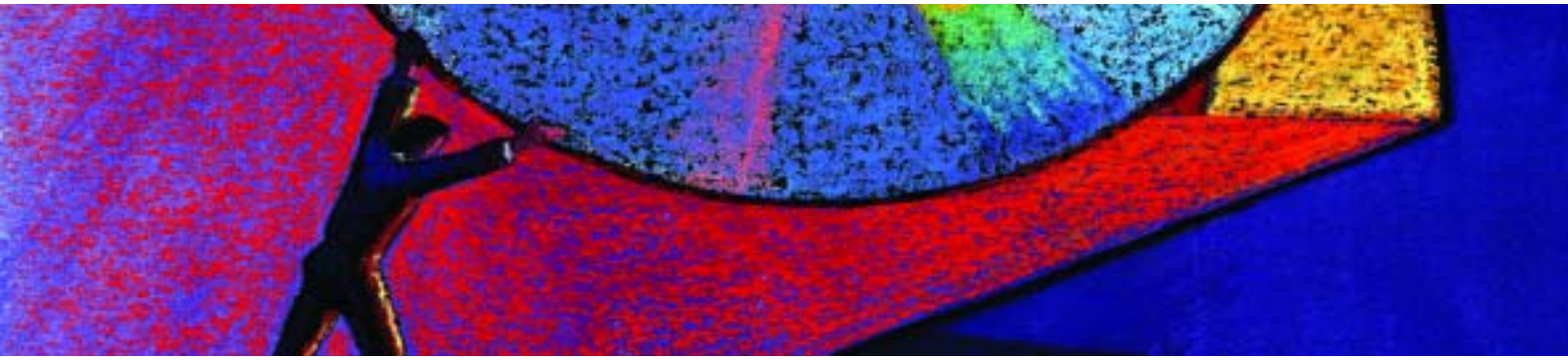
Purchasing and Managing Software Licences



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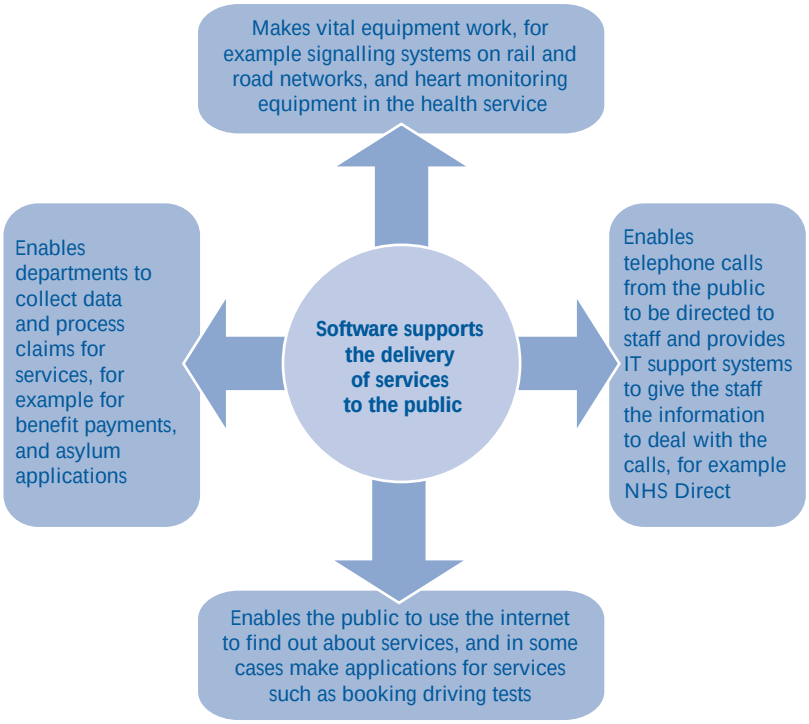
executive summary

In this section

Findings	5
Conclusions	7
Recommendations	8
Annex	9

1 Many of the services that departments provide to the public depend heavily on computer software **(Figure 1)** and to use software departments need to have valid licences. A software licence is a legally binding agreement between the software manufacturer and the user of the software, which defines how the software should be used, outlines the technical support and any upgrades that will be provided by the supplier and provides restrictions to prevent the abuse of copyright by illegal or unauthorised copying. In 2001-02 departments and agencies spent around £610 million on software, £100 million of which was spent on over one million software licences.

1 Software is vital for delivering services to the public



Source: National Audit Office

2 Departments may have a range of licences with suppliers providing varying degrees of flexibility. For example, straightforward licence agreements allow departments to use standard software packages, such as those from Microsoft and Lotus, and other deals cover more complex software where suppliers provide a core package with additional modules that are customised to fit organisations' requirements.

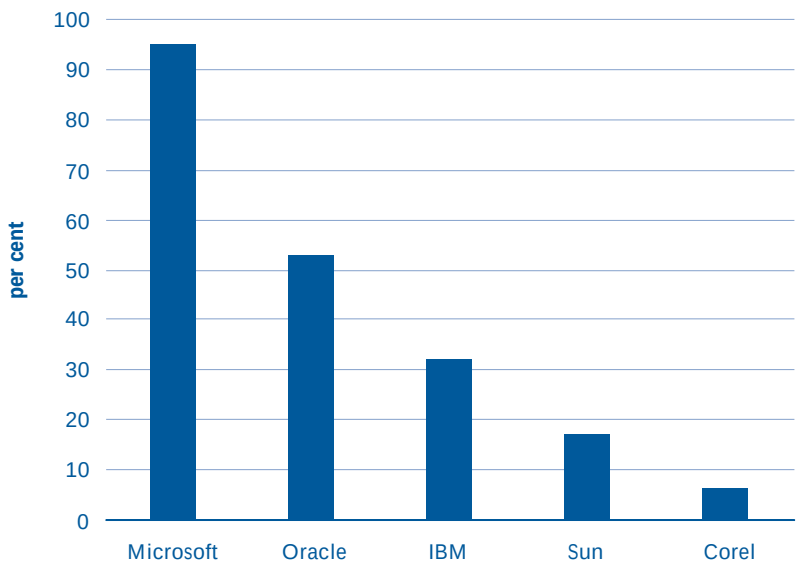
3 Departments and agencies are responsible for deciding what software to purchase and how they manage it. The Office of Government Commerce (OGC) is responsible for promoting value for money improvements in the way departments undertake their procurement.

4 Ninety-five per cent of departments use Microsoft software **(Figure 2)** and in May 2001 it announced new licencing arrangements to operate worldwide from August 2002. OGC and departments assessed the likely additional costs they would incur from these changes as being in the region of £40 million to £60 million per year. In response, OGC with the support of departments negotiated with Microsoft to secure more favourable terms. In March 2002 OGC announced a Memorandum of Understanding setting out the principles under which Microsoft will conduct business with the UK public sector for the three years to March 2005. This includes the pricing arrangements and the discounts which Microsoft will offer[1]. At the same time OGC announced agreements with Sun Microsystems and Lotus/IBM and subsequently secured agreements with Corel and Oracle.

5 The size of discounts depends on the volume of purchases which departments make with Microsoft and other suppliers. Depending on the level of take up, OGC estimates that, in addition to avoiding the increased costs from changes in Microsoft's licensing arrangements, the new arrangements could deliver savings of some £100 million over the next three years to the whole of the public sector and the Office is encouraging departments to use the Memoranda.

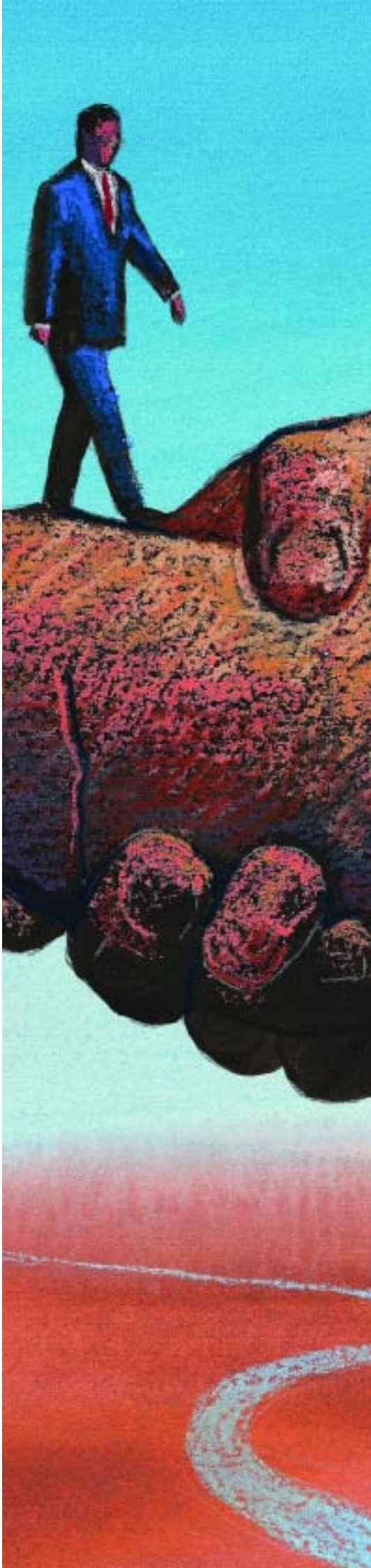
6 This report assesses how departments purchase and manage their software licences and in particular the extent to which they are taking advantage of the Memoranda of Understanding which OGC has negotiated with IT suppliers. Our examination is based on a survey of 66 departments and agencies together with more detailed examinations of four departments (Appendices 2-5).

2 Microsoft and Oracle software is used by the majority of departments



Source: National Audit Office survey of departments

1 The Memorandum can be used by central departments, agencies and non-departmental public bodies, the NHS, local authorities, police authorities, fire authorities, the House of Commons, the House of Lords, the National Assembly for Wales, the Scottish Executive and the Northern Ireland Devolved Administration.



Findings

7 **On departments' take up of the Memoranda of Understanding**. Across the public sector as a whole, OGC estimated that the Memoranda would save £36 million on direct price reductions, and using the returns from suppliers OGC estimates that the Memoranda have saved £31 million on direct price reductions in the first ten months. Thirty-one departments have so far used the Memorandum with Microsoft and five departments have used the Memoranda agreed with other suppliers. Departments have been slower in taking up the terms offered by Microsoft than OGC anticipated. Both OGC and Microsoft consider, however, that many departments are waiting until their existing agreements expire.

8 Ten departments were able to estimate savings achieved to date which were around £5.4 million, all of which had come from Microsoft. OGC does not have an established process by which departments are required to report specifically the level of discounts they achieve from using the Memoranda. Prior to the OGC Memorandum, some departments negotiated separate agreements with Microsoft which are now included in the discount arrangements agreed by OGC. The Ministry of Defence, for example estimates that its agreement, negotiated nine months prior to the OGC Memorandum, has the potential to save some £17 million over four years on expenditure on Microsoft software licences of £69 million.

9 OGC has negotiated agreements with other suppliers to encourage departments to purchase software from a wider range of companies. Suppliers other than Microsoft consider, however, that take up by departments has so far been disappointing and has had little impact on the level of business they receive from public sector organisations. Only Sun Microsystems considered that it might achieve a significant increase in business in the future as several departments were evaluating its Office software package.

10 **On the cost of software licences**. Departments that can identify the cost of their licences are better placed to assess the cost effectiveness of deals offered by different suppliers. Nine departments could not easily identify the costs of the various licences they own. In some instances, this was because licences had been bought as part of an overall package of software and equipment making it difficult to separate costs. Licences can, however, be bought on different terms; for example licences that can be used in perpetuity, until the software needs to be upgraded, without further payment while other licences have to be renewed each year. Departments therefore need to consider the costs of different options available to them.

11 **On determining the need for licences**. A number of factors influence departments' decisions to purchase software and the necessary licences. These include: assessments of the number of staff who need to have access to software; timing - so that the purchase of new software and equipment is co-ordinated to avoid acquiring upgraded software that cannot operate with existing equipment, and technological advances with new software providing opportunities to improve departments' processes and service delivery. For larger procurements most departments carry out a full business case and many exercise central control over expenditure. Less than 45 per cent of departments considered the total cost of ownership before purchasing new or upgraded software with the risk that the full cost of investment in IT may be understated.

3 The four case studies examined in the report

Department	Why it uses software	How software is purchased and managed	Our assessment
The Department for Education and Skills **Number of software licences held[1]:** 21,000, of which 70 per cent by amount but not expenditure are Microsoft. **Costs in 2001-02:** £1.7 million.	To provide desktop operations such as word processing and e-mail, for standard functions such as payroll.	The Department uses the academic volume licencing arrangements offered worldwide by Microsoft to schools, colleges, universities and central and local government organisations responsible for education. It also takes account of volume discounts wherever possible for other software. The Department is working on identifying where all its software is held and how it is licenced.	The Department has been able to take advantage of the favourable deals that Microsoft offers to organisations working in the education sector and has therefore reduced the cost of purchasing its software. The Department considers that the information on its database of software licences is between 75 per cent and 80 per cent accurate. It needs to improve the information on the location of software.
The Ministry of Defence **Number of software licences held[1]:** 130,000 for Microsoft desktop computers. Records for these are held centrally. Other companies' software is held by separate business units rather than centrally. **Costs in 2001-02:** £60 million.	To provide standard desktop operations, to operate administrative systems such as stores, vehicle and property management and to deploy armed forces personnel.	The Ministry is now introducing centralised arrangements which are available to all its business units to purchase software. It is planning to put in place arrangements to provide business software under centrally controlled arrangements rather than devolved to individual business areas. The Ministry has reasonable access controls to prevent unauthorised software being introduced for which a licence would be required.	The Ministry negotiated its own agreement with Microsoft to meet specific business needs, which was put in place prior to OGC finalising the Memorandum of Understanding with Microsoft, and was discussed with OGC. The Ministry estimates that the agreement has the potential to save some £17 million over four years on expenditure on Microsoft software licences of £69 million. Building on existing arrangements, the Ministry is exerting a greater degree of control over its software licences, particularly those for business systems, to allow it to identify the location and use of its software, rationalise the number of licences it holds and develop a more co-ordinated approach to purchasing new licences.
Land Registry **Number of software licences held[1]:** Over 20,000, of which 60 per cent by amount but not expenditure are Microsoft. **Costs in 2001-02:** £10.1 million.	To carry out standard office functions and administrative systems and to maintain a register and map of land ownership in the UK.	The Land Registry has outsourced the purchase and management of some of its software licences and benefits from reduced administration costs and increased buying power of its partner. The Land Registry's contractor, Compaq, uses an online audit tool to check the software being used on systems, to keep records of all the licences purchased and to review the need for non-standard software whenever staff move posts.	The Registry has evolved a clear method for purchasing and managing software, built around the principle of centralised control. Its partnership with Compaq has the potential to offer savings, and the Registry whether checks other purchasing routes, for example using G-CAT, have the same product more cheaply. The practice of preventing non-standard software from being loaded onto networked computers is a fairly strong control, but the use of tracking tools needs to be fine-tuned in order to provide more assurance that staff cannot introduce unlicenced software.
Ordnance Survey **Number of software licences held[1]:** 18,500, of which around 40 per cent by amount but not expenditure are Microsoft. **Costs 2001-02:** £2.1 million.	Ordnance Survey uses standard office software and specialist illustration and mapping software to provide mapping products to organisations and the public.	Ordnance Survey uses Computacenter to purchase and manage its software and computer equipment requirements apart from large scale projects, which are supplied through competitive tender. Ordnance Survey has decided to strengthen its controls by employing a software librarian to keep records of all licences and it intends to cross check the software on its systems against records of licences held.	Ordnance Survey has developed a strategic partnership with Computacenter, which is designed to provide purchase cost savings and technical or market knowledge support. Within the organisation, the work of the Investment Group and the software librarian are helping to impose centralised control over licensing. Ordnance Survey considers that its control of existing licences is adequate, but recognises that there is a risk that its staff could load unauthorised software onto their personal computers, thereby breaking internal rules. It will, however, be important for the organisation to develop its checking procedures and ensure that staff are fully aware of their responsibilities for software use.

NOTE

1 Many of the licences are for desktop software with separate licences for each machine or for multiple products on the same machine. In contrast, other suppliers supply single licences that allow many users to use the product or one licence for a single product used concurrently by many users. Therefore it is not appropriate to calculate the average cost per licence.

12 **On having complete and accurate records**. Without reliable information on the software they hold, departments cannot be sure that they have the appropriate number of licences. Purchasing more licences than are needed will not represent value for money but not having enough exposes departments to the risk of financial penalty because they will not be complying with legally binding contractual obligations. All departments had information in some form on the details of their licences. Several departments with large numbers of staff working in a wide range of separately located business units, such as the Ministry of Defence, have traditionally used devolved arrangements for the purchase and management of software. They are now, however, introducing centralised arrangements, where appropriate, to improve the information they have on the location of their licences, their terms and what they cover.

13 **On regularly checking to ensure that all software has an appropriate licence**. Software packages can be purchased relatively easily and there is always a risk that staff may acquire new software for which no licence is held or which is not compatible with existing systems. Regular independent reviews which reconcile the software in use with the licences held can help manage this risk. Four departments carried out manual checks at least every three months and 18 departments did this once a year. For the remainder the frequency of reviews is more mixed with nine departments carrying out no checks. Checks can be done electronically using specialist software and 23 departments carried out electronic checks at least annually. Four departments carried out neither regular manual nor electronic checks of software to reconcile it with the licences held.

Conclusions

14 When there is a relatively small number of suppliers there is a significant risk that departments increasingly come to rely on one or two companies. This inevitably makes it more difficult to be sure that value for money is achieved. Where, however, suppliers receive a significant amount of revenue from departments, there is opportunity for departments collectively to exercise their purchasing power to secure better deals. OGC, therefore, has done well in working with departments and the wider public sector to negotiate agreements with Microsoft and other IT suppliers from which all public sector organisations can benefit. So far, ten departments have estimated savings of £5.4 million but some will be waiting for the optimum time in their purchasing cycle to sign up to the agreement and it remains possible that the savings from direct price reductions of £36 million across the whole of the public sector will be achieved. The full realisation of the discounts on offer to departments will depend on the extent to which they use the agreements to purchase software. From their returns, OGC estimated that savings of £31 million from direct price reductions had been achieved across the public sector by January 2003.

15 Most software companies offer discounts for purchasing larger volumes but for commercial reasons they do not publicise details of the discounts they agree with different customers. It is, therefore, often difficult for departments to assess whether the prices they are charged reflect, and continue to reflect, the best market rate. This emphasises the importance, if value for money is to be achieved, of both departments and OGC having reliable data on the level of actual discounts achieved from suppliers in accordance with the arrangements negotiated. In addition, they also need to have reliable market intelligence on IT suppliers and their overall performance together with information on the costs which other purchasers of software are incurring.

Recommendations

16 To support OGC's and departments' drive to improve the value for money from software licences, we make the following recommendations.

For departments

1 **Maintain reliable information to assess the extent of their expenditure on software and supporting licences** so as to be able to consider fully the implications of different deals available and assess the full costs of different types of software or of changing suppliers.

2 **Consider in the first instance using the Memoranda of Understanding negotiated by OGC with suppliers**. The significant cost savings will only be realised if departments purchase software in sufficient volumes. Departments need, therefore, to purchase from suppliers through the arrangements agreed by OGC. Alternative procurement routes should be the exception and only followed where there is very clear evidence that this will deliver better value for money. Departments also need to be alert to the risks and opportunities of spreading business among more suppliers.

3 **Check regularly to ensure that no unlicenced software is being used on their systems**. Departments need complete and accurate records of the licences they hold and to reconcile these to their software in use. To ensure the accuracy of reconciliations, departments should use electronic software that is now available to carry out checks. At least twice a year, departments should carry out a more detailed inventory of the software and licences they hold.

4 **Consider the total cost of ownership when purchasing major upgrades or new systems.** Often the initial purchase price of new software or an upgrade will be only a small proportion of the total cost of ownership. Other costs are likely to include installing the system, retesting, resolving problems caused by using different software and the resources and time needed to train users. If all these are not taken into account in purchasing decisions the cost of the investment is likely to be understated.

For the Office of Government Commerce

5 **Monitor carefully take up of the Memoranda of Understanding and the discounts received by departments.** Although OGC published the Memoranda when they were signed, OGC cannot direct departments to use the Memoranda it has negotiated but has emphasised to them that it is in their interests to do so. OGC has been actively discussing the benefits of the Memoranda with around 20 organisations in the wider public sector that it identified as likely to benefit from using them. Our discussions with departments indicated that not all were aware of the agreements with suppliers. OGC needs **(i)** to publicise the Memoranda more widely and demonstrate how all public sector organisations can benefit; **(ii)** monitor take up of the arrangements and target organisations that are not procuring software through the Memoranda so as to identify the reasons why and how any obstacles can be overcome; and **(iii)** establish a means of receiving sufficiently reliable information on the extent to which savings are being achieved so that the appropriate remedial action can be taken if it becomes apparent that planned savings are not likely to be realised.

Annex

Key questions for departments to ask when determining whether they are achieving value for money in purchasing and managing their software licences

- **Is the need for the software fully justified?**

  Departments should be confident that the software will contribute to improving its business processes and service delivery, that total ownership costs have been taken into account, that the software will be compatible with existing systems and the timing of the acquisition is right - to minimise the risk of new software quickly becoming redundant or overtaken by developments in technology.

- **Is there opportunity to aggregate purchases to secure discounts?**

  Departments should have sufficient central control to ensure that, whenever possible, their purchases can be aggregated to secure discounts from suppliers.

- **Are the Memoranda of Understanding negotiated by OGC with software suppliers going to be used?**

  In the first instance departments should always consider using the Memoranda established by OGC to purchase software. If a decision is taken not to use the Memoranda this should be clearly justified on the basis that the alternative procurement route will clearly deliver better value for money in the short and longer term.

- **Are there systems in place to obtain reliable information to report and monitor the discounts received from suppliers?**

  Departments should have information which enables them to report and monitor the volume of business they do with each supplier and the discounts they receive to ensure that this is in accordance with the terms of the Memoranda negotiated by OGC and other agreements.

- **Is there reliable information on all software currently in use and licences that have been purchased?**

  Departments need to have the equivalent of an asset register which maintains a record of all software held together with the supporting licences. This information should be regularly updated.

- **Are regular checks carried out to ensure that all software is supported by an appropriate licence?**

  Regular independent manual and electronic checks should be carried out to reconcile the software in use with the licences held. This is important to ensure that departments are not exposed to non-compliance with contractual obligations should they not have sufficient licences. Alternatively, checks should identify instances where departments have more licences than they need.

Part 1 Introduction

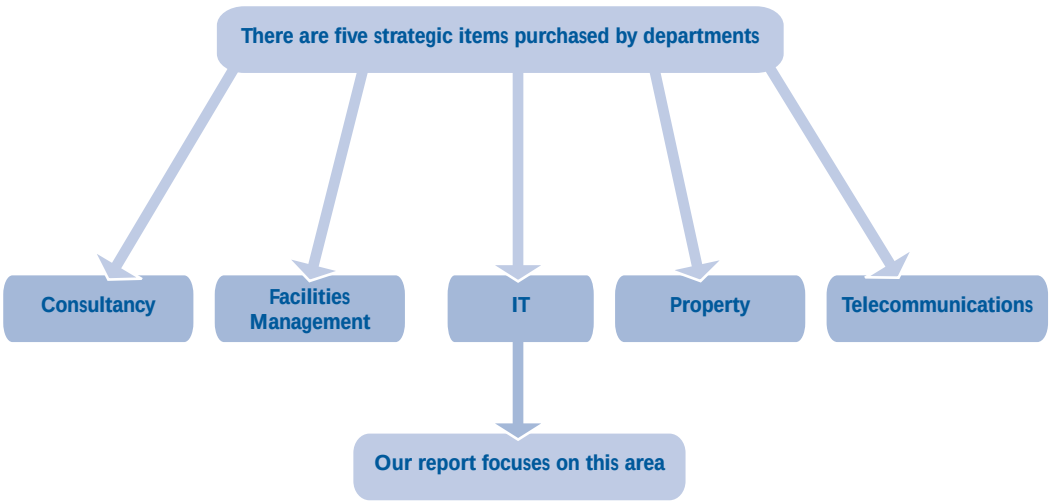
1.1 Procurement is becoming more complex. Some goods and services are of strategic importance to government such as IT and communications because they are purchased by nearly all departments and without them it would not be possible to deliver key public services. Typical risks that need to be managed are ensuring continuity of supply, quality and fit for purpose, and long term cost effectiveness. At the same time, globalisation and contracting markets mean that in some cases there may be only a small number of suppliers - thus making it difficult to rely on traditional forms of competition to achieve value for money.

1.2 The Office of Government Commerce (OGC) exists to promote value for money in how departments undertake procurement. One way it is seeking to do this is to identify strategic suppliers to government, to monitor their performance and to represent the collective interests of departments where prices appear excessive or quality is less than satisfactory **(Figure 4)**. Departments are responsible for their own procurement but for some strategically important items, such as IT, OGC seeks to take advantage of departments' collective buying power and negotiate favourable agreements with suppliers which all departments can benefit from. This report considers the approach adopted in purchasing and managing software licences which are an essential component of IT which itself is strategically important to the delivery of public services.

Why departments use software

1.3 Departments and agencies are heavily dependent on IT systems, comprising a wide range of hardware, software and telecommunications equipment, to deliver services to the public. Most public servants now have a computer on which they rely for word processing, e-mail, access to the internet and to provide access to more complex data systems, for example payroll, accounting and sharing information. In addition there are increasingly complex technical uses within departments or for linking different departments. For example the Met Office uses software to provide forecasts of severe weather, such as heavy rainfall which are used by the Environment Agency when assessing the risk of flooding, or severe cold which alert hospitals to possible increases in demand for beds.

4 Key strategic supply items for departments and agencies



Source: National Audit Office