16);
improve the central collection and dissemination of information on actual and suspected frauds in the Department, including procurement fraud, and analyse it by key activity areas – such as property management (paragraphs 4.22 to 4.27);

build on existing IT systems to improve their information of property management expenditure and activity, and facilitate analysis of patterns and relationships that will highlight matters for further investigation (paragraphs 4.2 to 4.8 and 4.28);

ensure that they obtain accurate information on the adequacy and cost-effectiveness of controls operating against fraud in practice and act to improve them where necessary (paragraphs 4.29 to 4.34);

build on existing networking initiatives, and reinvigorate their ‘fraud focal point’ project, so as to promote Department-wide awareness of fraud and fraud risk management (paragraphs 4.35 to 4.41); and

ensure that key property management staff receive appropriate training and guidance on fraud risk management and that such knowledge is kept up-to-date (paragraphs 4.42 to 4.44).

Concluding comments

The Department’s management of fraud risks in the property maintenance area presents a mixed picture: the relatively low numbers of reported suspicions, and the absence of recent prosecutions, indicate no special cause for concern. But exploration of the underlying quality of controls, and of the arrangements and incentives for detecting and reporting fraud, suggests that this may not represent the true picture. Indeed the current level of control against fraud is unacceptably low. The Department’s traditional controls over fraud need to be reinterpreted for the new service delivery environment. We recommend that the Department:

reappraise their whole property management control environment in the light of increased contractorisation and changed business practices, to ensure that controls address current risks, that all players are incentivised or encouraged to root out fraud, and that detection arrangements take advantage of modern information technology;
ensure that they collect the basic data on activities, resources applied and outcomes to fuel better information systems, and to monitor actively the quality of fraud risk management in practice; and

review the balance of resourcing between units analysing, detecting and helping to prevent fraud, and those investigating suspicions reported, as well as how these resources are directed towards high risk expenditure. Although all staff engaged on fraud work appeared heavily loaded, central resourcing is heavily biased towards investigation over detection and prevention.

The Department have started to progress a number of useful reforms in managing fraud risks both across the organisation and in property management. And their review of the arrangements for procuring works services gives them an opportunity to implement some fundamental improvements in control. But they need to develop a clearer sense of how both will contribute to the assurance required in a coherent regime of management control.
Part 1: Introduction

1.1 The Ministry of Defence (the Department) spend some £900 million a year on property management in the United Kingdom, which includes maintenance work on buildings and low cost construction work. They are one of the largest single purchasers of maintenance work in the public sector. Broad estimates by the Department suggest that property management expenditure of up to £180 million a year (20 per cent of the total) may be at risk of fraud, although there is no evidence of actual losses on this scale.

Property management on the defence estate

Property management on the defence estate covers individual jobs below £240,000 plus VAT and fees (about £300,000), most of which are maintenance work but which can include minor new works. Examples of items of property management work include the replacement of windows, repairs to roofs, repairing leaky taps, grounds maintenance and extensions to buildings. The Department classify all work above the threshold of £240,000 plus VAT and fees as capital works expenditure which is managed under different project arrangements.

The Department’s expenditure on property management covers work which may be needed on:

- Over 250,000 structures such as buildings, runways, docks, aerials, masts and water towers. Buildings account for more than 45,000 of the total including office buildings, research facilities, hangars and workshops. These range from modern buildings to listed heritage buildings, some of which are over 250 years old; and

- 240,000 hectares of land of which two thirds are training lands.

The Department employ over 200 Property Managers in the United Kingdom, who are responsible for running the estate at over 2,500 individual sites. Each site is occupied by one or more of thirteen Top Level Budget Holders, belonging to either the Navy, the Army or the Royal Air Force or a central budget area within the Department.

At the majority of sites, the Property Manager works with a Works Services Manager, a commercial contractor who engages and manages subcontractors carrying out the maintenance work. And most Property Managers are advised and assisted by an Establishment Works Consultant, a commercial building and property consultant.

The Department are considering possible changes to their arrangements for property management, along the lines of ‘prime contracting’. This would involve passing to a single contractor, in each geographical region, responsibility for delivering works services. And, as part of the introduction of resource accounting and budgeting, the Department are considering removing their current internal expenditure limit on each individual property management job.
What is fraud?

1.2 Fraud includes dishonest acts committed by the employees of the Department, by external individuals or groups or by both employees and external parties working together to gain a financial advantage from the Department. Corruption involves external parties or the Department’s employees making payments or bestowing benefits on an employee. Where corruption is involved there may not be any immediate loss to the Department but positions of trust may become subject to abuse. For the purposes of this Report, we have grouped cases of fraud and cases of corruption together.

Definitions of fraud and corruption

Fraud has no precise legal definition. The Theft Acts of 1968 and 1978 cover the offences generally referred to as fraud and it is for the court to determine in a particular instance whether fraud has occurred. The Government Internal Audit Manual defines fraud as the use of deception with the intention of obtaining an advantage, avoiding an obligation or causing loss to another party.

Corruption is defined in the Prevention of Corruption Act, 1906, S.1 (1) and is the offering, giving, soliciting or acceptance of an inducement or reward which may influence a person to act against the interests of the organisation. The Act of 1906 applies to Crown Servants and employees of local authorities. The Prevention of Corruption Act, 1916 and the Criminal Justice Act, 1967 increased the penalties for corruption.

Principal differences between civil and criminal fraud cases relate to the burden of proof and the sanctions available. Generally the burden of proof required in a civil case is lower than that required in a criminal case.

1.3 The Department have stated that dishonest and illegal activity will not be tolerated under any circumstances, irrespective of any loss or gain to the Department or others. Furthermore, the Department undertake to investigate all cases of suspected fraud, theft and irregularity and, where appropriate, to prosecute cases or take disciplinary action.

What is the incidence of fraud in property management?

1.4 The overall incidence of reported fraud in the Department is one of the highest of all government departments. But this is commensurate with their much greater size and the varied nature of their activities. Furthermore, of 213 cases reported in 1998-99, 120 were actually theft of assets, which is not strictly fraud, but is classed as fraud for the purposes of reporting by departments to the Treasury.
1.5 The number of cases of property management fraud was less than 10 per cent of the total reported in 1998-99. But taking into account cases reported in previous years, property management cases represent some 50 per cent by number, and over 75 per cent by value of all frauds currently being investigated by the Department. The total estimated fraud loss of those cases under investigation by the Ministry of Defence Police Fraud Squad is £17 million.

1.6 In the last three years, a number of reviews by the Department’s internal auditors have highlighted widespread failures and weaknesses in procedures in property management. And in their 1998-99 Annual Report to the Accounting Officer, the auditors noted that control over property management expenditure remained a problem area. As a result Defence Internal Audit have been unable to provide the Accounting Officer with an assurance on the propriety of the Department’s expenditure on property management.

1.7 The Department recognise that property management is an area susceptible to fraud. This is because the Department have found it difficult to ensure that controls are consistently applied across roughly 200 establishments where property management expenditure is incurred. Typically at each establishment there is a large volume of low value transactions to control, which can put systems under pressure. For example at a typical establishment about 70 per cent of the transactions or 1,700 individual jobs each year cost about £200 each.

1.8 To maintain and repair their considerable estate, the Department need to use the services of several Works Services Manager contractors and many subcontractors. Getting a value for money service from these contractors and preventing fraud where so many external parties are involved requires the Department to have a good understanding of the firms they use and to manage and monitor the work they do. The Department need to be aware of the results of studies, such as the report from the Department of the Environment, Transport and the Regions entitled “Combating Cowboy Builders: A Consultation Paper”. This report showed that some parts of the construction industry suffer from particular problems of poor service and dishonest practices by rogue builders.

1.9 Despite the number of cases under investigation, the Department have not taken any cases of suspected property management fraud to the criminal or civil courts since 1995. The Department do not have complete information on all cases, but of the 25 investigated by the Ministry of Defence Police Fraud Squad between January 1996 and December 1998, enquiries are ongoing in eleven cases, five
have been passed to other units for civil or management action, eight enquiries have been closed as ‘no crime’ and another has been closed because of insufficient evidence.

What did we do and how did we do it?

1.10 Against this background, we examined:

- The Department’s overall approach to managing the risks of fraud (Part 2);

- The controls the Department have in place to prevent fraud in property management (Part 3); and

- How the Department detect and investigate frauds and how well they learn lessons on fraud (Part 4).

1.11 Details of the methods we used are at Appendices 1 and 2. In summary, we:

- focused our work on the Department’s estate in the United Kingdom, excluding those parts run by agencies with Trading Fund status;

- assessed the Department’s performance on managing the risks of fraud against good practice criteria. The criteria we used were based on the model anti-fraud organisation developed by Deloitte & Touche and the “Risk Management Guidance Note” issued by the Treasury in June 1994. Figure 1 sets out these good practice criteria. We also followed up on recommendations by the Committee of Public Accounts following their previous examinations of the risks of fraud in the Ministry of Defence where relevant to this Report (the Committee’s Forty-sixth report on The Risk of Fraud in Defence Procurement, Session 1994-95 (HC365) and the thirty-seventh report on Fraud and Irregularities at Defence Establishments, Session 1990-91 (HC442));

- identified the key risks of fraud in property management and estimated the annual value of transactions at risk from fraud. To do this we constructed a fraud risk assessment model, with the assistance of our consultants AEA Technology Risk Solutions, and using data from sources
within the Department. Deloitte & Touche also assisted in identifying key risks to fraud and in developing the recommendations for change, particularly those relating to fraud detection and investigation;

- examined the Department’s controls over property management as operated at three establishments: Her Majesty’s Naval Base Devonport, RAF Wittering and Tidworth Army Garrison. This included interviews with the Department’s staff and contractors responsible for property management expenditure at the establishments. We also examined a sample of transactions to assess whether controls had been operated and whether the controls were effective in preventing fraud. Our consultants Weatherall, Green and Smith, a firm of chartered surveyors and international property consultants, assisted us with this work. The results of the examination were used in the fraud risk assessment model;

- conducted a telephone survey of a random sample of 62 Property Managers to obtain information on their background in property management and their awareness of fraud issues; and

- interrogated all of the Department’s (PROM2) computer records on property management transactions for 1997-1999 at two establishments to identify invoices which may have been paid twice thus indicating possible fraud. The transactions were then examined to confirm whether this was the case.

1.12 We designed our work, in consultation with the Department, to assess the level of risk of fraud in property management and to help them tighten up their arrangements for managing those risks and reduce the amount of money that they may potentially be losing through fraud. At the time of our investigation the Department were reviewing these arrangements. We discussed our emerging findings with the Department so that they could take them into account in their review.

1.13 Whilst we designed our work to assess the risk of fraud in property management, we did not set out to detect specific instances of fraud and dishonest conduct. The Auditing Practices Board’s Statement of Auditing Standard Number 110 makes it clear that external auditors cannot reasonably be expected to detect all instances of fraud. The responsibility for preventing and deterring fraud, and for detecting any that occurs, lies with an organisation’s management and with those to whom they assign specific responsibilities (such as an internal audit department).
The Risk of Fraud in Property Management

Source: National Audit Office and Deloitte & Touche

Figure 1 The fraud risk management cycle and the good practice criteria we used

Learning lessons (Part 4)
- The organisation should make the best use of information, both internal and external
- Performance in preventing and detecting fraud should be monitored
- Lessons learned should be disseminated through fraud awareness training and information sharing

Policy and strategy (Part 2)
- There should be a clear anti-fraud statement of policy
- All members of the organisation should follow ethical procedures
- Fraud risk assessments should be done across the organisation
- Objectives and targets for improvement should be set

Organisation (Part 2)
- Management’s responsibility for preventing and detecting fraud should be clear
- Central responsibilities for managing the risks of fraud should be clear
- Arrangements for reporting suspicions of fraud should be clear
- Management structures should encourage prevention, detection and reporting of fraud

Proactive detection, investigation and recovery (Part 4)
- Techniques for proactive detection should be used, particularly in high-risk areas
- All allegations of fraud should be investigated in a consistent and thorough way
- Appropriate and effective action should be taken to prosecute fraud and recover money

Implementation of Controls (Part 3)
- A control system should be designed which is effective against the assessed risks. Controls should be operated as often and as effectively as intended

Source: National Audit Office and Deloitte & Touche
Part 2: The Department’s overall approach to fraud risks

2.1 This Part looks at the Department’s approach to the risks of fraud at the organisational level, both overall and also in property management specifically, and compares it with best practice. Covering the Policy and strategy, and Organisation headings of the “fraud risk management cycle” at Figure 1, this Part considers:

- what is the Department’s policy on fraud?
- do the Department have a strategy for managing the risks of fraud?
- how are the Department organised to manage the risks of fraud?

What is the Department’s policy on fraud?

2.2 Best practice, as described by Deloitte & Touche and others, requires that an organisation states its intentions on fraud in a publicly available Fraud Policy Statement, to which all its staff subscribe. As a minimum, the policy should:

- set out the organisation’s attitude to fraud, and what action it will take where fraud is discovered;
- set out staff’s responsibilities for behaving ethically;
- describe the overall responsibilities for the management of fraud; and
- set out the procedures for staff to follow when fraud is suspected.

2.3 The Department have a fraud policy statement which is set out in an internal publication (a “Defence Council Instruction”) and made available to all Service and civilian employees. The statement spells out the Department’s attitude to fraud – it will not be tolerated – and it emphasises that the Department will prosecute or take disciplinary action against those committing fraud in all cases. The policy statement also sets out the contact points within the Department that staff should inform if they have suspicions of fraud.
2.4 The Department’s fraud policy statement makes it clear that defence staff, as Crown Servants, are expected to act in an ethical manner, and should be, and be seen to be, free from any influence by external parties in their work (in particular, they should normally decline any offers of gifts or hospitality from external persons). Although staff are expected to observe these standards, they are not required to sign up to the policy specifically.

2.5 In recent years, however, the Department have increased their use of contractors in many areas of activity, including property management – where maintenance and minor building works are managed by contractors and carried out by sub-contractors. Such contractors are not subject to the same checks as the Department’s staff, and are not part of the same anti-fraud culture. For example, contractors in property management do not have sight of the Department’s fraud policy statement, which is an internal document only, and are not expected to sign up to a specific commitment to prevent and detect fraud.

2.6 The Departmental staff we spoke to had a good general awareness of the ethical standards they were expected to adhere to, and of their responsibility for preventing and detecting fraud. But we consider that making the fraud policy statement more widely available, particularly to contractors, could help ensure that this culture was spread more widely. And it could help to deter the more opportunistic frauds, although we recognise it is unlikely to stop the determined fraudster. The Department are now preparing to circulate appropriate guidance to contractors.

**Key recommendation**
The Department’s policy on fraud should be published externally, and should be understood by contractors as well as staff

**Do the Department have a strategy for tackling fraud?**

2.7 Best practice suggests that the organisations that perform most effectively in fighting fraud have formed a strategy to approach the problem. A strategic approach to fraud risks would include:

- A statement of “where we are now” i.e. an assessment of the current levels of fraud risk in each area;

- The establishment of “where we want to be” with relevant objectives and targets; and

- A plan of action for meeting them.
The Department have no formal strategy for managing the risks of fraud, either for the organisation as a whole, or for specific areas of activity. In property management, the overarching Defence Estates Strategy outlines the Department’s plans to move towards improved partnership arrangements with the construction industry and recognises that, in so doing, they will need to place a high priority on deterring and preventing fraud. The Department have in place, however, a number of policies, objectives, targets and actions which are relevant to fraud risk management, which we explain below.

Just as there is no Departmental strategy for managing fraud risk, so there is no structured Departmental risk assessment. But in property management, Defence Internal Audit have drawn attention to the risks of fraud and malpractice. And, the Defence Estates agency have set up recently a high level Fraud Prevention Steering Group to:

- co-ordinate the efforts of different units in the Department combating property management fraud;
- develop and implement a strategy for combating fraud;
- promote greater awareness of potentially fraudulent activities;
- commission consultants to review previous fraud investigations and audits and to assess the level and nature of the risks revealed; and
- implement an action plan to respond to our recommendations and those of their consultants.

The Group is chaired by the Chief Executive of the Defence Estates agency, and includes representatives from budget holders, the Defence Fraud Analysis Unit, Ministry of Defence Police, and the Defence Estates agency.

The Department have not set any targets for fraud detection and investigation, or fraud risk reduction, or staff possession of relevant skills or knowledge, or compliance with fraud protection practices; and there is little or no monitoring of such indicators. Their ability to set meaningful targets for the reduction of fraud risks is hindered by the gaps in their information on the current level of risk. As a result, it is not possible to form a view on whether the management of fraud risk is improving, or indeed adapting to changing patterns of service delivery.
2.11 Although there are no clear objectives or plans for fraud risk management, there are a number of practices and activities designed to afford a degree of protection from the risk of fraud. Many of these practices date from reforms of the Civil Service in the last century, designed to counter fraud and corruption, and are common to all parts of the Civil Service. Key elements include:

- recruitment of staff by open competition, minimising risks of nepotism or creation of corrupt groups of staff;

- rotation of staff through a variety of posts, exposing weak areas to a succession of staff and making fraudulent activity more likely to be discovered;

- financial procedures which separate responsibility for authorising work and paying for it, and which require budgeting discipline, clear records and accountability for expenditure;

- internal and external audit with freedom to select areas or transactions for independent scrutiny; and

- well-established procedures for contracting for services and products, including the need to compete requirements above specified financial values, to specify requirements, and to operate defined procedures for safeguarding tenders and evaluate them objectively.

While these practices and procedures are clearly still important to fraud prevention, they have not kept pace with the Department’s increasing use of contractors to carry out formerly in-house activities. For example, whilst Works Services Managers’ contracts are re-competed every three to five years, many staff transfer from the incumbent firm to the incoming firm, reducing the regularity with which there is a change of individual in key posts.

2.12 In conclusion, it is clear that the Department have in place many important components of the necessary infrastructure to deter, detect and investigate fraud. It is equally clear that they have no well-informed strategy to bear down on fraud risks or to address the potential for good and ill of contractorisation and advanced information technology. Without a coherent strategy, piecemeal initiatives will not give full value because of the different groups of people that need to act in concert to secure effective fraud risk management – a point reinforced below.
Key recommendations

The Department should prepare an overall strategy for managing the risks of fraud, as they have done for managing other types of risk, and ensure that this strategy is reflected in the approach of individual areas, such as the property management function.

As part of the strategy the Department should bring together information from initiatives such as the Fraud Task Force into a formal risk assessment for fraud. This approach should be applied to property management and to other areas.

Starting from a formal assessment of the risks, and the systems currently in place to manage them, the Department should set targets and monitor key indicators for fraud risk reduction.

How are the Department organised to manage the risks of fraud?

2.13 Best practice, as described by Deloitte & Touche, and underlined by Treasury guidance for government departments¹, states that to be effective in managing the risks of fraud, organisations should:

- hold all levels of management responsible for preventing and detecting fraud, with a fraud officer or focal point in each subdivision or location to coordinate activities;

- assign clear central responsibilities for responding to fraud; and

- have management arrangements that encourage the prevention, detection and reporting of fraud in all areas.

Management should be clear about their responsibility for preventing and detecting fraud

2.14 The Permanent Under-Secretary of State for Defence, as Accounting Officer, has responsibility for safeguarding public funds employed by the Department, including preventing and detecting fraud in all areas. The Department’s decentralised structure means that this responsibility is delegated through each of thirteen Top Level Budget Holders to lower levels of management, including the Property Manager at each establishment.

In line with best practice, the Department’s thirteen Top Level Budget Holders each appointed a Fraud Focal Point in 1998. This arrangement replaced the previous committee structure which the Department considered had not been sufficiently proactive in promoting anti-fraud measures. Each focal point is responsible for coordinating the response of the Top Level Budget Holder to fraud in that area, and the focal points are expected to liaise with each other and with the central bodies responsible for fraud.

With the establishment of the fraud focal points, the Department have the opportunity to promote and reinforce management’s responsibility for preventing and detecting fraud. The Department, however, have yet to define terms of reference for focal points, who have met as a group to discuss fraud issues on three occasions since they were created. These terms of reference might include sharing information with each other on anti-fraud controls and disseminating information from the centre on training and new initiatives.

**Key recommendation**

The Department should treat as a priority the development of terms of reference for their fraud focal points and should ensure that they are proactive in promoting fraud awareness and prevention.

**Central responsibilities for fraud should be clearly defined**

Centrally, the Department have split responsibilities for reporting and investigating fraud from those for work on deterrence and fraud training. Figure 2 shows that the overarching roles are divided between four groupings, the Defence Fraud Analysis Unit, the Defence Procurement Agency’s focal point (whose title is Pol C4F), the Ministry of Defence Police Fraud Squad, and the three Military Police forces. In addition, functional areas, such as property management, have specialist agencies whose responsibilities include fraud matters. In property management, the Defence Estates agency mainly takes this role, but each of the three Services also has a specific estates function with an interest of its own in fraud. We looked at how clearly defined and how well communicated within the Department the reporting and investigating roles were.
## Central responsibilities for managing the risks of fraud in property management

### Accounting Officer

The Accounting Officer (the most senior civil servant in the Department) has overall responsibility for managing the risks of fraud. For property management the Accounting Officer devolved central responsibilities to:

<table>
<thead>
<tr>
<th>Reporting fraud</th>
<th>Defence Fraud Analysis Unit</th>
<th>Ministry of Defence Police Fraud Squad</th>
<th>Navy, Army and Royal Air Force Military Police</th>
<th>Defence Estates agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part of the Defence Procurement Agency</td>
<td>A unit reporting to the Director of Defence Internal Audit</td>
<td>Independent of the rest of the Department and staffed by professional, civilian police officers</td>
<td>Staffed with military officers</td>
<td>An agency with overall responsibility for the defence estate</td>
</tr>
<tr>
<td>All suspected frauds relating to procurement should be reported to this unit. Information reported here is shared with the Defence Fraud Analysis Unit.</td>
<td>A confidential contact point for reporting all suspicions of fraud. Prepare the annual report to HM Treasury on frauds reported within the Department.</td>
<td>Those wishing to report fraud can contact police officers locally or centrally</td>
<td>Staff may report suspicions of fraud to military police locally.</td>
<td></td>
</tr>
</tbody>
</table>

### Investigating frauds

| The Unit evaluate individual fraud cases reported to them and decide on action to be taken. Provide investigative support to Ministry of Defence Police Fraud Squad. |
| Officers investigate fraud cases, sometimes with assistance from Defence Fraud Analysis Unit and the Defence Estates agency, and prepare for prosecutions. |
| Special Investigations Branch investigates frauds locally. |
| An agency with overall responsibility for the defence estate. A small unit investigates fraud in property management, reported either direct or through the Defence Fraud Analysis Unit. They also provide support to Ministry of Defence Police and Defence Fraud Analysis Unit investigations. |

### Deterrence & training

| Give presentations on fraud awareness to staff at the request of budget holders. Carry out checks on specific areas of the Department as a deterrence measure. |
| Gives presentations on fraud awareness to staff, in conjunction with the Defence Fraud Analysis Unit. Carry out high profile fraud investigations which can also act as a deterrence measure. |
| Provides fraud awareness training for Property Managers and other estates staff. |
| Produces written guidance on property management matters, including fraud. Commission reviews of property management at establishments from property consultants. |

### Number of staff

| One person | Nine staff (including two auditors) | Forty officers | Four regiments of officers |
| One person | Nine staff (including two auditors) | Forty officers | Agency of some 1,400 staff with 14 people (plus consultants) involved in fraud investigations |

Source: National Audit Office
Staff should know to whom to report suspicions of fraud

2.18 The arrangements for the Department’s staff to report fraud are set out in a department-wide internal publication (the most recent being Defence Council Instruction General 222/99, amended by 248/99). Figure 3 shows the official routes a person suspecting fraud is expected to follow.

![Diagram showing the arrangements for reporting fraud in the Department]

This figure shows that there are a number of different official routes for reporting suspected fraud in different circumstances.

Source: National Audit Office
2.19 We asked a representative sample of the Department’s Property Managers to whom they would report suspicions of fraud (Figure 4). Some staff (19 per cent) would only report their suspicions to their management, whilst others (58 per cent) would report their suspicions to four or more different places. Few respondents identified the need to adopt different reporting routes in different circumstances. And general awareness of PolC4F’s role in procurement fraud was very low. Since we undertook our survey, the Department have issued the latest version of their internal publication on reporting routes.

![Figure 4](Image)

**To whom would Property Managers report suspicions of fraud?**

- **Line Manager or Commanding Officer**: 98%
- **Defence Estates**: 68%
- **MOD Police**: 55%
- **Others (2)**: 44%
- **Defence Fraud Analysis Unit**: 44%
- **Internal Audit**: 42%
- **National Audit Office**: 26%
- **Service Police**: 26%
- **Civilian Police**: 10%
- **PolC4F**: 8%

(1) The percentages add up to more than 100 per cent, because each respondent was allowed to name more than one person or unit to whom they would report suspicions of fraud.

(2) Fourteen Property Managers named contact points, other than their line manager, in their chain of command or budget holder. Ten said that they would report suspicions to their single Service estates organisation (RAF Infrastructure Organisation, Naval Bases and Supply Agency, and G4 Estates in the Army). Five said they would tell their Works Services Manager or Establishment Works Consultant. And six specified the Defence Estates Contract Branch.

Source: National Audit Office

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**Staff should know what to report**

2.20 As well as knowing who to report concerns to, staff should know what to report. The internal publication on reporting arrangements states that it is necessary for all suspected fraud and theft cases, irrespective of their value, to be reported immediately. In practice, if staff find it difficult to distinguish between fraud and other irregularities (including honest mistakes) they are likely to wait before reporting some suspicions and they may not report others at all. This is a particular problem in procurement fraud, especially in the property management area, because it can be difficult to distinguish between poorly performing...
contractors, those operating sharp practice\(^2\) and those acting fraudulently. Over half (53 per cent) of the Property Managers we surveyed agreed that this was a problem.

**Staff should be able to report suspicions of fraud to an independent unit in confidence**

2.21 It is important that staff are able to report their suspicions of fraud to an independent unit in confidence so that they cannot be unduly influenced by local colleagues or managers who might be involved in the fraud. Staff in the Department can contact the Defence Fraud Analysis Unit (including through a fraud ‘hotline’ answering service), the Ministry of Defence Police or Service Police directly without talking to their line manager or others at their establishment, if they choose, so the Department’s existing arrangements are satisfactory in this respect. If staff were advised to report only to an independent reporting point, however, perhaps the Defence Fraud Analysis Unit, then arrangements would be simplified and made more coherent. The Unit could refer the matter on to local management or other units as appropriate.

**It should be clear to contractors that they should report all suspicions of fraud and repeated instances of sharp practice and poor performance to the Department and they should know to whom to report**

2.22 The Department’s instructions on reporting suspicions of fraud are set out in an internal publication, but they are not provided to the Department’s contractors. The Department do not, therefore, make it clear to their contractors that they are expected to report all suspicions of fraud. This is particularly important for Works Services Manager firms as they have no contractual requirement to report suspicions of fraud to the Department and may prefer to deal themselves with subcontractors about whom they have suspicions. For example, at RAF Wittering, the Works Services Manager found that a subcontractor was using unaccredited staff to carry out electrical inspections whilst charging the fees that were agreed for accredited staff. The Works Services Manager kept the Property Manager informed but dealt with the subcontractor without informing or involving any of the Department’s fraud investigators.

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2. Sharp practice is where a contractor deliberately interprets ambiguous statements in their contract in their favour despite knowing that the result will not be what the customer intended. Sharp practice does not involve outright deception and is therefore not illegal.
The Department should have clear, consistent arrangements for investigating fraud cases

2.23 Investigating suspected crimes, including fraud, in all areas of the Department has traditionally been the responsibility of the Department’s four police forces (the civilian Ministry of Defence Police and the three Services’ military police forces). And the Ministry of Defence Police’s forty-strong Fraud Squad have developed considerable expertise in investigating fraud. More recently, though, the need for further specialist audit input to fraud investigations was recognised in 1998 when the Department formed the Special Analysis Unit (subsumed from 1 April 1999 within the Defence Fraud Analysis Unit). The Unit is tasked with investigating some complex fraud cases and bringing them to a point where the police can take the matter over, and its multidisciplinary team of nine staff (including two auditors) work closely with the Ministry of Defence Police Fraud Squad.

2.24 There are some benefits in the four defence police forces and Defence Fraud Analysis Unit sharing the responsibility for investigating frauds across the Department. The Defence Fraud Analysis Unit can act as a filter to evaluate whether cases merit police action and can provide continuing support to the police during investigations. However, the Department have not set out a clear definition of the roles of the parties with the result that there is the potential for confusion and inconsistency in the treatment of fraud cases, especially where an investigation is started at a local level. For example, a suspected fraud case reported to a local military police officer may be investigated locally or the officer may choose to pass it to the Ministry of Defence Police Fraud Squad. One solution to this problem might be to route all cases through the Defence Fraud Analysis Unit for evaluation in the first instance, regardless of the route by which they were reported.

2.25 In property management there is also an additional player – the Defence Estates agency, who have overall responsibility for defence estate matters, and who have a small team investigating fraud allegations (see Figure 2). Under the Defence Estates agency’s Fraud Prevention Steering Group initiative, this team have begun to work more closely with the Ministry of Defence Police Fraud Squad and the Defence Fraud Analysis Unit, assisting these units with their investigations by bringing their property expertise to bear. The Defence Estates agency intend to become more proactive in investigating possible frauds. The Department should ensure that their approach makes effective use of all three units’ undoubtedly experience in property management fraud to achieve successful prosecutions and recovery of funds.
**Key recommendations**

The Department should consider simplifying their reporting arrangements for fraud as the staff we surveyed could not easily identify the most appropriate branch to contact. Routing all reports through the Defence Fraud Analysis Unit, for example, could help clarify matters.

The Department should make it clear to staff that they should report all suspicions of fraud and should provide advice where necessary to help staff distinguish between fraud and sharp practice.

Works Services Managers should be required by contract to report all suspicions of fraud, sharp practice or repeated poor performance to a single reporting point in the Department. This requirement should also be placed on their subcontractors.

The Department should clarify the roles of central bodies in dealing with fraud cases, ideally routing all cases through a single point, such as the Defence Fraud Analysis Unit, to ensure a consistency of approach.

The Department should make effective use of all the expertise of their people in investigating property management fraud, which is highly technical. This will involve closely coordinated working between the Defence Estates agency, the Defence Fraud Analysis Unit, and the Fraud Squad.

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**Arrangements in property management should encourage the prevention, detection and reporting of fraud**

2.26 We considered as part of our review of property management the arrangements for managing this work at the Department’s establishments. Figure 5 shows how the Property Manager and contractors at each establishment form part of a structure designed by the Department to provide value for money in works services and to incorporate controls against fraud.

2.27 The Department’s management arrangements for property management are designed to pass responsibility for works to professional contractors with the skills to carry them out. The Property Manager acts as the Department’s (the customer’s) representative, ensuring that the contractors meet their requirements. The Department are currently seeking actively to improve their arrangements for property management, with a view to improving value for money by developing a closer partnership with industry. We looked at what improvements would be needed to the current structure to encourage the effective prevention, detection and reporting of fraud.
By transferring responsibility for procuring and managing works to the Works Services Manager, the Department have also transferred a proportion of the controls and the responsibility for preventing fraud. However, the Department have not made the responsibility for preventing and detecting fraud explicit in the Works Services Managers’ contracts. (In fact the word “fraud” does not appear in the details of the tasks to be carried out). The Department intend to remedy this under the possible changes to their arrangements for property management – along the lines of ‘prime contracting’.
2.29 Works Services Managers are required to set out their proposed systems of financial control in their tender for the work, and this is reviewed by the Defence Estates agency’s contracts branch. But the Department do not prescribe what kind of control or “quality assurance” system should be in place, and the level of controls varies between different firms. For example, on control of sub-contractors, Works Services Managers submit annually a list of the approved subcontractors they intend to use or invite to tender for work at their establishment. The Department do not collate or analyse this information or monitor centrally the performance of property management subcontractors, and do not set or monitor procedures for approving subcontractors, which may vary from one Works Services Manager to another. But the Defence Estates agency are beginning to compile a database on the Works Services Managers, Establishment Works Consultants, and main subcontractors used by the Department.

2.30 We are concerned that the Department have in practice relinquished responsibility for a considerable number of important controls against fraud, but have not incentivised the Works Services Managers to carry them out effectively. For example, many jobs are inspected only by the Works Services Manager, before payment is made by the Department. But as the Works Services Manager is reimbursed in full by the Department for payments made to subcontractors, he has no incentive to root out overcharging or other types of fraud by subcontractors. And since the Works Services Manager’s fees from the Department are based on the level of expenditure at the establishment (the “estimated annual value”) he may even benefit financially if fraudulent activity increases the cost of works.

2.31 The Department must also rely on the Works Services Manager for general management of the supply chain. They do not, for example, have full visibility of all contracts between Works Services Managers and subcontractors and they do not generally have visibility of payments made to subcontractors. The Department intend to remedy this contractually under the proposed arrangements for prime contracting, through supply chain management. The Department should make provision for appropriate access by the Comptroller and Auditor General and the National Audit Office, in line with Treasury guidance.

2.32 The Establishment Works Consultant is the Property Manager’s professional adviser on all technical matters. And as the majority of Property Managers are not technically qualified in property matters, the advice of the Establishment Works Consultant is crucial to help prevent and detect fraud. Standard terms of contract provide, inter alia, for the Establishment Works Consultants to monitor Works Services Managers’ procurement methods for
compliance with their agreed contract strategy (in which they set out the different types of subcontracting arrangements they intend to use for particular types of job). And they must check a sample of orders, representing five per cent of all orders and drawn at random by Property Managers, for compliance with value for money, statutory and accountability criteria. These are useful provisions, but they could be more precisely expressed:

- there is no requirement or incentive for the Establishment Works Consultants to use their professional knowledge to devise a suitable strategy for monitoring the Works Services Manager and have it approved by the Property Manager; and

- the contract does not specify the standard of checks that must be made by Establishment Works Consultants on the sample of orders referred to them. Establishment Works Consultants submit with their tenders a copy of the standard checklist they intend to use for the checks, but the checklists are variable in quality. Subsequent guidance from the Defence Estates agency outlines an extensive list of matters that should be covered but, despite being classified as ‘mandatory’, has no contractual force. Moreover, it raises a number of issues for Establishment Works Consultants to consider, rather than specifying the assurance required.

2.33 The Defence Estates agency also have a network of local offices in place, with professional expertise available to assist Property Managers in combating fraud. The Department recognise, however, that Property Managers have not always drawn on this support.

2.34 The Department are already trialling alternatives to the current arrangements for property management, including closer partnering arrangements with industry. These proposals are still in an early stage, but Defence Internal Audit have already expressed concern, in an audit of the RAF property management partnering trial, that further development is required to provide adequate controls against fraud and malpractice. We also consider that, if the new system does not address the lack of incentives for contractors to protect the Department against fraud, it will provide no improvement in value for money in this area. The Department accept this viewpoint, and are looking into the incentives that need to be provided.
Key recommendations

In view of the considerable responsibility and control passed to contractors in property management, the Department should look closely at their incentives to fight fraud. They should aim to bolster incentives in any new arrangements, as the current system is inadequate in this respect.

The Department should ensure that they have general management access to, and visibility of, the supply chain under prime contracting. They should also provide for appropriate access by the Comptroller and Auditor General and National Audit Office.

The Department should be clearer about the responsibilities of the Establishment Works Consultant for preventing and detecting fraud. They should aim to incentivise these consultants to provide a professional level of support for Property Managers.
Part 3: The Department’s controls to prevent and detect fraud in property management

3.1 Treasury guidance on risk management issued in 1994 advises government departments to “ensure that the risks to which they are exposed are identified and analysed on a systematic basis”. In further guidance on the risk of fraud issued in 1997, the Treasury advises managers to “identify risk areas” and “assess the scale of the risk”. Since the Department had not conducted a risk assessment, our work in this Part of the Report, which corresponds to the third heading Implementation of controls in the fraud risks management cycle at Figure 1, was designed to:

- identify the key risks of fraud in property management;
- assess whether the Department have controls which can prevent or detect the risks of fraud we have identified;
- estimate the annual value of transactions at risk from fraud; and
- identify the actions the Department could take to reduce the risks of fraud.

In the light of our work, the Defence Estates agency employed consultants in June 1999 to identify the types of fraud that can occur in property management and whether these frauds could also occur under the new arrangements the Department are introducing.

What our work involved

3.2 We created a fraud risk model, assisted by our consultants AEA Technology Risk Solutions, which was validated and refined in workshops consisting of a group of the Department’s Property Managers and other relevant professional staff. We then tested some of the assumptions generated in the workshops against actual processes and property management transactions at three sites – where our property consultants inspected a sample of works. The resulting model is based around six key stages in progressing property management work (Figure 6). The model permits the quantification of the value of transactions exposed to a variety of
### The main stages and key risks of fraud in the Department’s property management system

#### How do the Department ensure that only the maintenance work required is identified and authorised to be carried out?

The Department requires establishments to have in place procedures to select acceptable subcontractors and rotate opportunities to win work between them. Tending procedures should govern the selection of subcontractors where full competition is used. The Works Services Manager is responsible for awarding the work to subcontractors. The appropriate level of competition for each type of job is set out in a contract strategy agreed with the Property Manager.

#### How do the Department ensure that maintenance work is awarded to contractors in a way that minimises the risks of fraud?

The Department requires establishments to have in place procedures to select acceptable subcontractors and rotate opportunities to win work between them. Tending procedures should govern the selection of subcontractors where full competition is used. The Works Services Manager is responsible for awarding the work to subcontractors. The appropriate level of competition for each type of job is set out in a contract strategy agreed with the Property Manager.

#### How do the Department limit the cost of maintenance works?

A limit of expenditure is set for each works item – with advice from the Establishment Works Consultant where necessary – and is approved by the Property Manager. The Works Services Manager is required to keep the cost of the work within this limit when arranging for the work to be carried out by the subcontractor. If unforeseen difficulties or changes to the scope of work occur, the Property Manager may approve a variation to the limit of expenditure, seeking advice where necessary from the Establishment Works Consultant.

#### How do the Department manage and monitor maintenance work to ensure that it is completed in accordance with the specification?

Subcontractors carry out the work and report to the Works Services Manager, who monitors and inspects works and certifies them as acceptable on completion.

The Property Manager and Establishment Works Consultant also carry out a programme of inspections and monitoring.

#### How do the Department ensure that payment is made only for authorised, completed work?

The subcontractor completes the work and sends an invoice to the Works Services Manager, who certifies to the Property Manager that the work is complete. The Works Services Manager prepares a summary invoice and applies for payment authorisation from the Property Manager. All summary invoices are sent to the Department’s Defence Bills Agency for payment to the Works Services Manager.

#### How do the Department ensure that maintenance tasks have been properly carried out?

The Establishment Works Consultant carries out a monthly audit of 5 per cent of all maintenance tasks, to check for proper value and value for money.

### The key risks of fraud

#### The key risks of fraud are:

- **(i)** The person identifying works could:
  - (a) deliberately write a vague description or specification allowing the subcontractor to be paid for work not done or work done but not required, in return for cash or favours.
  - (b) give favoured subcontractors information on the limit of expenditure to allow them to make excess profits, in return for cash or favours.
  - (c) destroy tenders to favour certain contractors in return for cash or favours.

- **(ii)** The subcontractor alone, or in collusion with other parties, could:
  - (a) deliberately inflate the limit to allow the subcontractor to overcharge, in return for cash or favours.
  - (b) deliberately split one job into several to avoid the need for full competition and to direct work to a favoured subcontractor.
  - (c) deliberately use materials of lower quality or a smaller quantity than specified but charge the full price.

#### The key risks of fraud are:

- **(i)** The person setting the limit of expenditure could:
  - (a) deliberately bypass competition and direct work to a favoured subcontractor in return for cash or favours.
  - (b) give favoured subcontractors information on the limit of expenditure to allow them to make excess profits, in return for cash or favours.

- **(ii)** The subcontractor on site could deliberately damage equipment or buildings to create extra work.

#### The key risks of fraud are:

- **(i)** Those awarding work could:
  - (a) deliberately bypass competition and direct work to certain subcontractors in return for cash or favours.
  - (b) give favoured subcontractors information on the limit of expenditure to allow them to make excess profits, in return for cash or favours.

- **(ii)** The person identifying works could:
  - (a) deliberately write a vague description or specification allowing the subcontractor to be paid for work not done or work done but not required, in return for cash or favours.
  - (b) deliberately split one job into several to avoid the need for full competition and to direct work to a favoured subcontractor.

- **(iii)** The subcontractor alone, or in collusion with other parties, could:
  - (a) deliberately use materials of lower quality or a smaller quantity than specified but charge the full price.

- **(iv)** The subcontractor alone, or in collusion with other parties, could:
  - (a) deliberately bypass competition and direct work to a favoured subcontractor in return for cash or favours.

- **(v)** The person setting the limit of expenditure could:
  - (a) deliberately bypass competition and direct work to certain subcontractors in return for cash or favours.
  - (b) give favoured subcontractors information on the limit of expenditure to allow them to make excess profits, in return for cash or favours.

- **(vi)** The person identifying works could:
  - (a) deliberately write a vague description or specification allowing the subcontractor to be paid for work not done or work done but not required, in return for cash or favours.
  - (b) deliberately split one job into several to avoid the need for full competition and to direct work to a favoured subcontractor.

- **(vii)** The subcontractor alone, or in collusion with other parties, could:
  - (a) deliberately use materials of lower quality or a smaller quantity than specified but charge the full price.

### Other examples of fraud

- **(d)** invoice for work not completed.
- **(e)** deliberately submit duplicate invoices for payment.
- **(f)** deliberately invoice for items not provided or used, e.g. hire equipment.

### Audit and inspections

- Urgent and ad hoc tasks such as repairs are identified by occupants of buildings, or during inspections by the Establishment Works Consultant, Works Services Manager or property management staff. The Property Manager or deputy authorises works to be carried out.

- Planned tasks such as decorating work are identified by the Establishment Works Consultant during technical inspections, the majority of which are carried out every two years. The forward maintenance plan for the establishment is reviewed annually.

- The Property Manager or deputy authorises works to be carried out.

- These audits cover the preceding five stages in the property management system and so they should address the key risks above.

### Future direction

- How do the Department ensure that payment is made only for authorised, completed work?

- How do the Department ensure that maintenance tasks have been properly carried out?

- How do the Department limit the cost of maintenance works?

- How do the Department manage and monitor maintenance work to ensure that it is completed in accordance with the specification?

- How do the Department ensure that maintenance work is awarded to contractors in a way that minimises the risks of fraud?

- How do the Department ensure that only the maintenance work required is identified and authorised to be carried out?
fraud risks, net of the effect of any relevant transaction controls. It takes into account the likely variation in the type and level of controls with the value of the job, by evaluating separately the risk levels for three value bands (low, mid and high). The values of transactions in each of the bands are described at Appendix 2. Figure 6 shows the main risks that existed at each stage.

3.3 The rest of this Part explains those risks, and ways to mitigate them, for each stage of the property management works process. Main points to note are:

- the values quoted represent the annual value of transactions at an average establishment that would not be subject to control for the specific risk given. Those values do not, therefore, represent actual fraud occurring, merely the value of transactions at risk;

- the model does not quantify general factors, such as recruitment or posting policy, or internal audit, that might act to minimise or detect fraud in a more general sense;

- by contrast, the model assumes that where a control operates, it is applied fully effectively; and

- that no transaction is subject to more than one fraudulent element.

3.4 The results of the model therefore give a good indication of priority areas for management attention. We have, for each stage, set out the most severe risks of fraud, discussed the operation of relevant controls, and made recommendations for improvement. Some of these recommendations could be implemented without incurring additional costs, and some may require additional resources. The Department will need to consider whether to allocate additional resources to reducing the risk of fraud and where to target them. To do so, they intend to develop and use our fraud risk model. But before getting down to the detail of individual risks and controls, there are a number of overarching findings from the risk modelling.

**What were the overall results of the risk modelling?**

3.5 No system of controls can guarantee to prevent fraud occurring since the cost of operating the controls needs to be balanced against the likelihood and severity of potential fraud. Our risk modelling results show that the amount that could be lost to fraud in property management at the typical establishment each
year is about £580,000. This indicates that overall £135 million or 15 per cent of the Department's total annual expenditure on property management could be lost to fraud, given current levels of control (see Appendix 2 for details of our calculations).

### 3.6 A number of general points emerged:

- local Property Managers and Works Services Managers used their own perception of risks to determine the extent and frequency of fraud controls, leading to considerable variation in the quality of fraud control unjustified by the available evidence;

- the system of annuality generally led to higher levels of expenditure in the last quarter of the year, thus straining the operation of controls. That profile was well known to Works Services Managers (and subcontractors) who at RAF Wittering and Tidworth had specific knowledge of amounts to be spent by year end;

- the level of control over high value transactions was generally greater than over lower value. Clearly the sum of money at risk is higher where a large contract is involved. But our results show, for example, that it was possible for a large number of small transactions to escape inspection and audit checking entirely;

- among property management staff and contractors, there was a lack of understanding of the way in which checks should be operated to provide effective control against fraud. And records of the results of checks were generally poor; and

- evidence from the work of the Defence Estates agency’s establishment reviews indicated that the percentage of each transaction that can be lost to fraud is much higher than our workshop group of Property Managers estimated (for example, they found evidence of overcharging by more than 100 per cent of the true cost for materials and labour, whilst our workshop group estimated the likely level at 10 per cent). Therefore, our model is likely to be conservative in its estimate of the sums at risk from fraud.
3.7 These findings indicate considerable scope to improve the coverage, targeting and operation of controls, as discussed in more detail below. The Department should build on the results of the model, to improve the design and execution of controls over fraud risks in the property management area.

How do the Department ensure that only the maintenance work required is identified and authorised to be carried out?

3.8 Figure 7(a) shows the Department’s system for identifying and authorising maintenance jobs. A typical establishment issues around 5,000 individual orders for maintenance jobs every year.

Source: National Audit Office
3.9 Through our risk modelling work we identified the most significant types of fraud that could occur and the amounts that could be at risk (Figure 7(b)).

![Figure 7b]

**Figure 7b**

The value of the risks of fraud in identifying and authorising work at the three establishments visited

Source: National Audit Office

3.10 In discussion with the risk modelling workshop group we identified the key controls present in the Department’s system which could prevent these types of frauds:

- physical inspection of the works requested before the works order is raised;
- detailed and accurate statements of user requirement for each item of work ordered;
- checks by the Property Manager of works orders raised.

At the three establishments visited, we selected a sample of transactions to examine how often these controls operated and whether they were operated in a way which would prevent fraud.

**The Department should inspect the work required before a job is approved**

3.11 Before approving work to be carried out the Property Manager needs to be satisfied that the work is necessary and appropriate. He may do this by inspecting the work, or delegating the inspections to property management staff. For more
complex works, the Property Manager may ask the Establishment Works Consultant to carry out a site inspection. There have been a number of examples where the Department has funded and paid for work that did not exist or was never required – which illustrates how fraud can occur if physical checks are not carried out.

3.12 The Department’s guidance to Property Managers does not advise on the amount of inspection work that should be done. Our examination of a sample of transactions at the three establishments we visited showed evidence that an inspection was undertaken for around seven per cent of the jobs. The method by which the Property Managers selected the jobs for inspection was not apparent but Figure 8 below shows that those inspected were weighted towards the higher value jobs.

<table>
<thead>
<tr>
<th>The number of effective site inspections carried out</th>
<th>Low value transactions</th>
<th>Mid value transactions</th>
<th>High value transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of transactions where an effective site inspection was carried out by the Property Manager, property management staff or Establishment Works Consultant before the works order was authorised</td>
<td>2%</td>
<td>3%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Source: National Audit Office

3.13 That pattern of application of controls is reflected in the outcome of our risk modelling, which shows that more than two-thirds of the expenditure uncontrolled for these fraud risks relates to low and mid value transactions. Contrary to the views of Property Managers who attended our workshop, however, there is a proportion of uncontrolled expenditure on high value transactions.

**Detailed and accurate statements of user requirement should be prepared for each item of work ordered.**

3.14 Each works order has a statement of requirement describing the work that needs to be carried out. The Establishment Works Consultant may prepare a statement of requirement for more complex jobs where a detailed technical statement, with accompanying drawings, is required. For more straightforward jobs, such as running repairs, a simple description of the problem prepared by a member of the property management team may be sufficient. The statement of requirement is a key control against the fraud because it provides a basis for costing the work accurately and checking whether the completed work satisfies the Department’s requirements.
In our examination of 150 transactions we found that only 12 (9 per cent) of the statements of requirement were sufficiently detailed and accurate to control against fraud. For the remaining transactions, we found that:

- The Establishment Works Consultants provided detailed technical statements of requirement in ten cases or 29 per cent of the high value jobs which would normally be considered complex jobs requiring professional advice;

- For low value jobs, the statement of requirement was, in more than 80 per cent of cases, provided by the building occupier and often lacked enough detail to ensure that the correct work was carried out. For example, in one case we examined, where several windows needed to be repaired, the occupier did not specify how many were broken. In this case, there is a risk that the subcontractors carrying out the repair could claim to have done more than needed;

- In 9 transactions we examined, the Works Services Manager, rather than the Property Manager or the Establishment Works Consultant, produced the statement of requirement. In these circumstances the Works Services Manager could deliberately add unnecessary extra work which could then be placed with a favoured subcontractor in return for an inducement.

**The Property Manager should have a system for checking works orders raised**

At the three establishments we visited, property management staff have been given delegated authority to approve works orders, although the Property Manager may check a sample of such orders. Property Manager checks would encompass overall reasonableness of the orders, based on knowledge of the local estate, for example to ensure that only authorised properties were being maintained, and also to make sure that financial delegations had not been breached.

The Department’s guidance to Property Managers does not require them to carry out checks on the orders approved by property management staff and therefore does not provide advice on what the checks should cover. At the establishments visited, Property Managers approved up to a hundred works orders each week which had been raised by their staff and carried out checks in only three per cent of the cases we examined.
Key recommendations

On identifying and authorising maintenance work

The Department’s Property Managers should ensure that all job requests have an accurate, sufficiently detailed statement of requirement to enable later checking that the work required has been done. This will usually entail a site visit, and in some cases a technical statement of requirement supplied by the Establishment Works Consultant.

Property Managers should carry out random, thorough checks on works orders raised by their staff to ensure that they are valid and within delegations.

How do the Department control the cost of maintenance work?

3.18 The Works Services Manager is responsible for arranging for each item of work to be carried out for a sum not exceeding a limit set by the Property Manager. Figure 9(a) shows how the Department set the limit for each job and how they allow for any unforeseen variation in the cost.

![Diagram of how the Department set a limit on the cost of each job](image-url)
3.19 Our risk modelling identified the main types of fraud that could take place at this stage of the system (Figure 9(b)).

![Figure 9b: The value of the risks of fraud in pricing work at the three establishments visited](source: National Audit Office)

- **Risk:** Favoured subcontractors could be deliberately told about the Department’s cost estimates.
- **Risk:** The person pricing the work could deliberately overprice the work, allowing a favoured subcontractor to be paid an inflated price for work done.
- **Risk:** The people carrying out the work could request additional funding for unnecessary or “ghost” additional work.
- **Risk:** The person pricing the work could deliberately price elements of work separately so that the work can be awarded without competition to a favoured subcontractor.
- **Risk:** The person pricing the work could deliberately underprice the work so that the work can be awarded without competition to a favoured subcontractor, with the intention of using a variation to provide additional funding at a later stage.

3.20 Through our risk modelling, we identified the key controls which the Department currently have in place to prevent and detect these frauds:

- Professional advice should be sought when setting limits of expenditure;
- Professional advice should be obtained before authorisation of increases or “variations” to the limit of expenditure.

### Professional advice should be sought when setting or increasing the limit of expenditure

3.21 Estimating accurately the likely cost of maintenance work can be a skilled task requiring professional expertise, particularly for high value jobs that are technically complex or repairs where the cause of the problem cannot be identified easily. In such cases, the Property Manager can ask the Establishment Works Consultant to provide an assessment of the likely cost, based on technical guides, previous costs for similar work at the establishment and their professional experience. For straightforward maintenance work such as replacing a broken window, the Department’s guidance allows Property Managers or their authorised staff to base estimates on industry standard reference costs. The guidance emphasises that a contingency allowance or “slack” should not be built into the
estimate under any circumstances. Establishment Works Consultants should assess the level of risk associated with a job and identify it separately as part of their estimate.

3.22 From our examination of a sample of transactions at the three establishments visited, we found that the limits of expenditure set by the Department were not always accurate enough to act as a useful control on potential fraud. Figure 10 shows that even for high value jobs where the content and costing of the work is likely to require professional advice, the Establishment Works Consultant provided an estimate in only 35 per cent of transactions.

![Figure 10](image)

Source: National Audit Office

3.23 For 88 per cent of those transactions where the Establishment Works Consultants provided an estimate, there was no evidence that they had based their estimate on a site inspection. Instead they had based it on a review of the paperwork, by taking measurements from site maps rather than from an inspection of the site. Relying only on the paperwork could reduce the accuracy of the estimates provided. For example in one case we examined the Establishment Works Consultant had taken measurements from plans to calculate the length of new concrete kerbstones to be provided. Our consultants found on measuring the work done that the original estimate had been inaccurate, and the Department had been overcharged as a result.

3.24 On the more complex high value jobs it is important that Establishment Works Consultants’ estimates are accurate to prevent the scope for fraud: if dishonest subcontractors become aware of the amount the Department are willing to pay they are likely to price accordingly. To get an indication of the accuracy of the estimates provided by the Establishment Works Consultants we compared their estimates with the outturn cost of the work. We found that some 40 per cent of the estimates provided were more than 50 per cent different from the price actually paid. The reason for the large variation could be explained by the competitive prices charged at that time or in that part of the country by subcontractors. Our findings suggest, however, that the Department need to examine further the basis on which Establishment Works Consultants make their estimates.
3.25 We also compared the estimates on the remaining transactions we examined with the actual cost to gauge the accuracy of those estimates. We found that:

a) For 33 low value transactions, the property management staff had set the limit of expenditure in round figures, such as £50 or £100. In these cases none of the estimates had been based on up-to-date reference costs for standard low value jobs. Property management staff told us that particularly for low value jobs they deliberately overestimated the limits to avoid the possibility of further administrative work later in dealing with requests for an increase from the Works Services Manager;

b) In 30 transactions examined, the Works Services Manager had obtained estimates from subcontractors, which the property management staff then used to set the limits of expenditure for the jobs. If the limit on the expenditure is set on this basis, it increases the risk that the subcontractor could deliberately overcharge, or that the Works Services Manager could collude with the subcontractor to charge higher prices with the additional amount shared between them;

c) In 29 transactions examined where the Works Services Manager sought an increase in the limit of expenditure either before or after starting the work, property management staff authorised it, without carrying out further checks on the reasonableness of the increase. Again this increases the risk that the subcontractor could overcharge in collusion with the Works Services Manager.

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Example

**Excessive limits of expenditure allow alleged fraudulent overcharging**

There are a number of examples where Property Managers authorised increases in the limit of expenditure after a counter offer from the Works Services Manager without seeking further advice from the Establishment Works Consultant. When this work was re-measured as part of the subsequent review it was found that the value of the work was significantly less than the counter offer. In at least one case, the Works Services Manager’s counter offer was more than twice the original limit of expenditure and the subsequent review found the value of the work to be just less than the original limit of expenditure.

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3.26 All the fraud types in this section are more likely to occur where subcontractors are informed of the limit on expenditure before quoting or bidding for the work. In particular, if there is collusion between the person setting the limit and the subcontractor, the limit could be set deliberately high, allowing subcontractors to charge more than necessary. To reduce the possibility of subcontractors becoming aware of the limit of expenditure the Department could consider changing their practice of informing the Works Services Manager of the limit of expenditure. Instead the Works Services Manager could provide the
Property Manager with a quote for the work, which the Property Manager would then compare with the limit of expenditure before deciding whether to proceed with the work. If the Department adopt this approach, it is particularly important that they produce reliable costings, or ensure that their Establishment Works Consultants do so, against which to assess Works Services Managers’ quotes.

**Key recommendations**

**On controlling the cost of maintenance work**

In the light of the increased risk it presents of deliberate overcharging, the Department should consider whether to change their practice of informing the Works Services Manager of the limit of expenditure for each job.

Limits of expenditure for all jobs should be based on a professional estimate of the likely cost, either by the Establishment Works Consultant or by reference to an up-to-date list of standard reference costs. Establishment Works Consultants should base their estimates on a site inspection.

When asked to approve an increase in the limit of expenditure on a job, Property Managers should in all cases seek the professional advice of the Establishment Works Consultant.

**How do the Department ensure that maintenance work is awarded to subcontractors who are able to carry out the work and at the lowest cost?**

3.27 The Works Services Manager is responsible for implementing the maintenance programme approved by the Property Manager, which is done mainly through appointing subcontractors. The Works Services Manager indicates in the contract strategy the proportion of the work they intend will be awarded to subcontractors by single tender, three quotes, measured term and full competitive tender (Figure 11(a) below).
Through our risk modelling we identified the most significant types of fraud which could occur and the sums potentially at risk (see Figure 11(b)).
3.29 We also identified the key controls which the Department have to prevent and detect fraud:

- The Department need to ensure that the Works Services Manager awards the work by competition where appropriate.
- The Property Manager and the Establishment Works Consultant should review which subcontractors are invited to quote or tender for the work.
- The Department should have adequate physical security and arrangements to safeguard tender documentation.
- The Property Manager and the Establishment Works Consultant should make checks at tender boards.

**The Department need to ensure that the Works Services Manager awards the work by competition where appropriate**

3.30 Our risk modelling shows that the most significant risk is of the Works Services Manager or their staff awarding work to a subcontractor without competition in return for payment or other favours. To prevent this type of fraud, the Department expect the Works Services Manager to award jobs valued over £5,000 by competition except where the job is awarded under a measured term contract. Figure 5 describes how measured term contracts are let by Works Services Managers following competitive tendering.

3.31 At the three establishments visited we compared the Works Services Manager’s contract strategy with the way in which jobs had been awarded in 1998-1999 (Figure 12). The results showed that at each establishment the Works Services Manager put out less work to competition than expected. One of the reasons for this was that the Works Services Managers were required by the Property Managers to take on additional work late in the financial year and to complete that work by 31 March so that the expenditure could be charged to the financial year. The Works Services Managers considered that the only way they could meet the Department’s requirements was by awarding the work to subcontractors by single tender.
In the transactions examined, we found that all jobs over £5,000 had been awarded after full competitive tender or competition by three quotes, or to the measured term contractor. But in the majority of cases at Tidworth where work had been awarded to the measured term contractor there was no evidence of reference to the schedule of rates (a schedule setting out the competitively determined rates for standard jobs). This contravenes the Department’s stated policy of competing all work over £5,000. The risk with these cases is that the measured term contractor could deliberately inflate prices.

The Department’s requirement for jobs above a given value to be put out to competition could be circumvented by the Property Manager or the Works Services Manager splitting a job into two or more smaller jobs so that each part fell under the competition limits. However, in the transactions examined we found no cases where this had occurred.

The Property Manager and the Establishment Works Consultant should review which subcontractors are invited to quote or tender for the work.

Frauds in the awarding of work may involve collusion between the person awarding the work and the subcontractor who will carry out the work. Property Managers and their staff should therefore review, or ask the Establishment Works...
Consultant to review, the list of subcontractors which the Works Services Manager intends to invite to quote or tender for individual jobs. In so doing, they should confirm that subcontractors on the list:

- are pre-approved. If subcontractors are properly pre-approved by the Works Services Manager, the Department will have assurance that they will be using subcontractors who have the necessary expertise to carry out the work required;

- have a record of putting in bids for the work. If listed subcontractors persistently fail to tender, the chances of other favoured subcontractors on the list being awarded the work would improve; and

- are not being overly favoured in the amount of work awarded to them as this could indicate that fraud is occurring. This check should also be carried out on work awarded by single tender where it may be easy for the Works Services Manager to favour a subcontractor. There is a difficult balance between awarding work to a subcontractor who is providing good value for money and taking steps to prevent possible fraud by withholding work from that subcontractor. But careful scrutiny of the work of favoured sub-contractors can provide a check on whether they are providing good value.

3.35 In the transactions examined, we found that for the high value jobs procured by full competitive tender, in 20 per cent of cases the list of subcontractors invited to tender had been reviewed by the Property Manager and/or the Establishment Works Consultant. For mid value jobs procured by the three quotes system, we found that the lists of subcontractors invited to quote had not been reviewed.

3.36 To check on the patronage of subcontractors, the Property Managers rely on monthly reports from their Works Services Manager. We found that the standards of reporting were inadequate at each of the three establishments we visited. At Devonport, the Property Manager is provided each month with an updated list of all contractors who have been invited to tender for work under full competition and those who won the work. But no information is provided on mid value work procured by three quotes or measured term contract or on low value work procured by single quote. At Wittering the Works Services Manager reports details of the six contractors who have been awarded the most work during the
month, which provides very limited information on patronage. And at Tidworth, the Property Manager is provided with no information on which contractors have been invited to quote or tender or which have been awarded work.

The Department should have adequate physical security and arrangements to safeguard tender documentation

3.37 Restricting access to tender documentation before the tender board is convened reduces the risk that a fraudster could tamper with the documentation to favour a specific subcontractor. Tampering could include the destruction of competitively priced tenders or opening tenders to pass price information to a subcontractor who has not yet bid.

3.38 Part of the Department’s protection against these risks is to hold tenders in a locked tender box which requires two keys, held by separate people, to open it. We found that at Wittering and Devonport satisfactory arrangements are in place but at Tidworth, only one key is used to open the box, neither key nor box being held in a secure place.

3.39 Control over tender documentation involves having procedures to record the receipt of tenders. At the three establishments we visited, tenders were not date stamped, numbered or recorded in a register as received before being placed into the tender box. This meant that there was a risk tenders could be destroyed without detection.

Example Lack of control over tenders allows alleged corrupt favouring of a subcontractor

There have been a number of examples where the correct tender procedures were not followed by the Works Services Manager. Favoured sub-contractors were awarded contracts as a result of their tenders being deliberately and unjustifiably included as late tenders.

The Property Manager and Establishment Works Consultant should make checks at tender boards

3.40 Tenders are assessed at a tender board according to whether they broadly comply with the Department’s statement of requirement or technical specification and according to their price. The Works Services Manager usually carries out a full technical assessment of the tenders after the tender board. It is important that tender boards involve a number of people including the Property Manager and/or Establishment Works Consultant to reduce the risk that the tenders are unfairly assessed or altered. It is also important for those attending to check that all subcontractors invited to tender have done so or have formally declined, that the tender documents show no physical signs of tampering – such as marks on the
envelopes - and that there are no unusual patterns of pricing – such as all but one firm pricing significantly higher than the estimate which could suggest the firm has been informed of the estimate. Figure 13 below shows the results of our examination at the three establishments we visited. We noted, however, that the Department have not issued guidance to Property Managers on the type of checks they should carry out.

**Figure 13**

<table>
<thead>
<tr>
<th>The checks carried out on tenders at the three establishments visited</th>
<th>Wittering</th>
<th>Devonport</th>
<th>Tidworth</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Tender boards attended by Property Manager and/or Establishment Works Consultant</td>
<td>Yes</td>
<td>Yes</td>
<td>Infrequently</td>
</tr>
<tr>
<td>(ii) Checks that subcontractors invited to tender have done so or declined</td>
<td>No evidence of checks</td>
<td>No evidence of checks</td>
<td>No evidence of checks</td>
</tr>
<tr>
<td>(iii) Checks on whether tenders have been tampered with</td>
<td>76% of cases checked</td>
<td>No evidence of checks</td>
<td>No evidence of checks</td>
</tr>
<tr>
<td>(iv) Checks on unusual patterns of tendering</td>
<td>No evidence of checks</td>
<td>No evidence of checks</td>
<td>No evidence of checks</td>
</tr>
</tbody>
</table>

Source: National Audit Office

**Key recommendations**

**On awarding maintenance work to subcontractors**

The Department should ensure that their Property Managers monitor Works Services Managers’ procurement of work, to determine whether it is consistent with the agreed contract strategy.

Property Managers should monitor the patronage by their Works Services Managers of different subcontractors, and should be provided with the information they need to do this.

Property Managers, with the help of their Establishment Works Consultants, should ensure that proper tendering procedures are followed, including physical controls and recording of tender receipt, and should make specific checks for likely tender fraud.

The Department should consider asking their Establishment Works Consultants to review the Works Services Managers’ technical assessments of tenders, before jobs are let to the winning subcontractors.
How do the Department manage and monitor maintenance work to ensure it is completed in accordance with the specification?

3.41 The Works Services Manager is responsible for managing works in progress and for monitoring subcontractors and the work that they do at the establishment. He is also responsible for ensuring that all work is completed on time, within cost and to the required specification. The Department require their Property Managers to satisfy themselves that works have been completed as required before authorising payment. Figure 14(a) shows the stages of the process.
3.42 Our risk modelling process identified the main types of fraud that could take place in this part of the system. They are shown in Figure 14(b) below:

![Figure 14b](source: National Audit Office)

The value of the risks of fraud in carrying out work at the three establishments visited

- **Risk:** The people carrying out the work could deliberately use lower quality or lower quantities of materials than specified
- **Risk:** The people carrying out the work could deliberately create the need for repairs to be repeated as a result of their poor workmanship, which they would be subsequently awarded and paid for
- **Risk:** The people carrying out the work or monitoring the work could deliberately falsely declare the work to be complete, allowing it to be subsequently paid for

3.43 The risk of fraud is increased where it is difficult to verify the quantity of materials the subcontractor has used and the quality of the work carried out – for example, where the work is subsequently covered up. The best way to prevent these frauds is to inspect jobs, and guidance issued by the Department to Property Managers stresses that they should “regularly and frequently walk their estate, since there is no substitute for actually seeing what is happening, first hand”. Our model shows that all the key controls to prevent these frauds involve physical inspection of the site:

- Physical inspections of works in progress by Property Managers, their staff or professional advisers;
- Record of physical inspection provided by Works Services Manager on completion of work;
- Physical inspections of completed works by Property Managers, their staff or professional advisers;
- Property Managers or their staff ask building occupants to confirm that the work has been completed.
A record of physical inspection should be provided by the Works Services Manager to support completion certificates

3.44 Where the Works Services Manager provides details on whether inspections have been carried out on the work and the results of those inspections, the Property Manager can form an opinion on whether the work has been completed satisfactorily or whether further evidence is required. In 33 out of 110 fully paid transactions we examined at the three establishments there was a record of whether an inspection had been carried out or not. In only 11 of these cases had the results of the inspections been included.

Example False completion certificates provided

There have been a number of examples where completion has been falsely certified and payments made to sub-contractors – sometimes to enable full use to be made of annual budgets. This situation has been exacerbated when the sub-contractor has subsequently gone into liquidation, without completing the work.

3.45 The risk that the Department could be paying for works which have not been completed satisfactorily is underlined by the results of the inspection by our consultants, Chartered Surveyors Weatherall Green and Smith, of a selection of 33 of our sample jobs valued at more than £900,000 in total. In seven cases (21 per cent) our consultants found important outstanding defects or “snagging items” on jobs where full payment had been made based on certificates of completion from the Works Services Manager.

3.46 We also looked to see whether sufficient evidence was available to Property Managers to support part-payments where these had been made on the larger jobs we examined. The Department’s guidance states that part-payments or “milestone payments” may be authorised if they were set out in the original contract and if evidence is provided of the value of work completed. Our consultants considered that in all cases they examined there was insufficient evidence in the form of valuations provided to Property Managers to support part-payments. And in nine cases, where a total of £320,000 had been paid, our consultants found strong indications that substantial part-payments had been made in advance. At around the same time as our visit, the Department commissioned their own consultants to review property management at Wittering, and in a similar exercise they found conclusive evidence of advance payment of around £75,000. In these cases, the Department are running the risk that the subcontractors, having been paid for the work, could fail to finish it satisfactorily or even go into liquidation.
3.47 There is no evidence that these cases are examples of actual fraud. And from our discussions with Property Managers we recognise that pressure to spend their remaining budget around the financial year-end may encourage the advance certification of completion or partial completion. However, we consider that this practice, which is specifically prohibited by the Department, significantly increases the risk of fraud.

**Physical inspections of works should be carried out by the Department**

3.48 In addition to relying on the certification of works by the Works Services Manager, the Property Manager and his staff can inspect jobs personally or require the Establishment Works Consultant to carry out inspections. Property Managers should plan these inspections to complement those carried out by the Works Services Manager and provide assurance on any jobs that are of particular concern – such as those where important elements of the work will not be visible following completion of the task. We found, however, no documentary record that checks by the Department’s staff or Establishment Works Consultants were taking place. The Property Managers we talked to had a good level of general knowledge of their estate, but to provide adequate assurance that works being paid for are satisfactorily complete they should have a formal system of checks and record the results.

**Property Managers or their staff should ask occupants to confirm that work has been completed**

3.49 As an additional control some of the Department’s establishments, including all those we visited, ask occupants to confirm completion. Particularly for low value jobs, where other inspections may not always be done, this acts as a key control, although it cannot provide a technical assessment of the quality of the work. We looked for evidence, usually in the form of a signature, that the check had taken place.

3.50 We found that the check operated as an effective control in only 25 per cent of transactions. This is because:

- establishments have difficulty in operating the check, especially where building occupants are on military duty at other locations;

- at none of the sites was there a list of approved building representative signatures against which the Property Manager could check the validity of the signature on the completion form; and
there was no requirement for the building representative to add his or her name, rank and contact details to facilitate checking.

**Key recommendation**

**On managing and monitoring maintenance work**

Property Managers should ensure that a regime of inspection is in place at their establishments, such that all jobs are checked before any final or interim payment is made. Inspections may be carried out by Property Managers themselves, by their staff, by the Establishment Works Consultant, or by occupants. The results should be recorded to facilitate later checking, for example by the Property Manager.

**How do the Department ensure that payment is made only for authorised work completed to specification?**

The Department have contracts with Works Services Managers and pay them for works carried out by subcontractors. The Works Services Managers are then responsible for paying the subcontractors. Figure 15(a) shows how the Department’s system for authorising and making payments operates.

---

**Figure 15a**

<table>
<thead>
<tr>
<th>Payment for works carried out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcontractor completes work</td>
</tr>
<tr>
<td>invoice</td>
</tr>
<tr>
<td>Works Services Manager checks invoice and pays subcontractor</td>
</tr>
<tr>
<td>Property Manager approves invoice for payment and returns to Works Services Manager</td>
</tr>
<tr>
<td>Works Services Manager prepares summary invoice form AG177</td>
</tr>
<tr>
<td>Property Manager approves form AG177</td>
</tr>
<tr>
<td>Works Services Manager sends summary invoice form AG177 to Defence Bills Agency (Liverpool) for payment</td>
</tr>
<tr>
<td>Defence Bills Agency pay Works Services Manager</td>
</tr>
</tbody>
</table>

Source: National Audit Office
The most significant types of fraud that could take place at this stage of the system were identified by our risk modelling process. They are shown below:

3.52 Responsibility for authorising payment of property management bills lies with the Commanding Officer or Head of an Establishment, but in practice is delegated to the Property Manager. As in other areas of expenditure, the Department have in place standard financial controls on payments made. These include:

- separation of duties: payments are authorised by someone other than the person who authorised the works order. At the sites we visited, Property Managers split the responsibilities between themselves and either their authorised deputies or establishment finance staff.

- computer controls: the Department’s computer systems do not allow payments to be entered if they exceed the limit of expenditure for that job.
Our risk modelling process included the Department’s generic controls over payments as well as key controls specific to property management expenditure. These key controls are:

- The Department should have in place checks on the subcontractor’s invoice for accuracy and validity;
- The Department should check that amounts invoiced by the Works Services Manager match the amounts paid to subcontractors;
- The Department should check discounts received by subcontractors are passed on where appropriate.

The Department should have in place checks on subcontractors’ invoices for accuracy and validity

Although the Department’s contract is with the Works Services Manager, and not with the subcontractors carrying out the works on the establishments, the Property Manager is required to make checks on subcontractors’ invoices before the Works Services Manager can submit an invoice (see Figure 15(a)). These checks are a key control against fraud because the subcontractor’s invoice provides evidence to show that the payment being requested relates to work that has been approved by the Department.

In our examination of 150 transactions selected at the three establishments visited, we found that in none of the transactions were adequate checks made on subcontractors’ invoices by the Department to prevent and detect fraud. In particular, this was because:

- at two establishments, the Property Managers received only photocopies of the subcontractor invoices, creating the risk that the original invoice could also be presented for payment. It would also be possible to deliberately alter the photocopied invoices without detection;
- at the three establishments, Property Managers did not “cancel” the original invoices, by stamping or signing them. Unless this is done, there is a possibility of the invoice being presented for payment again at a later date;
at one establishment, the original invoices are held at the Works Services Manager’s head office in another part of the country, making it difficult for the Establishment Works Consultant or others to carry out audit checks on transactions; and

subcontractor invoices did not have sufficient detail to enable a Property Manager to judge whether all items charged for were valid, especially when combined with a poorly written specification. For example, in one case, a number of doors needed repair. Neither the specification nor the invoice detailed which doors they were or how the cost of repairs to each door was calculated.

**The Department should check that the amounts invoiced by the Works Services Manager match the amounts paid to subcontractors**

**3.57** Although Property Managers have sight of invoices from individual subcontractors, the Defence Bills Agency at Liverpool rely on the Property Manager’s approval of the summary invoice when paying Works Services Managers (see Figure 15(a)). It is, therefore, important that Property Managers check that the charges on the summary invoice are valid:

**Example**

**The Department are allegedly charged twice for the same services**

There have been a number of examples where subcontractors have been persuaded by Works Services Managers to include work in their contracts that is included in the Works Services Manager’s management fee. As the costs were passed on to the Department, the Department is effectively paying twice for the same work.

**3.58** In our examination of 150 transactions selected at the three establishments visited we found that although Property Managers or other authorised staff had approved each summary invoice (form AG177), their approval did not indicate that they had checked in detail whether the summary form agreed with the subcontractors’ invoices. In one case, we found a discrepancy between the amount charged to the Department by the Works Services Manager and the subcontractor’s invoice. Although the cost of fuel supplied by the subcontractor for emergency site heating included VAT at only 5 per cent, the Works Services Manager’s summary invoice showed VAT at 17.5 per cent. The Department are now taking steps to recover the overpayment.
The Department should check discounts received by subcontractors are passed on where appropriate

3.59 Depending on the amount and value of materials used on a job, a subcontractor may receive substantial discounts from the supplier. The Department require that any discounts are passed on to them. If the subcontractor deliberately fails to pass on the discounts, the loss to the Department could be substantial:

Example

Subcontractors allegedly fail to pass on discounts received

There have been a number of examples where subcontractors have purchased materials in bulk and have received a substantial discount on the list price. Although a requirement of the contract, these discounts were not passed on to the Department, resulting in overpayment.

3.60 The Department do not provide any guidance to Property Managers on how they can prevent such frauds. At the three establishments visited, we found that:

- there was confusion amongst Property Managers about whether subcontractors are required to pass on discounts. One Property Manager felt this was a commercial matter for subcontractors which should not concern the Department; and

- Property Managers did not carry out any specific checks on whether discounts had been passed on. Methods they could use include contacting the suppliers of the materials or checking unit costs against prices charged on other jobs or standard reference costs.

Key recommendations

On paying for work

Property Managers, or their authorised staff, should have sight of all original subcontractor invoices to support payment of the Works Services Manager’s summary invoice, and should endorse them to prevent duplicate payment.

Property Managers or their staff should carry out checks, where appropriate, to ensure that discounts received by suppliers are passed on to the Department.
How do the Department ensure that the maintenance programme has been properly carried out?

3.61 As well as having in place a system of specific key controls at each stage of the procurement process, as described in the five preceding sections, the Department also require more general audit checks to be carried out at each establishment. One of the roles of the Establishment Works Consultant is to audit and monitor the work of the Works Services Manager and subcontractors. They are required to carry out specific physical and financial audit checks to detect fraud and confirm whether value for money has been obtained on a sample of five per cent of all jobs. The results of the checks, which should be carried out at the end of each month, are reported to the Property Manager for follow-up action.

3.62 If audit checks on five per cent of works are carried out effectively, the Establishment Works Consultant should be able to detect the majority of the types of fraud outlined in the preceding five sections of this Part, providing a high level of assurance for the Property Manager. And at the three establishments visited, Property Managers placed considerable reliance on these checks. Our risk model treats audit checks as a key control against all types of fraud, and in our transaction testing we looked to see how effectively they were executed.

3.63 We found that:

- at Tidworth Garrison the audit checks were between two and three months behind schedule. At RAF Wittering, checks were still outstanding on the jobs carried out by the former Works Services Manager firm more than eighteen months previously. If checks are not carried out soon after the work is completed it can be difficult for the Establishment Works Consultant to assess the standard to which the job has been completed or even whether the work has been carried out at all;

- at the three establishments, the Establishment Works Consultants have developed standard checklists to set out the results of their checks. However the checklists were too brief to demonstrate to the Property Manager that all the relevant aspects of the job had been examined;
at HMS Drake, Devonport, the Establishment Works Consultants told us that they inspected all jobs selected for checking but we found that there was insufficient supporting information to show what had been examined. At the other two establishments, the checks made on smaller jobs were based on a file examination only;

at RAF Wittering, small routine maintenance tasks were carried out as part of a monthly “bulk” works order which was excluded from the population when selecting the sample for audit checks. Therefore, for a period of several years, no low value works were subject to audit checking. In their review of property management at RAF Wittering, conducted in April 1999, the Department’s own consultants also considered this unacceptable. The establishment have now changed their procedures so that they no longer use bulk works orders and low value works are now included in audit checks;

in general the results of the checks were not used to highlight weaknesses or make improvements to controls. Where a transaction was found to be unsatisfactory, the results were usually treated in isolation, rather than being used as evidence of the operation of the system of controls.

**Key recommendation**

**On audit checks**

Property Managers should ensure that Establishment Works Consultants’ audit checks are thorough and up-to-date, that they record the results of an on-site inspection in each case, and that the results are followed up promptly, to provide a deterrent against fraudulent practices.
Part 4: Detecting and investigating fraud, and disseminating lessons learned

4.1 In addition to providing appropriate systems for capturing staff suspicions about fraud, the Department need to have active review arrangements to highlight areas of potential fraud. They also need effective means for investigating suspicions and for obtaining recoveries, where appropriate. And they need to collate and analyse their experiences, and disseminate the results to staff, so that fraud prevention and detection is improved. This Part looks at their performance on all these fronts, covering the last three headings in the fraud risk management cycle (Figure 1).

Detecting and Investigating Fraud

Do the Department proactively detect fraud?

The Department should use a range of computer techniques to detect fraud

4.2 In recent years a number of computer techniques have been developed which can help in identifying potential cases of fraud. These include computer assisted audit techniques, data mining, data matching, and investigation and analysis tools. The Department are already using some of these techniques:

Computer Assisted Audit Techniques can be used to identify unusual types of transaction within the Department’s records, which might be worth further investigation. Although the Defence Fraud Analysis Unit already use these techniques as part of their investigations, the Department should consider using them as part of their establishment reviews. Such checks could also be built into information systems to provide regular exception reports to managers on transactions.

Data Mining can be used to identify the relationships between sets of data within the Department’s databases. Some of the patterns identified may indicate fraudulent activity or practices which increase the risk of fraud. The Defence Fraud Analysis Unit are starting to use data mining on the Department’s payment records held at Liverpool. The aim of this work is to identify duplicate payments and compare the levels of risk between different payment methods.

continued
Computer techniques that can be used to detect potential fraud continued

Data Matching can be used to compare computer records held for different purposes or by different bodies to identify discrepancies and anomalies. The Department are considering comparing other departments’ and public sector bodies’ data on subcontractors who have committed fraud to see whether or not they are using the same firms, although they are considering the provisions of the Data Protection Act in so doing.

Investigation and Analysis Tools help fraud investigators to handle their case evidence, for example by highlighting links between colluding parties or between fraudulent transactions. The Defence Fraud Analysis Unit have begun to use these tools.

These techniques can be used to identify indicators of possible fraud including:

- duplicate payments;
- unusual patterns of works orders – for example a large number of jobs valued just below the financial limits at which the Works Services Manager should use full competition in awarding the work;
- invalid Value Added Tax numbers or incorrect amounts of Value Added Tax;
- unexpected relationships between subcontractors – for example shared address details, telephone or fax numbers, bank accounts or directors.

4.3 On property management the Department currently use a number of different systems for recording information on individual works services transactions. They are in the process of introducing a new system called PROM2 across the majority of the Department’s establishments, but we found that the take up of the new system across the Services was variable:

It is the Department’s policy that all establishments will operate PROM2 by the end of the year 2000.

RAF Stations – All stations, including RAF Wittering which we visited, now have PROM2 in place.

Army Establishments – The majority of Army Property Managers will be equipped with PROM2 by June 2000. Tidworth Garrison, which we visited, are still operating the predecessor system – PROMIS.

Naval Bases – All Royal Marines establishments and many establishments where property management is run by the Navy, such as Joint Support Unit Northwood (formerly HMS Warrior) which we visited, operate PROM2. However a number of bases, including HM Naval Base Devonport which we visited, have recently purchased the Area Resource Management System (ARMS), and are reluctant to switch to PROM2.

Civilian Establishments – Take up of PROM2 by civilian establishments has been slow to date.
We examined the sorts of property management information held on the PROM2 system to see whether it was currently possible to use these computer techniques to detect potential fraud. We also used computer assisted audit techniques on the Department’s records for the two year period 1997-98 and 1998-99 at RAF Wittering and at Joint Support Unit Northwood (formerly HMS Warrior) to assess whether the techniques produced worthwhile results which could indicate cases of fraud.

We found that PROM2 is capable of holding all of the key information that the Department require for property management at an establishment including: a register of future maintenance tasks that will be required, information on key assets, and details of works orders – including a brief description of the work, the limit of expenditure, details of variations to the limit of expenditure, the dates the order was raised and completed, the subcontractor who carried out the work, and details of the payments made against the order.

In practice, we identified a number of obstacles the Department would have to overcome before they could make the most of computer assisted audit techniques, data mining or data matching. Property Managers do not currently input to their computer systems all relevant information. For example, they do not hold information on the subcontractors who have been tasked with carrying out maintenance work at their establishment, although the Defence Estates agency are beginning to compile a database on the main contractors used (paragraph 2.29). So at present the Department cannot match their data with other organisations’ data on subcontractors who are involved in fraudulent activities. The absence of data on subcontractors also prevents the Department from matching data between establishments. Potentially a subcontractor could be found guilty of carrying out fraud at one location but could still be undertaking work for the Department at other locations. The Department have told us that in future all Works Services Manager and Establishment Works Consultant contracts will require the firms involved to invest in the PROM2 system and network their computers with the Property Manager at the establishment – although the Department will retain ownership of the IT hardware and software. This could significantly improve the Department’s information. In the meantime, the Department should instruct Property Managers to record more information on PROM2.

Application of the computer techniques to the data is also not straightforward. The Department’s property management IT systems are not networked between establishments, so data must be downloaded from each establishment separately. And data from the current version of PROM2 must be reformatted before it can be exported to software commonly used for computer
assisted audit, data mining or data matching. The Department are considering networking PROM2 between establishments and intend that it will be easier to export data from later versions.

4.8 We used computer assisted audit techniques on data from RAF Wittering and Joint Support Unit Northwood to identify unusual transactions which could have indicated duplicate payments. We then visited the establishments to examine further payment records for a number of the maintenance jobs concerned. Most of the transactions identified involved staged payments of the same value against a single maintenance job, contrary to the Department’s guidance which states that interim payments should be made exceptionally – for high value or long duration tasks – and that separate maintenance orders should be raised for each interim payment. The remainder of the apparently unusual transactions were a result of incorrect data which did not match exactly the paper payment records. The Department could therefore make use of these techniques to identify duplicate payments but to maximise their effectiveness they will need to raise separate works orders for interim payments and they will need to make sure that their electronic records reflect accurately the payments made.

The Department could use their reviews of property management at establishments to detect fraud

4.9 As part of their responsibility for overseeing property management, the Defence Estates agency carry out a regime of establishment reviews to check for compliance with the standard property management procedures and controls. The reviews, about 50 annually which cost roughly £10,000 each, are carried out by professionally qualified property consultants. They are designed to assess both whether the Department are getting value for money for maintenance work, and whether they are implementing controls against fraud and malpractice.

4.10 In the past, the property management reviews have been based on interviews with personnel, rather than examination of individual transactions. As a result they have been of limited practical use in identifying how often and how well specific controls and checks are operating. And they were not designed to detect possible frauds. The agency have recently revised the format of the reviews, however, to target more effectively the risks of fraud, through examining individual transactions.

4.11 The Defence Estates agency conducted a revised format establishment property management review at RAF Wittering during April 1999 and initial results show that such reviews could have a valuable role in identifying possible
The review, carried out by the Department’s professional consultants (building and quantity surveyors, and mechanical and electrical engineers), included the remeasurement or valuation of a sample of jobs under £5,000 in value. The results are shown in Figure 16.

### Figure 16

The results of the remeasurement and valuation work the Department carried out at RAF Wittering

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Jobs Examined</th>
<th>Work Priced</th>
<th>Amount Paid</th>
<th>Amount Valued</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>34</td>
<td>Schedule</td>
<td>£22,000</td>
<td>£20,000</td>
</tr>
<tr>
<td>B</td>
<td>11</td>
<td>Lump Sum</td>
<td>£28,000</td>
<td>£25,000</td>
</tr>
<tr>
<td>C</td>
<td>8</td>
<td>Schedule</td>
<td>£30,000</td>
<td>£28,000</td>
</tr>
<tr>
<td>D</td>
<td>4</td>
<td>Lump Sum</td>
<td>£32,000</td>
<td>£30,000</td>
</tr>
<tr>
<td>Various</td>
<td>11</td>
<td>Schedule</td>
<td>£34,000</td>
<td>£32,000</td>
</tr>
</tbody>
</table>

The review team remeasured or valued 34 jobs carried out by ‘term contractor A’ at a total of about £22,000 whereas the Department had paid about £28,000 for the work. So overall, the Department had paid about 27 per cent more for the work than the review team’s valuation. In fact, 30 of the 34 jobs examined were lower in value than the price the Department paid and so the review team concluded that there was enough evidence to be satisfied that this was deliberate and consistent overcharging by ‘term contractor A’. The commercial Works Services Manager at Wittering has challenged a number of statements made by the review team and the Department are currently deciding what action to take.
**Key recommendations**

The Department should promptly review the results of their data mining work at Liverpool to see if this technique could be of use in other areas, including property management.

They should also consider the use of computer-assisted audit techniques by the Defence Fraud Analysis Unit to proactively detect fraud at establishments.

And they should look into data matching, both within the Department and with other organisations, to identify where they may be using subcontractors who are under suspicion of, or have been convicted of, fraud.

In order to be able to use these techniques properly, the Department should ensure that they record subcontractor details on their IT systems, press ahead with their plans for Works Services Managers and Establishment Works Consultants to use PROM2, and they should consider opportunities to network future systems across the Department.

The Department should consider focusing all future establishment property management reviews around the detailed examination, including remeasurement and valuation, of individual jobs in order to detect irregularities and possible fraud.

**How effectively do the Department investigate cases of fraud?**

4.13   It is the Department’s policy that all suspected fraud cases will be rigorously investigated although not all can be substantiated nor progressed to prosecution. The Department’s investigative resources are split between the Defence Fraud Analysis Unit, the Ministry of Defence Police and Service Police (see paragraphs 2.23 to 2.25). In addition, The Defence Estates agency provide some resources to investigate fraud in works services. Under the Defence Estates agency’s Fraud Prevention Steering Group initiative, these bodies have begun to work more closely together.

4.14   The Department are unique in having four dedicated police forces, which provides them with substantial investigative resources. Specific expertise on fraud is, however, concentrated in the Ministry of Defence Police Fraud Squad. And the Squad do not have sufficient resources to investigate all of the reported fraud in the Department. Generally, they investigate only criminal cases where the estimated loss to the Department is over £75,000, passing lower value criminal cases to regional Criminal Investigation Departments. They will sometimes investigate cases of lower value if they are of a complex nature.

4.15   The Fraud Squad are currently investigating about 30 cases of alleged fraud, with an estimated loss to the Department of £17 million. About 75 per cent of this loss (£13 million) is a result of alleged fraud in the property management area, but the Fraud Squad estimate that 25 per cent of their fraud investigation resources are devoted to property management cases. Investigating fraud in
property management is particularly difficult because it often requires technical examination and evaluation of the work carried out, and it is very document-intensive because of the large volume of transactions. Investigations can be complicated by the layers of contractual relationship between the Department and the Works Services Manager, between the Works Services Manager and subcontractors, and sometimes between subcontractors and sub-sub-contractors. The Fraud Squad told us that they often rely on the support of the Defence Fraud Analysis Unit and the Defence Estates agency in providing technical property management and forensic accounting expertise.

4.16 The Fraud Squad have recently introduced a target of 180 days (six months) from receipt of an allegation to progress an investigation to the point where they can submit the case to the Crown Prosecution Service. They wish to improve on their current average performance of 244 days (over eight months) because they consider that the probability of a successful prosecution reduces the longer the investigation takes. The Squad told us that their investigations are often delayed because they have to release investigators to react to requests from defending solicitors during ongoing court cases. But they have only been recording since April 1999 the amount of resources devoted to each investigation and so the Department do not have good enough management information to know what impact more fraud investigators, or a different mix of skills, would have on the length of time taken to put a case together for the Crown Prosecution Service. Nor do they know whether there is a positive relationship between the amount of resources devoted to an investigation and successful prosecution.

Key recommendations

It is important that fraud cases are investigated by experienced and skilled investigators. The Department should consider whether the balance of their resources between Ministry of Defence Police Fraud Squad and other investigative branches is appropriate.

The Department should continue to collect data on the cost and duration of fraud investigations and the mix of resources devoted to them, and compare these with the outcome of the cases.

The Department should choose the most appropriate path for a fraud investigation

4.17 The Department have a range of penalties available to them including disciplinary actions, criminal prosecution, civil litigation and recovery of payments made under contract. Their policy is to seek criminal prosecution of fraudsters for all but the most minor of offences, and so their decisions over what action to take in response to evidence of fraud are driven by the requirements for criminal prosecution (Figure 17).
The Risk of Fraud in Property Management

**Figure 17** The key decisions the Department take when investigating fraud

Does the allegation or suspicion refer to non-Serving staff or contractors?

- **Yes**
  - Sufficient substantiation for police action?
    - **Yes**
      - Ministry of Defence Police investigate
    - **No**
      - Defence Fraud Analysis Unit investigate further

- **No**
  - Sufficient substantiation for police action?
    - **Yes**
      - Sufficient substantiation for criminal prosecution?
        - **Yes**
          - Found guilty?
            - **Yes**
              - Court imposes:
                - Jail sentence
                - Confiscation of property
            - **No**
              - Out of court settlement or
                - Court awards compensation or
                - Case closed
        - **No**
          - Sufficient grounds for civil litigation?
            - **Yes**
              - Out of court settlement or
                - Court awards compensation or
                - Case closed
            - **No**
              - Case closed or
                - Line management may take disciplinary action against staff, including:
                  - Demotion
                  - Fined from pay and/or
                    - Recovery of losses may be sought from contractor under contract

Notes: 1 Criminal court proceedings apply to individuals only.
2 Civil litigation can apply to individuals or firms.

Source: National Audit Office
Pursuing criminal prosecution is a lengthy, difficult and resource-intensive process because of the high standard of proof required in criminal law and strict rules over evidence collection. It is therefore extremely difficult to achieve convictions for fraud. The Department do not routinely collect and analyse data on fraud cases they have investigated and their success rate in prosecution. The Ministry of Defence Police provided us with information on the 70 cases which their Fraud Squad started investigating between 1994 and 1997. The Squad are still dealing with 20 of these cases and have passed six to other parts of the Department to proceed with civil litigation. The outcomes of the remaining 44 cases are shown in Figure 18. Five cases have been prosecuted, with four successfully resulting in convictions. But despite the relatively large number of property management cases investigated (paragraph 4.15), none of the prosecutions related to fraud in this area. Nine of the 20 cases the Squad are still dealing with relate to property management.

The effort and difficulty involved in prosecuting fraud cases means that the Department need to make a judgement in the early stages of each case about the chances of achieving a conviction. If they wait until they have sufficient evidence to present the case to the Crown Prosecution Service for a decision, they may have already reduced their chances of successful contractual recovery or civil litigation –
because of the time delays involved and because they are not legally allowed to use
in civil actions evidence collected by the Police for a criminal case. The Department
draw on the professional judgement of the Ministry of Defence Police concerning
those cases worth pursuing through criminal prosecution but have not developed
criteria based on the analysis of previous cases.

**The Department should seek to maximise their financial recompense**

4.20 The Department seek financial recompense mainly through criminal
prosecution. If the Department are successful in achieving a conviction for fraud,
they then ask the court to seize the individual’s assets (such as his house) up to the
value of the Department’s losses. These assets are released by the court only when
the individual pays back the losses (the money recovered goes to the Consolidated
Fund, not back to the Department). The Department have recovered £68,000 to
date in this way against £190,000 of their estimated losses for the four cases which
have resulted in convictions in the last five years (paragraph 4.18). The
Department have a total of £1.1 million of individuals’ assets restrained pending
future court proceedings – £900,000 of this relates to cases of alleged property
management fraud.

4.21 Because the Department do not achieve many criminal convictions and
because these convictions apply only to individuals not firms, they should also look
to maximise the amounts they recover under contract or through civil litigation.
The Department do not keep records on the amounts of money that they have
attempted to recover in these ways or the amounts they have recovered
successfully. But they have told us that they find it difficult to recover losses other
than for transactions for which they have substantial evidence of fraud. Moreover,
Works Services Manager contracts currently do not set out the conditions under
which the Department are entitled to seek recoveries in the event of fraud or poor
performance. The Defence Estates agency’s Fraud Prevention Steering Group have
now begun to look at ways of improving the effectiveness of recovery action.

**Key recommendations**

The Department should routinely collect and analyse data on fraud cases handled by all
of their investigating branches, and they should monitor their success rate in achieving
criminal prosecutions and financial recovery

The Department should seek to develop criteria, on the basis of their past record and
experiences of other organisations, on which cases to pursue through to criminal
prosecution and which cases to concentrate on financial recovery under contract or
through civil litigation
Learning lessons from fraud

4.22 In order to learn from their experiences and improve their performance, the Department need to collect and analyse good information on fraud, fraud risks and their performance in implementing controls. They also need to communicate well between different branches and disseminate information effectively to those who need it.

Do the Department have good information on fraud, fraud risks and their performance in implementing controls?

4.23 In order to improve their performance in detecting, investigating and preventing fraud, and minimising the risk of fraud, the Department need a variety of different types of information:

- on suspected frauds, and the outcome of investigations, so that they can identify new types of fraud, and target and refine fraud management resources;

- on the activity in given areas, such as property management, so that they can monitor trends and analyse patterns of performance; and

- on the operation of their control regimes in these areas, so that they can monitor the implementation of policy and identify redundant controls or gaps in coverage.

The following paragraphs summarise the Department’s information under these headings, and assess its adequacy.
The Department should collect and analyse information on fraud and suspected fraud

4.24 The only Department-wide aggregation of fraud information takes place annually to provide the Department’s input to an annual Treasury report on fraud in central government, the main features of which are summarised below:

The Treasury produce an annual report analysing cases of fraud in central Government. The report analyses:

- the scale of fraud and suspected fraud
- the types of fraud and suspected fraud
- the circumstances in which fraud occurred
- the means by which frauds were discovered and the action taken.

The report concentrates on internal fraud and suspected fraud committed by departments’ staff. It includes in its main analysis cases of fraud involving contractors or likely suppliers only where they are suspected of colluding with a member of staff. Procurement frauds are included in an annex but are not reported or analysed in detail.

4.25 The Treasury report format, however, provides limited information for the Department in managing the risk of fraud in property management. The report does not deal in detail with procurement fraud – one of the major sources of fraud in the Department, especially in property management. As such the report does not square well with the Department’s internal organisation or activities – many of which involve, and will increasingly involve, contractors. The Department do not reanalyse for their own purposes the raw data which forms the basis of their submission to the Treasury.

4.26 The Defence Fraud Analysis Unit have recently begun work on a database on which they will record information on all fraud and suspected fraud in the Department. They have told us that, given their current level of resources, this will take some time. But when it is complete it will enable them to analyse better their information on fraud and monitor their progress in investigations. They should include in their database information on:
In order to help with future risk assessments:

- details on exactly how the alleged fraud was perpetrated including the area of expenditure (e.g. property management) and who by;
- when and where the alleged fraud took place;
- whether there was collusion between departmental staff and contractors; and
- which contractors were involved.

In order to monitor the progress of investigations and their outcomes:

- who reported the suspected fraud and when;
- who is investigating the fraud;
- how far the investigation has progressed and what resources have been put into the investigation;
- the penalties imposed on the fraudsters; and
- the amount of money the Department has recovered.

4.27 On property management fraud, the situation is similar to the global picture – there is no routine collation or analysis and no authoritative summary of property management frauds. However, the Fraud Prevention Steering Group (paragraph 2.9) have recently begun to discuss property management fraud matters from manager, auditor and investigator viewpoints. And the Defence Estates agency have commissioned property consultants to analyse information contained in past establishment property management reviews to provide a profile of the likely risks. Along with the information collected by the small Defence Estates agency headquarters team which helps investigate some property management fraud, these initiatives should help the Department gain a better understanding of the types of fraud they are exposed to in property management.

**The Department should collect and analyse information on property management activities**

4.28 Monitoring of property management performance and managing fraud risk have common elements – in that any frauds occurring will lead to lower efficiency and effectiveness, and weak management practices will often increase risks of both poor performance generally and fraud specifically. Currently, it is not easy to analyse property management activity across the estate. Although many establishments have selected a common management information system – PROM 2 – establishments are not networked to facilitate transfer of information (see paragraphs 4.3 to 4.6). More generally, the existence of performance indicators, as opposed to financial data or activity data, is patchy. As a result, it is difficult for local managers to form a view on their relative performance or for central Defence Estates agency staff to engage in overall or comparative analysis of property management performance.
The Department need a clear view of the operation and effectiveness of management controls

4.29 The Department need information on the operation of financial and management controls against fraud, without which they cannot gain assurance that the desired degree of control is, in practice, being exercised. Moreover, they need to review continually the control regime to make sure that all key fraud risks are controlled, and that the controls are the most cost-effective. Information on the operation of controls against fraud could come from a number of sources – including those set out below. But such information is not routinely collated and analysed.

4.30 In property management the absence of such collation is made more worrying by the results obtained when reviews have been mounted. For example, the Department’s internal auditors have raised numerous concerns about the quality of property management controls. In a 1997 annual report to the Defence Audit Board they stated that “Property Management remains a problem area with widespread compliance failings and weaknesses in management procedures ... We are not satisfied that the Department is achieving value for money in this area, or that impropriety is not occurring”.

4.31 In the associated audit report they made 20 recommendations for improved control of property management work. Some focused on structural matters, regarding the roles of the Establishment Works Consultant, Works Services Manager and Property Manager, and these are being considered as part of the Department’s review of the overall arrangements for property management. But of the 12 that related to more straightforward management controls, we found that little had changed at the time of our fieldwork. For example:

- although the audit report advised that Property Managers should not authorise single tender (non-competitive) procurement, we found examples where they did so at the sites we visited; and

- whilst the audit report recommended that Establishment Works Consultants should be asked to remeasure works carried out by measured term contractors as part of their sample checks, we found that this was not always done.

4.32 Another source of information on the operation of controls comes from the Defence Estates agency’s periodic reviews of individual establishments. One of the first new-style reviews, which we referred to earlier (paragraphs 4.10-4.11), found
significant weaknesses in payment and inspection controls which enabled contractors to overcharge the Department. Those findings are consonant with our own site visits, where we noted poor documentation of control activity and fewer inspections of completed work than expected (see Part 3).

4.33 Finally, there are the results of Establishment Works Consultants’ checks on Works Services Managers’ transactions. At the establishments we visited, we noted that the Establishment Works Consultants had raised a number of concerns about the Works Services Managers’ procurement procedures, and about the price and quality of some of the maintenance jobs carried out. But the Consultants’ reports were often late, and the Property Managers’ follow-up action was similarly delayed and, on occasion, ineffectual (paragraph 3.62).

4.34 Taken overall, the Department’s collation and analysis of information on property management fraud, activity and operation of controls is inadequate to help focus fraud prevention or detection work. We recommend that:

**Key recommendations**

The Department should push ahead in developing a definitive central database of information on fraud. They should look to include the information which would help them with future risk assessments and in monitoring the progress and outcomes of their fraud investigations;

The Department should prepare and circulate internally an annual report of fraud and suspected fraud, including property management fraud, using the information they send to the Treasury, but analysing it in a more useful way;

The Defence Estates agency should build on new initiatives and pull together annually information on property management frauds, on property management activity and on the operation of property management controls. This should form the basis for an assessment of probity and value for money in property management expenditure.

**How effectively do the Department communicate on fraud matters?**

**The Department should share information with others**

4.35 Sharing information is an important way for an organisation to keep ahead of the fraudster. It is a key element of best practice to seek all relevant information on likely fraud risks from outside organisations and to have an appreciation of other organisations’ responses to those risks. The sorts of information that can be of use include:

- details of known fraudulent individuals or firms;
descriptions of novel fraud types; and

outcomes of different approaches to dealing with reported fraud.

4.36 As part of the Fraud Prevention Steering Group initiative, the Department are looking to share information on property management fraud and ways of combating it with both public and private sector organisations. As major purchasers of maintenance work in the London area, the Department have discussed with the Metropolitan Police what steps can be taken against organised fraud in the area. They have also made initial contact with NHS Estates with a view to sharing information and benchmarking buildings and estate performance, and they intend to extend discussions to fraud-related matters in the future. These are useful initiatives.

The Department should disseminate up-to-date and practical guidance on fraud risks and controls

4.37 In 1997, the Defence Estates agency issued important guidance for Property Managers discussing fraud risks, what factors indicate that fraud is taking place, and listing audit and managerial checks that should be carried out by the Property Manager and Establishment Works Consultant. But the guidance is lacking in examples of fraud, and in practical instructions on the checks that can be put in place to prevent them. We asked Property Managers in our survey what guidance documents they had found helpful in shaping their approach to fraud prevention, but only 29 per cent mentioned the guidance issued by the Defence Estates agency. Some 40 per cent said they referred only to wider Departmental or Treasury guidance on fraud, which was not specific to property management and lacked any practical advice on application. The Defence Estates agency have recently prepared draft best practice guides on: contract strategies; tender procedures; preparation and maintenance of a tender register, and; on the five per cent check of works. They plan to issue these to Property Managers in July 2000.

4.38 The Defence Fraud Analysis Unit have also sent out Special Bulletins on novel or significant frauds – three were issued on property management in April 1998. However, these Bulletins were distributed only to those who put themselves on the mailing list – not all Property Managers, for example, saw them. And there have been no bulletins since April 1998. The Defence Fraud Analysis Unit are currently considering the best format for a new series of property management fraud bulletins, and are also intending to include some more general fraud case notes in a magazine circulated to the Department’s finance staff.
4.39 Some information on irregularities – particularly details of smaller subcontractors associated with them – would be of most use for neighbouring establishments to that where the irregularities have occurred. There is, however, no effective regional or local structure which facilitates the exchange of such information. Any informal networking tends to follow Service or civilian management structures.

4.40 As the Department do not have a set approach to approving subcontractors (paragraph 2.29), the absence of shared information across the Department means that some sites may be vulnerable to fraud by subcontractors who have been identified and removed from approved lists at another site. However, we did find examples of good practices in this area which could be more widely used within the Department:

**Good practices at HM Naval Base Devonport and RAF Wittering**

At HM Naval Base Devonport, property management staff were involved in reviewing the performance of subcontractors on a quarterly basis. The Works Services Manager uses a system of three lists, A, B and D, (there is no list “C”). Subcontractors on list A are preferred subcontractors who are performing well at the establishment and are regularly invited to bid for work. New approved subcontractors or subcontractors whose performance could be improved are placed on List B and are asked to bid for work less regularly, to provide variety on tender lists and to carry out work when preferred subcontractors are unavailable. Subcontractors who have not yet completed the Works Services Manager’s approval procedures and those whose performance has been very poor are placed on list D until they complete the approval procedures or rectify their performance deficiencies. Property management staff and the Establishment Works Consultant are involved in reviewing the lists on a quarterly basis.

The Works Services Manager at RAF Wittering reports poor subcontractor performance and suspicions of potential fraud to his company’s headquarters, at which point the subcontractor is put under review. If another Works Services Manager from the same company attempts to place an order with that subcontractor, the company’s computer system automatically alerts them to the earlier concerns.

4.41 The Department have done little to disseminate the generally applicable lessons from their reviews of property management at establishments in the past. But while we were carrying out our investigation, the Fraud Prevention Steering Group commissioned consultants to review the information available from previous fraud investigations and audits (paragraph 4.27).

**The Department should provide regular training in fraud prevention and detection**

4.42 As the Department’s representative, the Property Manager needs to be able to act as an “intelligent customer” in dealing with the two main property management contractors. But from our telephone survey nearly half of the
Property Managers questioned had had no experience of property management before taking up post. Some were retired officers with a background in active service; others were serving officers or civilians with administration and personnel experience. Few had any technical or engineering qualifications.

4.43 It is therefore particularly important for Property Managers to receive training to enable them to effectively prevent and detect fraud. Most Property Managers attend a two-week initial training course provided by the Defence Estates agency which includes sessions on the risks of fraud in property management and advice on how to prevent fraud occurring. But they receive no mandatory refresher training. 16 per cent of the Property Managers we surveyed said they had never attended any fraud awareness training and a further 45 per cent had attended more than two years ago.

4.44 The Defence Fraud Analysis Unit frequently give presentations on fraud awareness to groups around the Department, at the request of budget holders – for example as part of the Royal Air Force’s programme of four property management fraud awareness seminars each year. Between June 1998 and June 1999, the Unit gave about 70 presentations, of which over 20 were given specifically to groups of property management staff. The Defence Estates agency also give tailored presentations on fraud awareness to property management staff when requested by budget holders. These presentations, where attended, provided a useful opportunity for Property Managers and others to update their knowledge of likely frauds and how to spot them.

Key recommendations

The Department should continue with their efforts to share information with others and benchmark their fraud management practices;

The Department should regularly update their guidance to include their latest knowledge on fraud risks and practical advice on how to combat them;

The Department could do more to benefit from the findings of their technical experts. They should draw together the generally-applicable lessons from both Establishment Works Consultant audit findings and from their new establishment property management reviews and disseminate the lessons to all establishments;

The Department should improve their sharing of information on the contractors they are using in property management, learning from good practices at RAF Wittering and HM Naval Base Devonport, and from the Defence Procurement Agency;

The Department should ensure that departmental staff, and Property Managers in particular, frequently receive fraud awareness training which includes practical advice on how to prevent and detect fraud. The Department should consider monitoring their awareness and designing fraud training programmes appropriately.
Appendix 1: The methods we used
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We reviewed trends in fraud perpetrated against the Department. To do this, we reviewed the Treasury Annual Fraud Reports and the Department’s information on cases of fraud and suspected fraud.

We examined the Department’s arrangements for dealing with fraud at their establishments and the controls that they operate. To do this, we conducted detailed fieldwork at HM Naval Base Devonport (Navy), RAF Wittering (RAF) and Tidworth Garrison (Army). In agreement with the Department, we selected these three establishments to be broadly indicative of property management arrangements across the majority of the Department’s establishments. We used the following criteria:

- an example from each of the Services;
- have a substantial budget, broadly comparable with the average establishment property management budget of nearly £4 million;
- have a commercial Works Services Manager and Establishment Works Consultant as do the majority of establishments;
- have a range of different assets supporting operational units;
- carry out a range of works using different contract methods.

At each establishment we interviewed the Property Manager, his staff, the Works Services Manager and the Establishment Works Consultant to find out about their arrangements for dealing with fraud and the controls that they had in place. We then carried out transaction testing on a random sample of about 50 maintenance jobs at each establishment, which were carried out within the period November 1998 to March 1999. And we physically inspected a selection of these jobs to see to what extent they were satisfactorily completed. Our testing helped us to see how often individual controls were operated and how effective they were, and contributed to our modelling.

We identified the key risks of fraud in property management and estimated the annual value of transactions at risk of fraud. To do this we conducted a fraud risk assessment model which incorporates different risks of fraud and the Department’s controls. We obtained data to populate the model from different sources:

- workshops with a number of the Department’s Property Managers and central staff;
- questionnaires to the workshop participants;
- our transaction testing during fieldwork at the three establishments.

Our modelling is explained further in Appendix 2.

We examined the Department’s overall arrangements for dealing with fraud, including fraud in property management. To do this, we reviewed documents and interviewed key players including:

- Defence Estates agency
- Defence Fraud Analysis Unit
- PolCF
- Directorate of Internal Audit
- Ministry of Defence Police

We obtained information on the experience and fraud awareness of the Department’s property managers. To do this, we used a telephone survey of a sample of 62 Property Managers randomly selected from a stratified population which reflects the three Services and Headquarters branches. We excluded Property Managers who we had already visited or who were involved in our risk modelling workshops. The sample is statistically representative and the sampling error was generally in the order of 10 per cent and often lower (at 95 per cent confidence).

We identified data records which could indicate fraudulent transactions and examined these maintenance jobs further. We wanted to see if our techniques would be of value to the Department in detecting fraud. To do this, we carried out data mining work on records of maintenance jobs carried out at two of the Department’s establishments – RAF Wittering and HMS Warrior at Northwood. We devised and carried out tests on the data to identify records which could indicate fraud and investigated the maintenance jobs further at the two sites. We obtained the data from the Department’s PROM2 IT system with the assistance of Britannia Software Plc., the Department’s contractor who developed PROM2. We are grateful for their assistance.

We employed consultants to assist us with our work

AEA Risk Solutions, the management consulting practice of AEA Technology Plc., provided us with the framework for our risk modelling and facilitated our workshop sessions.

Weatherall, Green and Smith, a firm of chartered surveyors, inspected a sample of maintenance jobs at each of the sites we visited, commenting on the extent to which the job was satisfactorily complete and on the Department’s recording of the work.

Deloitte & Touche Fraud Management Services assisted us in identifying key risks of fraud and in developing the recommendations for change, particularly those relating to fraud detection and investigation.
Appendix 2: Fraud risk modelling

**THE MODELLING PROCESS**

- Devise logical framework for model
- Select participants
- Preparation
- Workshop 1
- Postal questionnaire
- Workshop 2
- Transaction testing

**DETAITS**

We devised a framework for our model with the help of AEA Risk Solutions, the management consulting practice of AEA Technology Plc.

We selected the following participants, in agreement with the Department, to help us populate our model with data:

- 8 Property Managers (3 Army, 3 Navy, 2 RAF)
- 5 representatives from the Services’ central estate organisations - Army G4 Estates, Naval Bases & Supply Agency, and RAF Infrastructure Organisation
  - a representative from Defence Estates agency
  - a representative from Internal Audit

We asked participants to:

- during structured discussions, facilitated by our consultants, we asked participants to agree:
  - a flow diagram of the works services ordering process that we had drawn up
  - provide data on the value and number of maintenance jobs they carried out on their establishment
  - examine a list of fraud risks that we had drawn up, with advice from the Department and our consultants, and think about other possible frauds

During structured discussions, facilitated by our consultants, we asked participants to agree:

- a flow diagram of the ordering process
- average values and annual volume of maintenance jobs, according to how the job was procured
- a list of possible frauds
- the most likely perpetrator(s) of each fraud
- the possible severity of each fraud, the amount of money which the Department would lose on one maintenance job if a fraud occurred

Using a postal questionnaire, we asked the participants who were Property Managers to provide data on the frequency with which they operated controls at their establishments.

During structured discussions, facilitated by our consultants, we asked participants to:

- agree the key controls operating against each fraud
- suggest how the Department’s controls could be improved

At each of the three establishments we visited - Tidworth Garrison, HM Naval Base Devonport and RAF Wittering - we tested a random sample of 50 maintenance jobs which were carried out between November 1998 and March 1999. For each maintenance job, we looked to see what controls and checks had been operated and how well they had been carried out.

**DATA FOR THE MODEL**

- Average value of maintenance jobs
- Average number of maintenance jobs carried out each year
- List of frauds that could occur
- Likely perpetrator(s) of each fraud
- How much money the Department could lose from fraud on one maintenance job
- How often controls and checks operate
- Key controls against each fraud
- How well controls and checks operate

- Preparation

We asked participants to:

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- examine a list of fraud risks that we had drawn up, with advice from the Department and our consultants, and think about other possible frauds
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- Preparation
The key part of the model is a spreadsheet-based matrix which maps the key controls onto fraud risks. We have determined whether each risk applies to low, mid or high value jobs (see below). The diagram below shows an example of one fraud risk in the low value band. There are five key controls acting against this risk. In total, our model includes 149 fraud risks and 89 controls and checks.

### The Fraud Risk Model

The Risk of Fraud in Property Management

#### Frequency of Effective Controls and Checks

<table>
<thead>
<tr>
<th>Fraud</th>
<th>Committed By</th>
<th>Value of Work</th>
<th>Property management staff inspect the job before raising the order</th>
<th>Establishment Works Consultant inspects the job to produce a rough order of costs</th>
<th>Property management staff inspect the job whilst work is in progress</th>
<th>Establishment Works Consultant inspects the job whilst work is in progress</th>
<th>Property management staff ask building occupant whether work has been carried out</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Ghost job’ – A fictional maintenance job is reported to the property management staff, they raise an order and subsequently pay the subcontractor’s invoice but no work is ever carried out.</td>
<td>Subcontractor in collusion with the Works Services Manager</td>
<td>Low value work</td>
<td>0 per cent</td>
<td>2 per cent</td>
<td>0 per cent</td>
<td>0 per cent</td>
<td>35 per cent</td>
</tr>
</tbody>
</table>

#### Value Bands

Low value jobs (between £0 and £1,000) - there are roughly 1,700 of these jobs each year on each establishment, with an average value of about £200. They are typically awarded to a subcontractor without competition.

Mid value jobs (between £1,000 and £5,000) - roughly 700 jobs a year, with an average value of about £1,300. They are typically awarded by 3 quotes or under Measured Term Contract.

High value jobs (between £5,000 and £300,000) - roughly 50 a year, with an average value of about £55,000. They are typically awarded by full competitive tender.

### Calculating the Level of Risk

One of the key calculations in the model is the calculation of the level of risk for each fraud (see below). By adding up the levels of risk for each possible fraud, we obtained the total risk at an average establishment. The results show that at an average establishment some £80,000 annually of property management expenditure could be lost to fraud given the current level of control. This indicates that overall, across the Defence Estate, £135 million or 15 per cent of the Department’s total annual expenditure on property management could be lost to fraud.

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### Calculating the Level of Risk

The overall percentage of low value maintenance jobs which are not subject to a control or check against this fraud risk is calculated by combining these individual frequencies. The mathematics involved is the same as for calculating probabilities.

For this fraud risk, the percentage of low value jobs that are not subject to a control or check is 64 per cent.

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