

Assessing the impact of public sector procurement on competition

Volume 2: case studies

September 2004

Prepared for the Office of Fair Trading by •econ

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VOLUME 1: MAIN REPORT

1 INTRODUCTION TO CASE STUDIES

1.1 This collection of case studies of public procurement, and the competition issues surrounding it, accompanies our report 'Assessing the Impact of Public Sector Procurement on Competition', prepared for the Office of Fair Trading (OFT). The case studies we undertook in the course of our research cover public procurement of:

- broadband services
- continence care products
- IT services
- prison services
- waste management services

1.2 The purpose of these case studies was to inform the theoretical analysis and provide a valuable cross-check for the main report. For the avoidance of doubt, we should point out that our selection of case studies was in no way based on a preconception of where competition issues might arise, and that there is no relationship between the case study selection and the identification of markets for further investigation undertaken in the main report.

2 Procurement of broadband services

Introduction

- 2.1 This case study looks at public sector procurement of broadband connectivity, including the recent initiative to aggregate public sector demand and procure broadband services collectively across a number of public sector bodies.
- 2.2 Public procurement of broadband services provides an interesting insight into the potential effects of government demand on market outcomes, investment and innovation: public demand for broadband services has explicitly been considered as a driver of broadband take-up.
- 2.3 The government's policy objective is to have '100% availability of broadband and to have the most extensive and competitive broadband market in the G7 by 2005'¹ with significantly increased broadband connections to schools, libraries, further education colleges and universities. To support this objective a range of national policy initiatives have been developed by central government to be executed at local level, culminating in the Broadband Aggregation Programme.
- 2.4 Other important government initiatives, such as the drive to make all government services available online by 2005 and the modernisation of the NHS under the National Programme for IT, will further increase public sector demand for broadband connectivity. The aim of the broadband aggregation programme is to harness public sector demand in order to achieve a more extensive reach of broadband services (which would also benefit other broadband users) and to ensure value for money.

¹ The UK Government's broadband policy (see <http://www.broadband.gov.uk>).

The market

2.5 Broadband provides users with always-on, high speed connections to access the internet and transfer data. This definition is based on the services provided to customers as opposed to the technology by which they are provided or the speed of the connection. There is no consensus on the minimum speed for a connection to be defined as 'broadband' but it is often assumed to be any speed higher than 256 Kbps for downstream (data to the user) and 64 Kbps for upstream (from the user).² In terms of the user experience, what separates broadband from other ways of connecting to the internet and transmitting data is the emphasis on 'high speed' and 'always on'.

Demand

2.6 As of April 2004, there were about 4 million broadband internet subscribers in the UK, almost all of which were connected by DSL (2.45 million) or cable (1.54 million).³ These are mainly residential and small business users; larger businesses with substantial bandwidth demand typically look to other solutions for connectivity, such as a dedicated leased line to their premises.

2.7 A recent industry forecast puts total revenues from providing broadband services (excluding leased lines) to consumers and businesses at £4.4 billion over the next three years.⁴ Public sector demand of £1 billion is

² DotEcon and Criterion Economics (2003).

³ Ofcom (2004).

⁴ IDC (2003).

anticipated over the next three years.⁵ This comes from previous policy initiatives, such as the National Grid for Learning to get schools connected; the People's Network to make internet access available at libraries; and the wider e-government initiative, which means that local authorities and central government are to make their services available online. The biggest source of public sector demand in the near future is the NHS, which under the 'New National Network' is seeking to connect all NHS sites. Public sector demand for broadband services, therefore, amounts to around 20% of the total – a significant proportion.

- 2.8 Regardless of overall share of total demand, the public sector, through its commitment to connect schools, libraries and doctor's surgeries, will be the main purchaser of broadband connectivity in some localities, and without this public demand, it may well be that private demand for broadband services would be insufficient for broadband providers to sink the investment in connecting the locality.

Supply

- 2.9 The supply of broadband services varies widely across the UK, in terms of the number of delivery platforms (e.g. cable, DSL) available, the choice of service grades (bandwidth and contention) and the number of suppliers. For example, in parts of London, users can chose between DSL, cable, leased line and wireless solutions; DSL and leased lines are supplied by many different companies, using a mixture of their own infrastructure and access to BT's local loop. By contrast, in some rural areas, the only available link is a relatively expensive satellite connection.

⁵ See, for example, www.broadband4britain.co.uk, 'Will £1 Billion of Public Money Manage to Bridge the UK Digital Divide'.

2.10 The investments to bring broadband to a particular locality are potentially significant and may only be recoverable if there is sufficient demand. This has led suppliers to put in place programmes to establish likely demand levels before committing to roll out broadband to a particular area:

- Until recently, BT ran a broadband demand registration programme where 'trigger' demand levels for individual local exchanges to be upgraded to ADSL services were announced, i.e. the number of subscribers in that exchange area who would have to request broadband before BT would upgrade the exchange. BT has recently abandoned this programme because it is convinced that there is enough demand to justify upgrading the vast majority of exchanges, covering 99.6% of UK homes and businesses.⁶
- Easynet has launched 'Easynet Exchange Enable'⁷, which aims to register broadband demand from public sector and business customers by BT exchange area until it is commercially viable for Easynet to unbundle the exchange, taking into consideration the higher bandwidth requirements and likely spend from public sector and business customers compared to residential customers.

2.11 About 60% of users (i.e. a majority of residential and small business customers) have access to both cable and DSL services. These supply similar grades of service, with connection speeds up to 500Kbps or 1Mbps. This market is highly competitive and users of both types of

⁶www.btplc.com/News, Press release no. NR0421, 'BT presses broadband accelerator', 27 April 2004.

⁷ See, for example, www.news.zdnet.co.uk, 'Easynet's trigger scheme aims to close broadband divide', September 17, 2003.

service benefit from geographically uniform pricing, regardless of the actual level of competition in their region.

- 2.12 For larger users, who require higher bandwidth than that available over cable and DSL, it is necessary to use alternative delivery platforms. Most such connections use leased lines, which connect either to BT's network or fibre networks built by alternative providers. In some parts of the country, wireless alternatives (FWA or WiFi) are available. The cost of leased lines varies considerably, depending on the available supplier and the distance from the connection point to the main network. Some heavy users of broadband, such as local councils, have resorted to building their own fibre networks; in some cases, these may be shared by third parties. For example, Derwentside District Council procured Telewest to deliver fibre into Derwentside and build a Municipal Area Network. The fibre is owned by Telewest with free rights of usage for any community facility for 22 years⁸

Market definition and structure

- 2.13 Broadband services have distinct characteristics that distinguish them as a separate market from narrowband services (i.e. dial-up internet connections). These include the 'always-on' nature, significantly higher bandwidths and the fact that broadband does not tie up a consumer's phone line. There is evidence of significant one-way substitution – i.e. users upgrading from dial-up to broadband – as the price differential between the services has fallen and awareness of the benefits of broadband has risen. By contrast, there appears to be little scope for demand side substitution in the opposite direction.

⁸ DTI (2002).

- 2.14 Residential subscribers and small and medium-sized enterprises (SMEs) can also be considered as being in a different market to large businesses. Residential and SME subscribers typically require less bandwidth than large businesses, and therefore see all types of broadband delivery platforms – such as DSL, cable, fibre⁹ or fixed wireless access – as substitutes.¹⁰ By contrast, for larger businesses, very high bandwidth is often a key requirement, which means, for example, that most DSL and cable products are not realistic substitutes for a dedicated leased line.
- 2.15 Demand from public sector users spans across the residential/SME and large business markets according to connectivity requirements. For example under the New National Network (“N3”) for the NHS, a typical GP practice will have a connection offering 512 Kbps to 1Mbps but a typical community hospital will have a 10 Mbps connection.¹¹
- 2.16 Broadband customers require connectivity at a given location and can only choose amongst the broadband offers available at that location: a connection in Hull is not a substitute to a connection in Cardiff. This means that competition is not homogenous across the UK; there are different geographical markets. The scope for demand side substitution is restricted to the broadband offers available at any particular location.

⁹ By fibre, we mean fibre right up to the access point at the customer premise, as opposed to traditional copper wires in the local loop, which can be upgraded to DSL.

¹⁰ Consumer polls have shown that consumers are largely indifferent to broadband by DSL and cable and prices of the two have converged over time. Price changes by one type of provider have been observed to produce a competitive response in the pricing of the other type. Source: DotEcon and Criterion Economics (2003).

¹¹ NHS National Programme for IT press release, 19 February 2004, ‘NHS to be first major public sector user of broadband’.

The procurement process

2.17 As a result of the Government's Broadband Aggregation Programme, spearheaded by the DTI, nine Regional Broadband Aggregation Bodies (now known as Adits) and one National Aggregation Body were set up to aggregate demand from different public sector institutions and assist in procurement. The role of the Adits is to:

- aggregate public sector broadband demand in the region (or nationally in the case of the NAB) to create reasonable sized bundles of business for Service Providers – thereby attracting better value-for-money and increasing availability;
- advise public sector customers on potential solutions for their broadband needs, framing customer requirements appropriately to ensure the most effective use of competition and encouraging the use of alternate technologies
- manage the contractual relationship between Service Provider and public sector customers.

2.18 Although market-driven approaches to demand aggregation have been in place for some time, the setting created by the regional Adits with access to broadband framework contracts set up by the DTI is the Government's first systematic approach to the aggregation of broadband demand across the public sector.

2.19 It is not compulsory for public sector bodies to buy broadband services through the Adits; they can choose to buy directly from the market, subject to EU procurement rules if the contract exceeds the threshold value. However, the two biggest public sector broadband users, the NHS and the Department of Education and Skills (DfES), are committed to procuring through the Adits – the NHS through its recent award of a £530 million seven year contract for the provision and management of a

New National Network (“N3”) to link up all NHS sites in the country,¹² and the DfES through its school connectivity programme.

- 2.20 To provide a fast route to the broadband marketplace for public sector organisations, the DTI, on behalf of the Adits, has set up framework contracts with 17 preferred suppliers. These are listed in Table 1. The tender for framework contracts was published in the Official Journal of the European Union and the 17 suppliers were chosen from an initial 27 suppliers who expressed interest. There is no specific policy to promote subcontractors or to engage in the management of subcontractors. The framework agreements came into force in March 2004 and run for three years with an option to extend by one additional year.

¹² Note that the winner of the NHS contract of the N3, BT Syntegra, performs the role of a service integrator: it is responsible for service delivery to the customer but can subcontract for the supply of the actual connections. In fact, the contract stipulates that BT Syntegra has to purchase the required connections through the broadband framework agreements set up by the Adits (see NHS National Programme for IT press release, 19 February 2004, ‘NHS to be first major public sector user of broadband’).

Table 1: Framework contractors for broadband services

Supplier	Description
BT (Source: www.bt.com and www.btplc.com)	The UK incumbent telecoms provider with a nationwide PSTN network. BT currently has 2 million ADSL subscribers (incl. residential) and has recently announced that all exchanges (less 500) are to be ADSL-enabled by 2005. BT Group turnover was £18.7 billion in 2003.
Cable and Wireless (Source: www.cw.com)	International telecommunications company that owns and operates national PSTN networks in 80 countries as well as international backbone network. Provides voice, data and internet services to business and residential customers. Annual turnover in the UK of £1.7 billion in 2003.
Colt (Source: www.colt.net)	Owns and operates a pan-European backbone network. Offers various data services to business customers based on IP, frame relay and ATM. Annual turnover in 2003 of £1.1 billion across the European operations.
Easynet (Sources: www.uk.easynet.net and www.easynet.com)	Owns and operates a pan-European fibre network and offers broadband services to business customers using a mix of own local loops and BT unbundled local loop. Annual turnover in 2002 of £91 million.
Energis (Source: www.energis-squared.net)	Owns and operates a UK-wide network. Offers voice, data and internet services to business customers. Annual turnover in 2003 was £770 million for the UK and Ireland.
Thus (Source: www.thus.net)	Owns and operates a national backbone fibre network focused on major cities and commercial centres. Uses BT wholesale DSL access products. Provides voice and data communications services to business customers, including broadband at a range of bandwidths. Annual turnover of £330 million across voice and data activities.

Supplier	Description
<p>Kingston Communications (Source: www.kcom.com)</p>	<p>Incumbent telecoms provider in East Yorkshire. Operates a PSTN network which serves business and residential customers. Has expanded its network coverage to South West England, Midlands, Thames Valley and North West of England where it offers voice, data and internet services to business customers. Annual turnover in 2003 was £330 million.</p>
<p>Your Communications (Source: www.yourcommunications.co.uk)</p>	<p>Previously Norweb Telecom. Part of United Utilities Group. Owns and operates a national backbone fibre network but uses BT wholesale DSL access products. Provides voice and data communications services to business customers, including broadband at a range of bandwidths. Annual turnover of £165 million across all activities.</p>
<p>NTL (Source: www.ntl.com)</p>	<p>Cable TV company that owns and operates a cable network, also capable of providing broadband at bandwidths of 512kbps up to 45Mbps to residential and business users. Was the first company to offer broadband in the UK and is a household brand name with 1 million broadband subscribers (incl. residential). In 2003, ntl's annual revenue was £2.2billion, of which £282 million came from business customers (telephony and broadband).</p>
<p>Telewest Communications (Source: www.telewest.co.uk)</p>	<p>Cable TV company that owns and operates a cable network. Provides broadband services to residential and business users. Telewest currently has 310,000 broadband subscribers (incl. residential) and annual turnover of approx. £1.3 billion of which only a fraction relates to their broadband business.</p>

Supplier	Description
Neos Networks (SSET) (Source: www.neosnetworks.net)	Owns and operates a national fibre network. Provides high specification Ethernet services (>1Mbps). Available in 37 major UK towns. Subsidiary of Scottish and Southern Energy plc (SSE). Neos (combined with SSE Telecommunications) have annual revenues in excess of £50 million.
Equinox Converged Solutions Source: (www.equinoxsolutions.com)	Provides managed network services within the London area with a specialist focus on the public sector and education. Equinox has designed, built and now operates a fibre-based high speed, high capacity Ethernet network within London. Annual turnover in 2003 of £5.9 million.
Logicalis (Source: www.uk.logicalis.com and www.logicalis.com)	International provider of integrated IT solutions. Designs and implements network and IT infrastructure. Logicalis Group has international revenues in excess of £220 million.
MLL Telecom (Source: www.mlltelecom.com)	Designs, installs and manages wireless broadband networks, particularly focused on rural and remote areas. The customer typically takes ownership of the network.
Networks by Wireless (Source: www.networksbywireless.co.uk)	Designs and implements LAN, WAN or MAN using wireless technologies and mixed technologies. It is an infrastructure service provider, and the networks built are typically owned by the client or built and leased to the client.
Research Machines (Source: www.rm.com)	Supplier of software, services and systems to UK schools. Reseller of BT IDSN and ADSL products ranging from 128kbps to 2Mbps. Reseller of 2Mbps leased lines to schools including leased lines with lower Committed Information Rate which are offered at a discount. Total turnover (all activities) in 2003 was £215 million.

Supplier	Description
Synetrix (Source: www.synetrix.co.uk)	Designs and constructs converged multi-service networks with a particular focus on the public sector. Also provides satellite broadband solutions with speeds of 512 kbps to 2 Mbps downstream and 128 to 512 kbps upstream. Annual turnover of £14 million in 2002.

2.21 The selected companies fall into three broad categories:

- Network operators, who own and operate networks from which they sell connectivity products. Examples include BT, ntl, Kingston and Thus. This is the largest group of suppliers and spans companies with networks of different sizes, developed for different purposes.
- Companies that design and build LAN or WAN infrastructure for public authorities for wireless, wired or mixed technology networks. Examples include MLL Telecom and Networks by Wireless.
- Companies specialising in providing computers, and IT services and systems to the public sector or subsets of the public sector (e.g. the education sector), and which provide connectivity as resellers to complement their suite of products, for example Research Machines.

2.22 The framework contracts between the DTI and the providers specify generic terms and conditions for service provision covering aspects such as security and Intellectual Property Rights as well as standard pricing for basic services. There are also Service Agreement templates for use by the Adits when buying under the framework. However, bundles of different types of broadband demand in different geographical locations are unlikely to be purchased using standard specifications. This means that, according to the EU rules, most call-offs under the framework must be procured by staging 'mini-competitions' for the framework suppliers that are able to supply the required services.

2.23 Prior to the Adit broadband framework agreements, OGC Buying Solutions, the trading arm of the OGC procured broadband solutions framework agreements with six suppliers (BT, Easynet, Fujitsu, Kingston Communications, Synetrix and Telewest) for connectivity and packaged end user services to any public sector organisation. These framework agreements are still in place but have now effectively been superseded by the Adit framework agreements to the extent that over time DTI expect the vast majority of public sector organisations to channel their broadband demand through the Adits.

Potential competition effects

2.24 Given the pivotal role of public demand for broadband services (at least in some regions), there is considerable scope for such demand to affect competition in the supply of broadband services. The main effects that might arise in principle are as follows:

- **Public sector as a pivotal buyer in terms of choice of supplier:** The award of a sizeable contract to a particular supplier may make this supplier commercially viable in a particular region and turn it into a credible supplier for the private sector. This may, in turn, affect competition for private sector business to the extent that a supplier with a large government contract may benefit from scale economies, thus potentially being able to supply other customers at lower unit costs.
- **Public sector as pivotal buyer in terms of choice of technology:** In areas currently not served by any particular platform, the public sector can affect the choice of technology (e.g. fixed wireless or DSL). Any impact on the incentives to invest in broadband roll-out will have a lasting effect because a considerable proportion of infrastructure investments are sunk. Technology choices will affect the scope for future innovation and service availability. Capacity choices made in response to public demand may affect the scope for future entry. For example, if a supplier invests in considerable excess capacity on the basis of public sector procurement requirements, it will face a relatively low marginal cost of supply to the private sector compared to a situation in which capacity upgrades would be required. New entrants may not be able to compete with an existing supplier if the incumbent could increase supply at little additional cost.
- **Single-sourcing across geographical markets:** Given differences in competitive conditions across different geographic markets, aggregation of demand across markets in combination with a

preference for single source supply could potentially limit competition to those providers who can boast sufficient geographic coverage across regions – in the extreme case, the incumbent PTO.

- **Benefits from yardstick competition:** The regional Adit structure could potentially provide a means of achieving ‘yardstick competition’ or ‘peer review’ where the public sector procures broadband services in areas with little or no competition amongst suppliers. The DTI plans to collect management information allowing the comparison of performance among the Adits. Where the public sector buys broadband services in rural areas with limited supply, this set up may provide a way of checking price and quality against what has been achieved in areas with competitive supply, although of course cost conditions may differ significantly across those regions.
- **Self-supply and infrastructure build:** A decision to self-supply broadband services, or invest in infrastructure (which might be considered as an alternative strategy for driving roll-out) could potentially undermine the viability of private sector providers in specific areas where private sector demand alone is insufficient to justify the costs of network roll-out, or might limit the number of competitors that the market can sustain. In this case, competition to supply the private sector might be more restricted than would otherwise be the case. However, even in this case, differences in the objectives of a public sector supplier and commercial operators might lead to differences in the competitive dynamics of the market place.

2.25 Whether and to what extent these effects are likely to arise in practice does, of course, depend on the success of the public sector in bundling its demand – e.g. on the success of the Adits in terms of making public sector bodies buy through them rather than maintaining individual relationships with suppliers, thus bypassing the aggregation programme. Where the Adits succeed in bundling public sector demand, i.e. where

they successfully aggregate requirements, the key question is exactly how demand is aggregated and whether sufficient consideration is given to the impact of aggregation on competition, and in particular competitive supply in the longer term. These issues are complex and are left to the Adits to resolve.

2.26 The two key objectives of the Adits are to improve availability and to ensure value for money – the two main areas in the Adits’ Draft Key Performance Indicators (KPIs). It is unclear, however, how competition effects are being addressed, and how the potential conflict between long-term benefits from achieving infrastructure-based competition and the short term benefits from using established providers are to be balanced.

2.27 In addition, the Adits face a number of constraints:

- Given that individual public sector bodies are not obliged to buy through an Adit, the Adits will have to demonstrate that aggregation provides better value, for example in the form of lower prices. In order to prevent being bypassed, the Adits might be tempted to ‘over-aggregate’ public demand in order to be able to obtain favourable conditions, perhaps at the expense of longer term competition and smaller private sector buyers in some areas. The competitive advantage achievable for the supplier in the private sector may be significant enough for the supplier to offer services to the public sector at a discounted price.
- The Adits currently have government loans to cover start-up expenses but are set up as self-financing, not-for-profit organisations (limited liability partnerships). Operating expenses have to be covered by a management charge that is borne by public sector customers for which the Adits procure broadband. This structure may put the Adits under pressure to minimise operating expenses, perhaps by trying to reduce the number of suppliers used in the provision of services, and to increase the total level of public

sector demand it handles. Even though multi-sourcing might be beneficial, the potentially higher cost associated with such a strategy (at least in the short term) might increase the risk that public sector buyers bypass the Adits and buy directly.

- 2.28 With regard to the appropriate scope of aggregation, the consideration of geographical markets is clearly important. The region covered by each of the Adits may well contain a number of geographic markets with varying competitive conditions (e.g. there may be some areas with multiple suppliers, whereas in others only one provider may be present). If an Adit procures broadband services for users at different locations (schools, libraries, town hall etc.), it may not be appropriate to take a uniform approach to procurement if supply conditions vary across geographical markets.
- 2.29 Given that the Adits have been operational for only a short period of time, it is difficult to draw any conclusions with regard to their impact on competition. We understand, however, that the main concern of the Adits at the moment is that they are not being used widely by the public sector, but that they are being bypassed by public sector bodies. One possible explanation for this is that the Adits are pursuing a policy that is focused on promoting infrastructure competition, which may not necessarily offer the lowest price in the short term. However, a more detailed analysis of the reasons for such bypass would be required in order to draw any firm conclusions.
- 2.30 Another important competition issue arises where the public sector gets involved in infrastructure provision. Although the Adit's policy is to procure services from public network operators, there may be cases where the public sector wishes to build infrastructure, typically in rural and remote areas where no suppliers are present locally. This is also reflected in the supplier list, which includes companies that build infrastructure on behalf of customers. Careful thought will need to be given as to how these contracts are structured to ensure that long term competition is promoted where possible.

2.31 Aggregation of demand can be a very useful tool for achieving value for money for the public sector and drive the rollout of broadband. As highlighted above, the way in which demand is aggregated will be particularly important because of the scope for affecting competition and hence value for money in the longer run.

3 PROCUREMENT OF CONTINENCE CARE PRODUCTS

Introduction

3.1 This case study looks at the procurement of continence care products by the NHS in England. It draws heavily on the Competition Commission's (CC's) report on the completed acquisition by Coloplast A/S of the continence care business of SSL International plc.¹³

The market

3.2 There is a range of products suitable for managing urinary incontinence. These include the following:

- **Catheters.** These are hollow tubes inserted into the bladder to drain fluid. Intermittent catheters are inserted through the urethra and can be used by a wide range of patients. They vary from uncoated multiple use catheters to coated or pre-lubricated single use catheters. Around seven single use catheters may be needed in a 24-hour period. An alternative type of catheter is the indwelling catheter. This has a balloon attached that is inflated with sterile water once inside the bladder to keep it in place. This can be used for four to twelve weeks and is suitable for patients with both incomplete bladder emptying and uncontrolled urine release.
- **Penile sheaths.** These are attached to the penis to capture uncontrolled urine release. They can be left in place for between one and three days. There are one-piece sheaths and two piece

¹³ Competition Commission (14 June 2002), *Coloplast A/S and SSL International plc: A report on the merger situation*.

sheaths, where the latter have a separate double-sided adhesive strip that wraps around the sheath to keep it in place. Sheaths can be made from silicon, latex or other synthetic materials, but there is usually a strong preference for those made of silicon.

- **Leg bags.** These collect urine from indwelling catheters or incontinence sheaths and can be used for up to seven days at a time. They are not re-useable and, once disconnected, a new sterile bag must be used.
- **Night bags.** These usually have a capacity of 2 litres and are typically larger than most leg bags. They can be either drainable or non-drainable.
- Absorbent products such as pads or special absorbent underpants.

3.3 The products discussed in this case study are sheaths, urobags (leg and night bags) and intermittent catheters. These were the products considered by the CC.

Demand

3.4 The CC estimated that there were 2.4 million female and 0.9 million male sufferers of incontinence in the UK in 2002,¹⁴ but that only about 10 – 15% seek medical treatment. Demand for the products is expected to grow, driven primarily by the increase in the ageing population but also by increasing public awareness.

¹⁴ This was based on data from the Continence Foundation and the National Monthly Digest of Statistics.

- 3.5 The vast majority of continence care products are supplied through the NHS; there is very little demand from private individuals (except for absorbent pads which are not typically available on prescription and are not the focus of this study) or private hospitals.
- 3.6 The NHS funds the procurement of continence care products through two distinct channels: the primary care channel to the community and the secondary care channel to hospitals. The CC stated that, in 2002, about 90% of NHS expenditure on continence care products was through the community channel and 10% through hospitals.

Primary care in the community

- 3.7 Individuals suffering incontinence will typically first seek medical help by visiting their GP. It is GPs and, to a much lesser extent, nurses with prescribing rights who authorise the purchase of continence care products for their patients.
- 3.8 Patients may be referred by their GP to specialist local advisory services where a continence advisor will devise a care programme, and recommend a particular product and brand. The advisers typically contact the patient's GP for a prescription, specifying that product and brand. Continence care advisers therefore have a key role in the take-up of particular products and brands.
- 3.9 GPs and nurses are only able to prescribe products that are approved by the Department of Health (DoH) and listed in the so-called Drug Tariff (it is Part IX of the Drug Tariff that is of interest here). This is published monthly and applies to both England and Wales (the National Assembly for Wales operates a common policy with England).
- 3.10 On receipt of a prescription, patients can obtain the products from retail pharmacies or through Dispensing Appliance Contractors (DACs), which are specialist suppliers of ostomy and continence care products and

deliver direct to users' homes. Several of the manufacturers / distributors hold dispensing licences for these products.

- 3.11 From the DoH's perspective, the main advantage of Part IX of the Drug Tariff is that it allows patients in the community relatively convenient access (via pharmacies) to the products they need.

Secondary care in hospitals

- 3.12 Although hospitals only account for about 10% of total NHS spend on continence care products, the CC found that hospital sales derive an additional significance for suppliers because patients introduced to continence care products in a hospital typically prefer to continue using the same product and brand when discharged into the community. For example, a patient may be introduced to an intermittent catheter while in hospital but then continues to use the same brand for the rest of their life. The CC referred to this as the "pull-through" effect. In addition, the use of products in hospitals can increase recognition and acceptance of products by clinicians.
- 3.13 Around 90%¹⁵ of hospitals obtain their supplies of continence care products through central NHS arrangements. These comprise the following:
- The **Purchasing and Supply Agency (PASA)**. PASA runs a competitive tender process for suppliers and establishes prices and other terms and conditions (the National Contract).
 - **NHS Logistics**. The selected suppliers and their products are included in the NHS Logistics supply catalogue. Hospitals use this

¹⁵ PASA estimate.

catalogue to select their products and NHS Logistics then orders the products and delivers them to hospitals. ¹⁶

- 3.14 Some Primary Care Trusts (PCTs) have recently set up their own separate arrangements whereby they appoint one DAC within their area as the sole supplier of continence care products. South Sefton PCT told the CC that these arrangements were designed to secure ready access to specialist advice and support for patients. This is not a significant feature of the market and is therefore not discussed further.

Supply

- 3.15 The main suppliers for NHS-funded purchases (and thus for the large majority of all purchases) of the three products of interest are as follows:

- intermittent catheters: Astra Tech, Coloplast, SSL International, Bard and Sims Portex;
- **sheaths**: SSL International plc, Coloplast, Bard, Sims Portex and Jade
- **urobags**: SSL International plc, Bard, Coloplast and Sims Portex.

- 3.16 Most continence care products are manufactured outside the UK. In addition, some suppliers distribute products made by another company. For example, Sims Portex and Jade distribute silicon sheaths manufactured by Rochester (which has a patent for its manufacturing process); with Jade distributing them under both its own and the Rochester brand name.

¹⁶ NHS Logistics delivers a wide range of products, not just medical supplies.

Market definition and structure

- 3.17 The CC took the view that the relevant product markets should be defined narrowly for both demand and supply side reasons. On the demand side, different products have different functions; in particular some absorb urine releases while others drain urine from the bladder.¹⁷ On the supply side, supplier responses suggested that it would take at least 18 months to design and then launch a new product and longer still to obtain listing on, say, the Drug Tariff. The CC therefore defined separate product markets for sheaths, urobags and intermittent catheters.
- 3.18 Although most continence care products supplied in the UK are manufactured overseas, the CC concluded that regulatory restrictions, patent restrictions and distribution agreements make it difficult for firms to supply substitute products from one country to another and that the relevant geographic market was therefore national in scope. On this basis, market share figures are set out in Table 2 below.

¹⁷ Furthermore, switching is unlikely to take place in response to price changes because of the lack of price sensitivity of users and advisers.

Table 2: Market shares by NHS costs for the UK, 2000

	Intermittent catheters	Sheaths	Urobags
Coloplast	18.5	33.5	6.0
SSL	7.0	58.6	52.0
Astra Tech	62.9	-	-
Bard	1.4	2.0	30.9
Sims Portex	3.3	1.3	3.2
Other	6.9	4.6	7.9

Source: CC calculations; taken from Table 4.7 of the CC report into the Coloplast /SSL merger.

The procurement process

Community Channel

- 3.19 Procurement of continence care (and many other NHS) products for the community sector is, in practice, highly disaggregated. Products are selected on a patient-by-patient basis according to clinical need. The selected product is then obtained by the patient on prescription from a pharmacy or DAC.
- 3.20 The DoH does, however, exercise overall control over procurement in the community through the Drug Tariff. This lists approved products and their supplier, brand name, appliance order number, package quantity and list price. An updated version is published every month.

- 3.21 There is no competitive tender process for inclusion in the Drug Tariff. To be included, suppliers must apply to the DoH and demonstrate that the proposed products meet the following three criteria:¹⁸
- They must be safe and of good quality. To demonstrate this, the product needs to carry the Conformité Européene (CE) marking.
 - They should be appropriate for prescription by GPs and, if relevant, nurses. This essentially means that they should be suitable for self-administration by the patient or in some cases by a doctor or health professional.
 - They should be cost effective. The two main considerations are first, whether the product should be reimbursed by the NHS at all and, secondly, how the product price compares with that for alternative treatments or similar products already available.
- 3.22 Companies that wish to have their products included in the Drug Tariff need to demonstrate that their product meets these requirements and provide a product sample. The level of evidence needed depends on the circumstances in question; more evidence is required if there are no similar products already on the Drug Tariff, or if a supplier is seeking a higher price than apparently similar products currently listed when clinical data may be needed to justify higher prices on the basis of greater clinical benefits etc.
- 3.23 There does not appear to be a limit on the number of similar products that can be included on the Drug Tariff. In addition, products are only removed if the product has been discontinued or has not been prescribed within the last 12 months.

¹⁸ Drug Tariff Part IX Guidance to Manufacturers and Suppliers of Medical Devices.

- 3.24 The DoH states that it seeks to agree reimbursement prices that deliver value for money for the NHS while at the same time maintaining continuity of supply for patients. The centrally arranged system offers security to clinicians that the products they prescribe will be available to their patients.
- 3.25 The publicly available guidance on Part IX of the Drug Tariff states that the Prescription Pricing Authority will generally aim to 'ensure that the price of the new product is broadly in line with those already listed.'¹⁹ If a supplier seeks a different price it would be expected to justify the higher price in terms of the following types of factors:
- differences in cash costs through, for example, differences in quantities required;
 - differences in patient benefits (e.g. comfort, speed of recovery); or
 - other anticipated impacts within the NHS (e.g. staff time savings or greater ease of disposal).
- 3.26 Suppliers of products for which there are no suitable comparators are expected to provide evidence on improved outcomes, savings and patient benefits in line with the expected price to justify inclusion in the Drug Tariff.
- 3.27 An exception to the above approach arises if a company submits an application for their product to be included on the Drug Tariff and it is already on PASA's National Contract. In these cases, the Prescription

¹⁹ Suppliers are able to suggest with which products the comparison should be made and explain why.

Pricing Authority is able to use PASA's price list as a basis for discussions about the price at which the product should enter the Drug Tariff.

3.28 Products included in the Drug Tariff are entitled to an annual price increase under an agreement between the Association of British Health-Care Industries (ABHI) and the DoH. This increase is capped at the forecast of GDP deflator minus 0.75 per cent.²⁰

3.29 The Drug Tariff specifies how pharmacies and DACs (see Section 2.3.2) should be remunerated. Two different approaches are used:

- Pharmacies are able to keep the price of the item as listed in the Drug Tariff minus a "claw back" factor plus a fixed handling fee. This factor is directly related to the total quantity of products the pharmacy dispenses in a given month and is designed to counter-balance the higher discount that larger pharmacies are able to obtain from wholesalers.
- DACs are able to get the Drug Tariff price plus an 'on-cost allowance.' DACs with the lowest category of prescriptions obtain an allowance worth 25% while the highest category DACs can obtain allowances worth 15.8%.

²⁰ Applications for price rises must be sent three months in advance of the anniversary of joining the Drug Tariff.

Hospital channel

3.30 PASA operates a centralised procurement process for NHS hospitals. For continence care products, it runs an open, competitive tendering process every three or four years by advertising in the Official Journal of the European Union. The key criteria used to select suppliers are as follows:

- product performance – a minimum acceptable level of performance is specified;
- supplier performance – the supplier must have ISO 9000 to demonstrate that it manufactures products of a consistent quality;
- product delivery performance; and
- price.

3.31 Successful bids are included in the NHS Logistics supply catalogue. This is known as the National Contract. NHS Trusts and Health Authorities are then able to choose which products they use in hospitals. NHS Logistics places orders on their behalf when their stocks fall below agreed levels. Hospitals pay an additional fee for the distribution service provided by NHS Logistics.

3.32 The range of products available on the National Contract is reviewed every three or four years when the contract comes up for re-tendering. This is a natural point at which new products can be included and less effective ones removed. For example latex sheaths are now no longer available on the National Contract. Latex was removed due to the clinical evidence showing many patients suffered from latex allergies. Latex is less transparent and breathable than silicon or other synthetic materials and therefore less comfortable.

- 3.33 New suppliers cannot be added during the contract itself. As a result, PASA will take into account how volatile or dynamic the marketplace is when setting length of the contract.
- 3.34 Price is one of the key criteria used to select bidders during the competitive tendering process. Where there is a choice of products on the National Contract, some hospitals choose to set up a formulary as a measure to control costs. This is a limited list of (cheaper) products that can be used within the hospital.
- 3.35 Distribution is dealt with by NHS Logistics. NHS Logistics buys in bulk under the terms of the National Contract negotiated by PASA and then delivers the products direct to hospitals. NHS Logistics does not deliver to homes, nor does it deliver to the private sector.²¹

Potential competition effects

- 3.36 The likely impact of NHS procurement on competition in the supply of continence care products is discussed in terms of supply to the community and hospital channels before the two processes are compared.

Community channel

- 3.37 The Drug Tariff is likely to have three main effects on competition to supply the community. First, it is likely to restrict price competition; secondly it is likely to act as a barrier to entry; and thirdly, it may distort competition for the distribution of continence care products.

²¹ NHS Logistics also delivers non-medical products, for which it charges a higher price than is available for NHS hospitals.

- 3.38 Although the Drug Tariff acts as a cap on NHS costs, it is likely to dampen price competition for supply to the community. It provides companies with little incentive to compete on price because:
- there is no competitive tender process to select products for inclusion on the Drug Tariff. As a result, companies do not have to compete on price to secure a listing on the Drug Tariff. As a general rule, the price of, say, a new brand of intermittent catheter would be set at a similar level to the price of other intermittent catheters already on the Drug Tariff (unless the company can present compelling reasons for a higher price). The prevailing price level may bear little relationship to the cost of the new catheter;
 - once on the Drug Tariff, continence care products are selected on the basis of individual clinical need rather than price. The CC found that neither patients, nor those advising them, are very price sensitive. Firms therefore have no incentive to set a low list price. They also have no incentive to offer discounts to wholesalers or retailers because neither can influence take-up. In addition they have no incentive to adjust prices downwards in line with cost reductions over time (perhaps through securing economies of scale), nor to refrain from asking for annual price increases.

3.39 It could be argued that it is desirable to dampen price competition in this sector to ensure that competition is focused on clinical effectiveness, leaving scope for companies to invest in product development and innovation. However, the prevailing system is arguably a blunt and uncertain way of encouraging high levels of clinical effectiveness. It is also unclear that continence care product markets can be characterised as particularly dynamic and innovative ones that require high levels of research and development and that would be jeopardised by more active

price competition. The Urine drainage bag market in particular was considered by the CC to be relatively mature, with only a small number of new products being introduced within the last ten years²² (the basic design of these products has changed very little over the last 30 years).

- 3.40 Restricting price competition may also increase the importance of marketing and clinical trials needed to establish a reputation and encourage advisers to recommend their products. If significant, this could act as a barrier to expansion and constrain the ability of smaller firms who are less able to bear the cost of marketing to compete. It is not clear how significant this is likely to be. The CC took the view that if firms distributed free samples and provided free training to continence advisers, the costs involved would be small (because the number of continence advisers is limited).
- 3.41 Companies must have their products listed on the Drug Tariff before they can be prescribed for use in the community. If a similar product is already listed on the Drug Tariff it may take as little as four to five weeks (from initial submission) for applications to be cleared.²³ However for new products, the delay can be much longer. The CC reported that it took Astra Tech six years to secure the inclusion of the LoFric coated intermittent catheter on the Drug Tariff. Once this product had been included it took Coloplast's near identical product EasiCath, only six months to be included. Therefore the Drug Tariff can act as a barrier to entry for new products.

²² These have mainly involved changes to the tap design.

²³ This time period is considerably shorter than that reported by the CC. According to the DoH, this shorter time period has been achieved by the Prescription Pricing Authority, which assumed day-to-day authority for Part IX of the Drug Tariff in 2002.

- 3.42 In addition, companies cannot set very low prices on a temporary basis to assist market entry because subsequent price increases are constrained by the ABHI agreement.
- 3.43 The CC noted that the remuneration structure for DACs and retail pharmacies under the Drug Tariff makes it financially advantageous for a manufacturer to supply products through its own DACs. The Drug Tariff may therefore also distort the distribution of continence care products.

Hospital channel

- 3.44 PASA's use of competitive tendering is likely to make more of existing competition amongst suppliers than the Drug Tariff, enabling PASA to get better value for money. The existence of the pull-through effect, whereby sales to hospitals typically generate additional sales in the community, makes supply to hospitals particularly attractive and is likely to help PASA secure better terms and conditions than might otherwise be the case. This, together with the periodic (as opposed to annual) tender process is likely to make inclusion on the National Contract more attractive to potential suppliers, encouraging keener price competition. In the extreme case, it might even be the case that suppliers compete for inclusion on the National Contract by lowering prices below the competitive level, funding losses incurred in the provision of continence care products to hospitals from profits made on supplies to the community.
- 3.45 The CC found evidence of significant price differences between the community and the hospital sectors. In particular, it compared the value to manufacturers of sales to these different sectors by comparing relative average unit revenue. The CC found that in 2001 Coloplast's unit revenues from sales to the community exceeded the revenues from sales to hospitals by:
- 32 per cent for sheaths;

- 87 per cent for urobags; and
- 35 per cent for intermittent catheters.

3.46 However, the CC found that manufacturers' supplies of continence care products to hospitals were still profitable, suggesting that they do not deliberately price at or below cost when bidding to supply hospitals (to benefit from the pull-through effect). This could either be because in practice the link between the two markets is relatively weak, or because PASA's procurement process does not secure as low prices as is possible. In either case, use of the Drug Tariff is unlikely to be making use of the available competition.

3.47 PASA's periodic tender process potentially acts as a barrier to entry to supply hospitals. When determining the length of its contract, PASA has to choose a time period that is, on the one hand, of sufficient length that suppliers are keen to be included but on the other hand is not so long that it excludes new products and suppliers from hospitals for any significant time period, nor leaves too many unsuccessful suppliers out of the market for too long.²⁴ Periodic contracting also has the advantage of keeping procurement costs low.

3.48 PASA appears very aware of the trade-offs involved and is able to draw on its in-depth knowledge of the markets in question to judge how long to set the contract. As a result, the contract length varies from product to product. In some sectors PASA chooses, for example, to contract for just two years (perhaps with an option to extend for another two years), whereas in others it may fix a contract for four years.

²⁴ The large proportion of sales outside the hospital sector is likely to reduce the risk of driving an efficient competitor out of the market by excluding them from the National Contract.

- 3.49 PASA has suggested that it may be easier for smaller companies to secure sales when they are on the National Contract (compared to the Drug Tariff) because the electronic ordering system makes it easier for customers to order their products. However, this effect may be offset if companies have to conduct additional clinical tests to secure those sales in the first place.
- 3.50 All products procured under the National Contract are distributed through NHS Logistics, an in-house distributor. However, NHS Logistics compares its own internal operating costs with external contractors. For example, its newest depot at Bridgwater is contracted out and managed by Excel Logistics.

Comparison of the two approaches

- 3.51 The two processes for the procurement of continence care products are very different. PASA's procurement process has the advantage of being flexible and is adjusted according to the nature of competition in the market in question. This not only affects contract length but also the process adopted (for example whether e-auctions are used instead of a more standard paper tender). The Drug Tariff, a more passive process that applies to products supplied to the community, is a 'one size fits all' framework that is in place for a very wide range of products, regardless of the degree of competition amongst suppliers.
- 3.52 These two processes have very different outcomes. This can perhaps be seen most clearly when considering prices. The Drug Tariff significantly restricts price competition and, as a result, prices to the Community are much higher than those for hospitals.

4 PROCUREMENT OF IT SERVICES

Introduction

4.1 This case study considers the procurement of systems and services for large scale, complex IT projects by central government departments in the UK focussing on two examples, namely:

- the Department of Health's procurement of IT services from a number of suppliers under the National Programme for IT (NPfIT)
- the Inland Revenue's procurement of IT services through a 'strategic partner' under its ASPIRE programme.

4.2 IT services and systems are typically understood to include most IT-related products, excluding hardware, i.e.:

- **professional services**, including consultancy, training, bespoke software development and application management;
- **operational services**, including processing, outsourcing and value-added services;
- **systems and solutions**, comprising both systems integration and application solutions
- **maintenance and support**, by both vendors of hardware and third party maintenance and support companies.

4.3 In 2002, the Department of Health launched the National Programme for IT in the NHS (NPfIT). The NPfIT is not only an ambitious programme to modernise the way the NHS works but also represents a new approach to procurement of IT within the NHS. Where previously IT services and systems had been procured by individual NHS Trusts, under the NPfIT,

the Department of Health (DOH) will be responsible for the majority of NHS IT procurement.

4.4 The aim of the NPfIT is to:

- introduce an integrated national system of electronic patient records that integrates clinical information from some 30,000 GPs and 270 NHS hospitals and institutions
- roll-out an electronic appointment booking system
- introduce electronic transmission of prescriptions
- develop the underlying IT infrastructure required for these applications.²⁵

4.5 Procurement of eight contracts by NPfIT included contracts for operational services (including hardware), professional services, systems and solutions, maintenance and support. The NPfIT will spend on average £0.64 billion per year over the next five-ten years, including expenditure on hardware and broadband connectivity.²⁶ The procurement of all contracts took less than twelve months.

²⁵ Under the NPfIT, the DoH has also procured broadband services for connecting all NHS sites, the so-called 'New National Network' or N3. For further discussion, see the broadband case study (Section 0 of this document).

²⁶ This estimate has been achieved by summing the announced total contract values for the CRS National Service Provider, Local Service Provider, the New National Network (N3) and the Electronic Booking System contracts and assuming spend is distributed equally over the years that the contracts run for. The actual budgets are £0.4 bn in financial year 2003/04, £0.7 bn in 2004/05 and £1.2 bn in 2005/06 according to "The National Programme for IT in the NHS – Key elements of the procurement approach" by DoH, 31 January 2003.

4.6 Procurement of IT services for the Inland Revenue (IR) takes place under the so-called ASPIRE programme (Acquiring Strategic Partners for the Inland Revenue). Under this programme, the IR outsources all of its IT requirements (including the operation of current IT systems and related business processes as well as the development of new IT systems) to a strategic partner. Thus, the ASPIRE programme covers the full range of services listed above.²⁷ The contract with the strategic partner runs over the next ten years with an option to extend up to a further eight years. The procurement process under the ASPIRE programme lasted two years. The IR's contract with the winning bidder - Cap Gemini Ernst and Young (CGEY) - is estimated to be worth an average of £0.3 billion per year over the next ten years.²⁸

The market

Demand

4.7 Measured as a proportion of GDP, the UK has the highest spending on IT in Europe. In 2003, total IT expenditure (including hardware) was estimated to be £63 billion (about 1.8 per cent of GDP), with spending on IT services and systems accounting for about one-third of this. The most important customer for IT services and systems (as defined above) is the financial services sector, which accounts for 21 per cent of total IT spend, as shown in Table 3.²⁹

²⁷ Note that desktop computers for IR staff are procured separately to the ASPIRE process.

²⁸ CGEY press release no. PR1468, 11 December 2003, 'The Cap Gemini Ernst and Young Group wins £3 billion UK government contract' on www.capgemini.com/news.

²⁹ MBD Ltd (2003).

Table 3: Spending on IT services and systems by sector, 2003

Purchasing sector	Value (£billion)	Share of total (%)
Financial services	4.94	21
Business services	4.01	17
Manufacturing	4.01	17
Distribution	3.07	13
Local and central government	3.07	13
Transport	1.18	5
Public services	1.18	5
Utilities	1.18	5
Construction	0.24	1
Other	0.70	3
Total	23.58	100

Source: MBD Ltd; 'Business Computing (Industrial Report) – UK – December 2003'

4.8 The public sector's share of expenditure on IT services and systems has been estimated at 16 per cent to 18 per cent (the combined share of local and central government and public services in Table 3).³⁰ This estimate is significantly lower than the figure given in the Kelly report

³⁰ MBD Ltd (2003).

(OGC, 2003), which puts the public sector share of expenditure on IT services and systems at 55 per cent.³¹

- 4.9 Within the public sector, large scale IT projects are generally undertaken by central government departments.³² Self-supply of IT services and systems for such projects is generally not an option because, for example, of the lack of specialist skills.

Supply

- 4.10 The IT services and systems sector is served by a large number of suppliers varying considerably both in terms of their size and the range of services they offer. In 2003, there were more than 95,000 companies offering IT services and systems in the UK. These included 53,500 software consultancy and supply companies.³³ However, these figures include a large number of very small partnerships and self-employed individuals.³⁴ Only 1 per cent of IT companies have an annual turnover of more than £5 million.

³¹ 'Increasing Competition and Improving Long-Term Capacity Planning in the Government Market Place', OGC Report to the Chancellor of the Exchequer, December 2003. The figure used in the Kelly report for total expenditure on IT services of £22.6 billion, taken from an Ovum report, is reasonably similar to the MDB figure of £23.6 billion quotes above. Given this, the discrepancy might be explained by the fact that the public sector share of expenditure on IT services and systems was calculated on the basis of a public sector spend figure obtained from Kable Research, which could well be based on a somewhat different definition (e.g. including hardware purchases).

³² Note that the National Programme for IT is managed by the DoH rather than the NHS.

³³ MBD Ltd (2003).

³⁴ At the small-scale end, entry and exit barriers are low. A skilled IT consultant does not need much more than a computer and desk to start a business.

4.11 Therefore, only a small group of suppliers would seem to be able to deliver projects of the size and complexity of the NPfIT and ASPIRE programme. Table 4 below lists the top suppliers of IT services and systems to the public sector in 2003, and their global annual revenue (which in some cases may come mainly from non-IT products and services) as a crude measure of size.³⁵ By comparison, expenditure under the NPfIT amounts to around £640 million per annum (although this figure includes expenditure on hardware and broadband connectivity), and the ASPIRE contract is estimated to be worth £300 million per annum.

Table 4: Top UK public sector IT suppliers 2003 and annual revenue

Supplier	Annual revenue in FY 2003 (global)	Source
BT Syntegra (fully owned subsidiary of BT plc)	£623 mn	www.btsyntegra.com
EDS	£12 bn (\$21.5 bn)	www.eds.com
IBM	£50 bn (\$89 bn)	www.ibm.com/uk
Capita	£1.1 bn	www.capita.co.uk
Hewlett Packard	£41 bn (\$73 bn)	www.hp.com
Computacenter	£1.9 bn	www.computacenter.com
Fujitsu	£23 bn (¥4,667 bn)	www.fujitsu.com
SchlumbergerSema / Atos Origin	£2 bn (€3 bn)	www.atosorigin.com
Dell	£23 bn (\$41.4 bn)	www.dell.com
Siemens	£50 bn (€75 bn)	www.siemens.com
LogicaCMG	£1.7 bn	www.logicacmg.com

³⁵ According to Kable Research (2003).

Supplier	Annual revenue in FY 2003 (global)	Source
SCH - Specialist Computer Holdings (European businesses re-branded SCC)	£1.7 bn (2.7 bn)	www.scc.com
Microsoft	£18 bn (\$32bn)	www.microsoft.com
Capgemini	£3.9 bn (€5.8 bn)	www.capgemini.com
iSoft (provider of health care technology)	£92 mn	www.isoftplc.com
Accenture	£6.6 bn (\$11.8 bn)	www.accenture.com
Unisys	£3.3 bn (\$5.9 bn)	www.unisys.com
ITNet	£189 mn	www.itnetplc.com

4.12 The sector has seen some consolidation over the last couple of years (for example the mergers of Hewlett-Packard and Compaq, CMG and Logica, acquisition of KPMG's IT consulting business by Atos Origin, acquisition of SchlumbergerSema's core IT services business also by Atos Origin and the acquisition of PricewaterhouseCoopers's consulting arm by IBM) probably due to the somewhat slower growth in IT spend in 2001 and 2002 compared to the 1990s.

Market definition and structure

4.13 IT services and systems cover a range of services. In a recent case³⁶ the European Commission drew a distinction between the following seven market segments:

- hardware maintenance;
- software maintenance and support;
- IT and business consulting;
- software development integration;
- IT management services;
- education and training
- business management services.

4.14 The largest IT companies generally provide the full range of services across these segments, and this may place them in a strong position when bidding for projects where service requirements are bundled together (so-called 'end-to-end IT solutions'). Many of the mergers and acquisitions mentioned above have involved companies with complementary (as well as overlapping) service offerings, and the benefits from being able to provide such end-to-end solutions may partly explain the consolidation process. It may therefore be argued that there

³⁶ Commission of the European Communities (2002), Case no. COMP/M.2946 – IBM/PwC Consulting.

is a market for integrated solutions and that the service categories above are gradually becoming less relevant.³⁷

- 4.15 Many of the very large suppliers have developed internal sector specific expertise and are organised according to industries (financial services, communications, distribution, public sector etc). In some cases, suppliers may specialise in the needs of particular sectors such as financial services, telecommunications, retail or healthcare.³⁸ For example, Cerner is a global supplier of healthcare information technology and was short-listed as a prime bidder in two of the NHS LSP contracts (see Table 5).
- 4.16 In terms of the geographic market, the European Commission has concluded that 'despite a strong trend towards internationalisation of supply and demand, the geographic scope of the IT services market has not yet become wider than national.'³⁹ This conclusion seems to be based on the fact that a supplier needs a local presence in order to support its sales and signal delivery capability. Indeed, multinational IT services companies, such as IBM, retain a local presence in many countries.
- 4.17 At the same time, there is an increasing tendency for IT services companies to source inputs globally, for example to develop bespoke software modules in India, so that only the physical implementation of the project takes place in the country where the project was commissioned. This suggests that barriers faced by a supplier active in one country to provide services in another are limited, and that it might therefore be more appropriate to consider the relevant market for

³⁷ Ibid.

³⁸ Commission of the European Communities (2002), Case no. COPM/M.3014 – Logica/CMG.

³⁹ Ibid.

large-scale projects to be international rather than national (owing to supply side substitution).

- 4.18 Obviously, the existence of an internationalised supply side for the large and complex IT projects would limit the effect that UK government procurement can have on competition.

The procurement process

Procurement of National and Local Service Providers for the NHS

- 4.19 The provision of services by NPfIT for the NHS was divided up into two groups:

- National Application Service Providers (NASPs) have been selected to develop and to implement the core, national applications for central patient care record services and e-booking services.
- The 28 Special Health Authorities that are responsible for day to day services in England were divided into five regional 'clusters'; North East, North West and Midlands, East, South and London. Five regional Local Service Providers (LSPs) contracts have been procured, in two Waves, to implement applications at local level and to supply associated services such as integration with existing systems and provision of required hardware.

4.20 The procurement process was conducted as a negotiated procedure according to the EU procurement directives and UK regulations. The selection of a NASP for the electronic patient system ('NHS Care Records Services') and the LSP contracts ran in parallel in line with the following timetable:

7 February 2003	Notice published in the Official Journal of the European Communities calling for expressions of interest. 27 candidate organisations were included on a 'long list' for LSP contracts and 20 candidates were announced for the NASP.
30 June 2003	Deadline for proposals from organisations included on first stage long list.
12 August 2003	Announcement of second stage short-lists of organisations to receive a Preliminary Invitation to Negotiate.
5 December 2003	Award of LSP contracts for London and North East.
8 December 2003	Award of NASP Care Records Service contract.
23 December 2003	Award of LSP contracts for North West / West Midlands and Eastern regions.
26 January 2004	Award of LSP contracts for Southern region after further negotiation.

4.21 In order to ensure that successful bidders would be capable of delivering the complex requirements (illustrated by a 200-page output-based specification for the NASP tender and a 600-page specification for the

LSP contracts), a threshold of annual revenues of £50/£100 million was set for bidders. Owing to the complexity, consortia comprising several contractors were expected to bid for the LSP contracts. Given that some technology requirements were specific to the health service and not to eliminate the value smaller turnover companies could bring, lead bidders were also encouraged to engage subcontractors with appropriate expertise.

- 4.22 Bidding consortia were asked to indicate their main subcontractor for key aspects of the requirements (such as, for example, their chosen supplier of patient record software). As declared to all bidders, the NPfIT procurement strategy aimed to achieve contestability at all levels. Firstly, by ensuring competing prime bidders (a target of a minimum of three different suppliers for each of the five LSP contracts) and secondly, that competing health software would be selected. Because of bidder's choice of "clusters" and the distribution of their software solutions, it was not necessary to take any special steps to ensure that monopoly providers did not emerge and on-going contestability would be lost.
- 4.23 In order to keep both bid and procurement costs manageable and to enable bidders to focus on the particular regional "clusters" they had chosen; following the announcement of the second stage short-list LSP candidates were asked to put in priority order the region or regions they wanted to bid for (and to identify those in which they were not interested). During this process DoH checked that it would receive a minimum of three bids for each region. In the event, all bidders had the opportunity to pursue their first, and where chosen, second preferences. This approach may limit participation in some regions by encouraging bidders to focus on those regions in which they were particularly interested but equally nobody was forced to compete where they had little or no interest.
- 4.24 This approach meant offers received for one region could be compared with those received for other regions. This was, in particular, true for the second Wave of LSP tenders (for the South, North West and Midlands and

East of England). Having awarded the first two contracts at the beginning of December 2003, the DoH felt it had a good understanding of what the 'market price' was for the requested services. In that light, the DoH judged that the bids received in Wave 2 and subsequently for the Southern region could provide better value for money and that there was scope to improve the key terms and conditions including price. Table 5 shows winners and short-listed bidders for each of the contracts.

Table 5: NPfIT contract winners

Contract	Value	Winner	Award	Other short-listed candidates
NASP, NHS Care Record Services	£620 million over 10 years	BT	5/12/03	IBM, Lockheed
NASP, Electronic Booking System	£64.5 million over 5 years	Schlumberger-Sema	8/10/03	Information not in public domain
LSP, London area	£996 million over 10 years	BT	5/12/03	IBM, Lockheed
LSP, North East	£1,099 million over 10 years	Accenture	5/12/03	Cerner, Patient First Alliance (Jarvis)
LSP, North West and West Midlands	£973 million over 10 years	CSC	23/12/03	BT, Fujitsu, IBM, Patient First Alliance
LSP Eastern	£934 million over 10 years	Accenture	23/12/03	Cerner, Cap Gemini Ernst and Young, PlexusCare (EDS and LogicaCMG)

Contract	Value	Winner	Award	Other short-listed candidates
LSP Southern	£896 million over 10 years	Fujitsu Alliance (Fujitsu, PwC, TATA Consultancy Services)	26/01/04	Lockheed, PlexusCare, SchlumbergerSema

Procurement of a strategic partner for the Inland Revenue under the ASPIRE programme

4.25 The ASPIRE procurement process lasted nearly two years. It was also conducted as a negotiated process according to EU procurement directives and UK regulations. The main milestones of the process were as follows:

October 2001	IR announces intention to go to market.
March 2002	Notice published in the Official Journal of the European Community, i.e. the ASPIRE competition formally commences.
July 2002	Publication of the short-list of bidders invited to tender.
December 2002	Invitation to Tender (ITT) sent to short-listed bidders.
March 2003	Responses to ITT received.
July 2003	Preferred bidder list announced.
November 2003	Final confirmation of offers received from preferred bidders.
December 2003	Cap Gemini Ernst and Young (CGEY) announced as the preferred supplier.
January 2004	Contract signed with CGEY.

4.26 The IR already had incumbent suppliers providing similar services, namely:

- EDS, which had a ten-year contract running from 1994 to June 2004; and
- Accenture, which had a contract that ended in April 2004, extended for a year. This contract was originally between Accenture and the Contributions Agency, but was transferred to the IR when the Contributions Agency became part of the IR in 1998.

Thus, the ASPIRE programme was essentially a re-tendering of a public sector IT services contract, or a “second generation” outsourcing contract.

4.27 Given that EDS and Accenture had a largely successful relationship with the IR and obviously developed a thorough understanding of the specific IR’s specific requirements, there was a risk that other potential suppliers might perceive the incumbency advantage of a possible EDS/Accenture consortium to be so significant that it would discourage them from participating (and thus saving the significant cost of preparing a bid with little chance of winning). The IR was also concerned that some companies took the view that, if no other companies bid, the IR would have to split the contract up into several smaller contracts, which would then involve less risk for the supplier and would be easier to win.⁴⁰

4.28 In view of these concerns, the IR targeted 16 potential suppliers and actively marketed the forthcoming contract. The feedback from this marketing round indicated that the industry was still not convinced the

⁴⁰ Inland Revenue (2004).

tender was 'winnable' for new entrants⁴¹ and therefore that participation might be limited. However, new entrants indicated to the Inland Revenue how, in their view, the playing field could be levelled, and the IR sought to respond to these suggestions.

- 4.29 One of the IR's responses was to announce that the unique transition costs would not form any part of the evaluation of the bids. The suppliers were therefore asked to submit separate pricing of the transition component on the understanding that this element would not be included in the financial evaluation.
- 4.30 In addition, and in line with NAO guidelines,⁴² the IR provided funds for each potential bidder to conduct a Design and Implementation Study. These studies were effectively 'mini-projects' where the suppliers developed a proposal in response to an IR output specification and delivered the application as a demonstration of their capability to deliver on the specification.
- 4.31 As a result of this market making process, bids were received from three consortia, namely:
- Cap Gemini, Ernst and Young and Fujitsu – the eventual winners
 - EDS/Accenture – the incumbent suppliers to the IR
 - BT, CSC and SchlumbergerSema.

⁴¹ Inland Revenue (2004).

⁴² National Audit Office (10 May 2002), *Awarding the new licence to run the National Lottery*. This report suggests that where the incumbent's position is perceived to be strong, one option to promote competition is to contribute towards bidder costs.

Potential competition effects

4.32 The procurement of large and complex IT projects raises a number of competition issues:

- **Participation may be severely constrained** because of the sheer size of the project and the corresponding requirements that bidders have to meet. Although small with regard to the overall project size, participation costs are likely to be significant. This may restrict firms' incentives to submit bids. Efforts to reduce bidders' costs may be needed to increase the number of participants and ensure effective competition.
- **Incumbency advantages** may be significant, particularly where integration with existing systems is an issue. As a result of previous contracts, a supplier may have a better understanding of the requirements and the objectives of the procuring agency than newcomers. The tender design can alleviate or mitigate such advantages as exemplified in the IR ASPIRE case.
- **Subcontracting:** Where there is scope for the chosen supplier to subcontract with smaller firms, the extent to which the design of the procurement process provides incentives or discourages subcontracting may have a longer-term impact on the competitive structure of the sector.
- **Bundling of demand:** Consolidation of different requirements into a single contract may reduce administrative costs of the procurement process and subsequently the on-going costs of contract management, but may unduly increase participation costs, and discriminate against smaller providers unable to provide integrated services.
- **Hold-up issues:** In many cases, it is difficult or impossible to provide a precise and comprehensive specification of requirements; the

precise nature of the solution required by the public sector may only become known during the course of the project. This creates the need for ex-post changes in project specification. If the contractor needs to make specific investments in order to address the particular needs of its public sector customer it may be subject to hold-up. At the same time, the public sector customer is exposed to the risk of non-delivery or reduced service quality. Attempts by the buyer to insure against this by maintaining contestability after the contract award may increase exposure of the supplier.

4.33 The key characteristics of the NPfIT procurement process are:

- separating out requirements that have to be met on a national basis (through the NASP) and those that can be provided regionally
- splitting regional requirements into five separate regional 'clusters'
- focus on contestability after the contract award

4.34 Setting separate regional LSP contracts rather than one national contract provides scope for yardstick competition and provides some insurance for the buyer against sub-standard delivery:

- During the implementation or delivery phase of the project, the procuring agency is better able to evaluate the performance of particular suppliers by holding these up against each other. This helps to sustain an element of competition after the contract award.
- The buyer is less vulnerable to under-performance or price increases that might result from ex-post changes in the specification. If one or more of the regional suppliers were to fail, the DOH could potentially bring in one of the other regional suppliers to replace it. This imposes an additional competitive pressure on the suppliers to ensure they deliver adequately on their contracts. However, at the same time, this also increases the risk faced by suppliers,

potentially reducing their incentives for investment in specific assets.

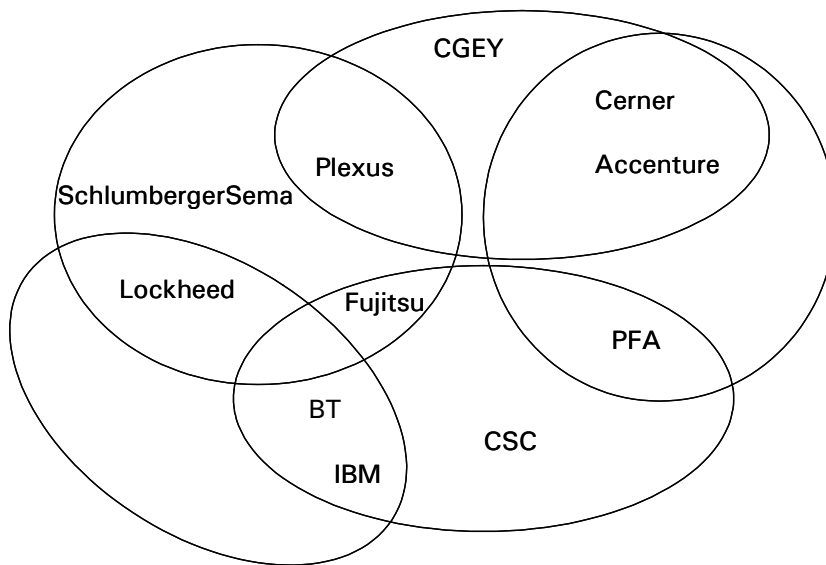
- 4.35 The subdivision into regional contracts is a balancing act. In this case, the prospect of multiple contracts with an explicit commitment to multi-source may have increased incentives for firms to participate. Importantly, despite the regional initiative, individual contracts were still sufficiently large to attract interest from the top tier of IT suppliers which have not traditionally taken part in the much more decentralised procurements by individual NHS trusts.
- 4.36 Splitting up demand in this way may also bring long-term competition benefits. Awarding multiple supply contracts reduces the extent to which (real or perceived) incumbency advantages could limit competition at the re-tendering stage. This means that the NPfIT should be less vulnerable to the situation that the IR faced with the ASPIRE programme, where just one bidder was perceived to have very large incumbency advantages.
- 4.37 Nevertheless, it is unclear to what extent the structure of the NPfIT contracts has actually been effective in reducing existing incumbency advantages. Prior to the award of these contracts, BT Syntegra was the provider of NHSmail (an electronic messaging service) and NHS Numbers For Babies (generating NHS numbers for newborns, a pre-requisite for electronic patient records) and in general, BT Group was the largest single provider of Information Technology and Communications services to the NHS.⁴³ In this round, BT Syntegra won two of the three tenders that it participated in as well as the NHS New National Network contract for connectivity services. Of course, BT's success may simply be

⁴³ BT press release ref. NR0350, 8 December 2003 on www.btplc.com/news/pressreleaseandarticles/corportatenesreleases/2003/nr0350.htm.

because its bids were superior irrespective of any incumbency advantages.

- 4.38 For the LSP contracts, IT services and systems were bundled together with supply of hardware. It is unclear whether this bundling has been strictly necessary from the point of economies of scope or the need to co-ordinate, or whether it has been chosen to limit the ongoing contract management cost. In any case, the bundling did not seem to give advantages to firms who could supply both in house hardware and services (IBM and Fujitsu). Only in one out of the four tenders where hardware suppliers bid did the hardware producer actually win. This may reflect the fact that supply of that hardware is largely commoditised.
- 4.39 The split into five regional contracts could have created a risk of collusion amongst bidders, despite long-term contracts on offer. As Figure 1 shows, there is no obvious segregation of bidders into distinct, non-overlapping groups competing for the individual contracts.

Figure 1: Grouping of bidders in NHS Local Service Provider (LSP) contracts



- 4.40 In any case, if collusion were attempted, there is little evidence of it having been successful. For example, BT and IBM bid against each other for three contracts. Two of these were won by BT, and the third by another bidder. Similarly, Accenture and Cerner bid against each other for two contracts, both of which were won by Accenture. Although the relatively unattractive terms initially offered for the Southern contract might be indicative of collusion, the bidders competing for this contract did not bid against each other for any of the other contracts and the final price was the best of all the contracts that were awarded.
- 4.41 The ASPIRE programme is different to the NHS NPfIT not least because it was a re-competition of IT services whereas the NPfIT which was effectively consolidating over time hundreds of hospital trust level contracts is a 'first generation' contract. The incumbents were perceived by the industry to have an overwhelming advantage. As a result, the IR had to try to level the playing field between the incumbents and potential entrants by partly funding the cost of bid preparation (through the commissioning of Design and Implementation studies, and separate evaluation of transition costs).
- 4.42 Internal analysis of the IR's commercial strategy identified a single strategic partner as the best option to support this strategy.⁴⁴ Therefore, all IT services and systems and certain business transformation and outsourcing requirements were consolidated into one contract. The IR was aware that this would entail sub-contracting out of services because no single supplier would be capable of delivering all requirements. According to the IR, this creates a competitive process as this second tier of firms below the prime contractor that can help sustain competition over the lifetime of the contract. At the same time, a single strategic partner creates stability at the prime contractor level. CGEY's original

⁴⁴ Inland Revenue (2004).

proposal suggested an internal board, chaired by the IR, with members drawn from CGEY, Fujitsu and IR taking decisions on subcontracting. This concept played an important part in CGEY winning the contract.

- 4.43 The IR believes that because of the sheer size of some of the public sector IT contracts, procurement will undoubtedly have knock-on effects on the private sector. Reputation and references are crucial in the IT services and systems sector. The IR contracts will provide references for EDS/Accenture and CGEY when they tender for work for private sector suppliers.
- 4.44 In the view of the IR, the first IT contract won by EDS in 1994 was instrumental to EDS, a US company, gaining a foothold in the UK market from where they have subsequently expanded into Europe. Although this may perhaps exaggerate the role of the first IR contract (EDS was established in the UK already in 1984), there is a general that whilst, on the one hand, there is an argument that the supply side for these large scale IT projects is highly internationalised, the sheer size of some of public IT sector contracts may mean that there is a knock-on effect on the private sector to the extent that they support the expansion of suppliers in hitherto unserved markets.

5 PROCUREMENT OF PRISON SERVICES

Introduction

- 5.1 This case study looks at the provision and management of prisons designed for the custody and rehabilitation of adults convicted for criminal offences, which we refer to as Prison Services. It draws largely on two sources, namely the report of the Competition Commission on the acquisition by Group 4 Falck (Group 4) of The Wackenhut Corporation (TWC) in 2002⁴⁵, and the CBI report on the effects of private provision of prison services.⁴⁶
- 5.2 It illustrates the development of a market for services that have traditionally been self-supplied by the public sector. The public sector continues to be the only purchaser of such services through Her Majesty's Prison Service (HMPS)⁴⁷ in England and Wales, the Scottish Prison Service (SPS) in Scotland and the Northern Ireland Prison Service (NIPS).
- 5.3 To date, no centres in Northern Ireland have been contracted out to private companies, and only one prison is privately run in Scotland. For this reason, this case study focuses on HMPS and the market for prison services in England and Wales.

⁴⁵ Competition Commission (2002), *Group 4 Falck A/S and The Wackenhut Corporation: A report on the merger situation*.

⁴⁶ CBI (2003).

⁴⁷ Since June 2003 part of Correctional Services in England and Wales, which also encompasses the National Probation Service and the Youth Justice Board.

The market

- 5.4 Prison services, as defined in this case study, include the provision and management of centres for the custody and rehabilitation of adult offenders. At present, procurement of prison services in England and Wales can be for:
- management-only contracts for the management of newly-built, re-built or existing prisons (so-called MO contracts)
 - integrated contracts for the provision and management of new prisons, including design, construction, management and finance of centres (so-called DCMF contracts).
 - The remuneration to the private service provider typically takes the form of a price per prisoner place per day.
- 5.5 There is a HMPS controller in each centre contracted to a private company, who confirms the number of prisoner places available, and monitors operation of the centre. Additionally, the Commissioner for Correctional Services in the Home Office has direct responsibility for private prisons, including the assessment of their performance and review of contracts.
- 5.6 HMPS may temporarily assume management of a private prison if it considers that security and control of the centre is being compromised (once security is re-established in the centre, management would be handed back to the private firm).

Demand

- 5.7 The UK has been one of the first countries, after the United States and Australia, to outsource prison services, thereby creating a market for prison services. HMPS is the sole buyer of prison services in England and Wales.

- 5.8 The 1991 Criminal Justice Act provided powers for private involvement in imprisonment, leading to the contracting-out of the management of a number of newly constructed prisons, namely Wolds, Blakenhurst, Doncaster and Buckley Hall.
- 5.9 In the wake of the Private Finance Initiative the scope for private provision of prison services increased to include the design, construction and financing of new prisons. The first Design, Construction, Management and Finance (DCMF) contract was awarded in 1995.
- 5.10 Early plans to market-test the management of existing prisons (which led to a tender for the management of HM Prison Manchester, won by the in-house bid in 1994) were abandoned following a challenge by the Prison Officers Association and legal concerns about the underlying lease arrangements, but market-testing was re-introduced in 2001 for prisons failing to meet the required standards: underperforming prisons were given a 6-month period to improve their performance; prisons failing to meet the requirements after this period would be opened to a competitive tender without an in-house bid.
- 5.11 The number of prisons where services have been subject to competitive tendering so far is small. Twenty-one contracts have been awarded through competitive tender (of which a number were renewals of management contracts that had expired). Table 6 shows prisons for which management contracts have been put out to tender, and Table 7 shows DCMF prison contracts. Competition for the management of Brixton prison, considered to be failing, commenced in 2001, but no private company has been prepared to submit a bid.

Table 6: MO contracts for prison services

Prison	Tender
Wolds	1991, 2001
Blakenhurst	1992, 2000
Doncaster	1993, 1999
Buckley Hall	1994, 1999
Manchester	1992/93, 2000

Source: Competition Commission (2002)

Table 7: DCMF contracts for prison services

Prison	Tender
Altcourse	1994/95
Parc	1994/95
Lodwham Grange	1996
Kilmarnock	1997
Ashfield	1997
Forest Bank	1997
Rye Hill	1998
Dovegate	1998
Ashford	2001
Peterborough	2001

Source: Competition Commission (2002), CBI (2003)

Supply

5.12 Prison services continue to be mainly self-supplied by HMPS. As of June 2004, there are four private firms supplying prison services in the UK, all owned by multinational correctional companies (see also Table 8). The four firms currently holding DCMF and MO contracts are:

- GSL, a UK subsidiary of Group 4 Falck, a Danish company listed on the Copenhagen stock exchange
- Premier, which is owned by Serco, a British company listed on the London stock exchange
- Securicor, a UK based firm providing security services worldwide
- UKDS, a consortium initially set up by two UK construction companies and Corrections Corporation of America, but since 2000 solely owned by French company Sodexho Alliances SA.

5.13 All the players in the market have an international presence and supply their services to governments of other countries.

Table 8: Operators of prisons under contracts held by private companies

Firm	MO contract	DCMF contract
GSL	Wolds Buckley Hall (until 1999)	Altcourse, Rye Hill
Premier	Doncaster	Lowdham Grange, Ashfield, Dovegate
Securicor		Parc
UKDS	Blakenhurst (until 1999)	Forest Bank, Ashford, Peterborough

Source: Competition Commission (2002), CBI (2003)

- 5.14 In February 2004, Group 4 and Securicor announced their intention to merge in the third quarter of 2004.⁴⁸ The new company is to be known as Group 4 Securicor plc. The merger has been approved by the European Commission's competition authority, but the announcement of the merger has raised concerns about a potential loss of competition in the UK, where the number of private suppliers of prison services will be reduced to three. In order to address concerns that the merger might not be approved by competition authorities in the UK, Group 4 will sell part of their interests in the UK ahead of completion of the merger.⁴⁹

Market definition and structure

- 5.15 The provision of prison services has been examined by the UK Competition Commission in the context of the acquisition of TWC by Group 4 in the context of a wider range of services provided by the merging parties and its competitors, ranging from prison and other custodial services (including prisoner escort services) to more general security services such as manned guarding, alarm monitoring etc.
- 5.16 The Commission concluded that, owing to the specialist skills required in construction and management of prisons, prison services were in a separate market from other custodial services, such as the construction and management of immigrant detention centres and secure training centres (custodial facilities for 12 – 17 year olds, known as 'trainees'). For example, Reliance Custodial Services focus on prisoner escort services, and have not shown any intention to become involved in the

⁴⁸ The announcement of the merger is available at:
http://www.securicor.com/merger_announcementv2.pdf.

⁴⁹ Prison Privatisation Report International, Issue No 60, January/February 2004.

provision of prison services apart from a single bid for the management of Blakenhurst in the first tender 1992.

- 5.17 The Commission also found that, even though both involve a management component, the skills required in the performance of MO and DCMF contracts were sufficiently different to suggest that both were in separate markets. A larger range of firms have submitted expressions of interest for MO contracts, compared with DCMF contracts where the number of bidders does normally not exceed five (with the exception of the tender for Lowdham Grange in 1996, where 8 bidders notified their interests).
- 5.18 Self-supply by HMPS was not included in the market, because HMPS was not competing for PFI prisons, and there was some uncertainty about the extent to which it would bid for future MO contracts. However, the Commission noted that the option of self-supply provided a strong constraint on the exercise of market power, even though not an immediate supply-side constraint.
- 5.19 Regarding the geographic scope of the market, the Commission found that the market is likely to comprise the UK. Although there is so far no private supply of prison services in Northern Ireland and only one prison in Scotland is privately operated, it is reasonable to assume that firms supplying services to HMPS could also bid for contracts tendered by SPS or NIPS. The lack of active participation in UK tenders by firms offering similar services abroad led the Commission to conclude that firms currently without a UK presence could impose a competitive constraint in terms of the threat of new entry, but did not provide an immediate supply-side constraint. Therefore, extending the boundaries of the geographic market beyond the UK would be inappropriate.

The procurement process

- 5.20 The procurement of prison services in England and Wales is centralised and conducted by the Procurement Group of HMPS, which (since its inception) works closely with the Office of Government Commerce (OGC). Procurement follows a restricted or negotiated procedure, and only pre-qualified bidders are invited to submit sealed bids.
- 5.21 HMPS's in-house team was initially excluded from bidding in the tenders for new prisons (Wolds and Blakenhurst). However, HMPS competed for all the other MO contracts. Since 1998, the in-house team has won two (out of four) re-tenders of expired MO contracts from the private incumbent, bringing former contracted-prisons back in-house. For obvious reasons, HMPS cannot bid for PFI prisons, but in the case of tenders for DCMF contracts the Prison Service calculates the likely cost of self-provision in order to obtain a 'public sector comparator'.
- 5.22 Management-only contracts initially covered five-year periods with options to extend. However, since 1999, contracts have been extended to ten-year periods. Integrated contracts last for 25 years, reflecting the significant investments required by the winning bidder. After expiry of the contract, the centre built by the contractor becomes property of HMPS.

Pre-qualification and tendering

- 5.23 Private companies wishing to bid for the provision of prison services need to pre-qualify as potential suppliers. For this, bidders need:
- to demonstrate the capability of safely operating a prison, which can be based on existing track record in operating prisons or on relevant experience in similar areas; and

- to prove robust and stable financial arrangements in order to guarantee that the company will be able to operate for the full length of the contract period.

5.24 For each tender, HMPS publishes an announcement inviting private companies to express their interest in bidding. HMPS will arrange an interview with interested suppliers or, if there is a large number of interested parties, supply a pre-qualification questionnaire to be completed by applicants. On some occasions, announcements for competitive tendering have been followed by Bidders' Conferences for interested parties, organised by HMPS.

5.25 Bids submitted by pre-qualified suppliers need to specify:

- the plans for the design and construction of the centre in the case of tenders for integrated contracts. Bidders have a considerable amount of freedom in designing the building, not only with regard to appearance, but also in terms of the location of particular facilities and areas, which depend on how the centre is to be run
- any plans for renovation, maintenance and repair that the operator may offer to undertake in the case of tenders for integrated contracts. In the event that HMPS were seeking for a specific renovation to be included, this would be specified in the terms of the tender
- plans for operating the prison, including staff involved, organisation of the centre and management of prisoners
- the cost of providing the service, in terms of the cost per prisoner place per day.

5.26 Bidders for MO contracts for existing centres (coming up because a previous contract expires, or because the prison has been considered to under-perform) are required to take-over the existing buildings and staff.

In order to reduce incumbency advantages by the operator running the centre at the moment of tendering, HMPS arranges for bidders to visit the centre and provides full assets and staff information and dilapidation surveys for the centres open to tender. Cost information for each centre is in the public domain.

Selection of bids

- 5.27 Bids are evaluated by an evaluation team both qualitatively and by means of a score based on the assessment of individual criteria listed below. The evaluation team also organises an interview with each bidder where the bidder can present their bid, explain their perception of the strengths and weaknesses of the proposal and answer questions. At the end of the evaluation process, the evaluation team agrees on a final score and recommendations for each bid. These are presented to the board of HMPS, who select the preferred bid and notify their decision to the Home Office. Negotiations are held with the preferred bidder over details of the proposed contract. A standby bidder may be held in reserve in order to protect against a breakdown of negotiations with the preferred bidder, but there are no simultaneous negotiations with the preferred and the standby bidder.
- 5.28 The evaluation of the design for new prisons takes into account factors such as:
- the output specification (how many prisoners would the centre be able to take care of)
 - the operational advantages and disadvantages of the design, e.g. how easy it would be to move prisoners, or the scope the design offers for the provision of recreational and purposeful activities or educational services to prisoners

- the flexibility of the centre (how easily can the centre be adjusted for alternative roles, e.g. conversion from a male prison to a female prison)
- the likely longevity of the building, which becomes property of HMPS when the 25-year contract expires (usually centres last more than 60 years); and
- the aesthetics of the building, as the building should not be intrusive and should be acceptable for inhabitants and local authorities in the area.

5.29 In evaluating the operational plans, the evaluation team looks at features such as:

- security
- ease of moving prisoners
- time out of cell for prisoners
- recreational services
- time for, and nature of, purposeful activities
- educational services
- counselling for prisoners
- fair treatment of prisoners
- efficient management of resources.

5.30 Table 9 (which reproduces Table 5.3 of the Competition Commission report) shows competitors for each of the MO contracts (including bidders who only expressed an interest, but were not short listed). Shaded fields indicate contract winners. This shows that the four main private providers and HMPS have bid for most of the contracts. Mancare and Securiguard bid for early contracts, but not for later ones. In general, the number of bidders for later contracts and re-tenders is lower.

Table 9: Competition for MO contracts for prison services

	GSL	Premier	Securicor	Reliance	UKDS	HMPS	Mancare	Pricor	Burns	Serco	Securiguard	WCC
Doncaster 1993												
Doncaster 1999												
Wolds 1991												
Wolds 2001												
Blakenhurst 1992												
Blakenhurst 2000												
Buckley Hall 1994												
Buckley Hall 1999												
Manchester 1992/93												
Manchester 2000												

Source: Competition Commission (2002)

Note: All firms that submitted bids (not just short listed bidders) included

5.31 Similarly, Table 10 (which reproduces Table 5.2 in the Competition Commission report, with the exception of Kilmarnock) shows that the four main providers have been regular bidders for DCMF contracts. Secure Care Services, was also a regular bidder up to the bid on

Lowdham Grange, and Correctional Services Corporation has been bidding on almost all tenders since.

Table 10: Competition for DCMF contracts for prison services

	GSL	Premier	Securicor	UKDS	CSC	SCS	Cornell	Bobby Rose
Altcourse 1994/95								
Parc 1994/95								
Lowdham Grange 1996								
Ashfield 1997								
Forest Bank 1997								
Rye Hill 1998								
Dovegate 1998								
Ashford 2001*								
Peterborough 2001*								

Source: Competition Commission (2002)

'Competitor' is defined as a firm that pre-qualified and submitted a bid. Not all competitors were short listed.

*Tenders for these prisons consisted of two stages; in the first stage bidders were required to submit a bid outline; in the second stage, shortlisted bidders (indicated with a bold tick) were required to submit a full bid.

Potential competition effects

5.32 The introduction of competitive tendering competition marks the first time that this sector of the UK economy has been exposed to competition. Although the private sector's presence is still small, it appears to have brought benefits in terms of cost reductions and delivery of new centres on time and on budget.⁵⁰ However, a number of potential concerns about the competitive effects of the procurement process for prison services can also be identified:

- **Barriers to entry:** Given that failure in the delivery of prison services (e.g. breaches of security, or mistreatment of prisoners) is unacceptable, bidders have to meet strict pre-qualification criteria both in terms of financial standing and capability. This creates significant barriers to entry.
- **Collusion amongst bidders:** Given the small number of potential suppliers, and the high barriers to entry, there may be a risk of insufficient competition for contracts. However, in-house bids for MO contracts, and the 'public sector comparator' may be effective measures to prevent collusion.
- **Self-supply:** Participation of HMPS in-house team in tenders may deter private companies from bidding.
- **Incumbency advantages:** The existing provider has advantages, particularly in relation to the avoidance of costs associated with

⁵⁰ The benefits from competition in the procurement of custodial services have been identified extensively in research carried out for example by the NAO and the CBI.

transfer of staff to a new contractor (management and operations of prisons is a labour intensive activity).

Barriers to entry

- 5.33 In its 2002 report, the Competition Commission discussed a number of potential entry barriers related to bidding costs and strategic advantages for firms already in the market (such as experience in the preparation of tenders or access to insurance), focusing on competition in a particular tender.
- 5.34 More generally, the requirement on potential suppliers to demonstrate the capability of safe operation of a prison, can be expected significantly to restrict the number of bidders. Even though demonstrating this capability does not necessarily require the bidder to have a track record of successfully providing prison services in the past, being able to demonstrate experience obtained from previous contracts, from supplying such services in other jurisdictions, or from supplying similar services would seem to be the most effective way of showing compliance with this criterion.
- 5.35 Indeed, there are no examples of potential suppliers being pre-qualified without previous relevant experience. Thus, in practice, entry is limited to suppliers who have experience in the management and operations of prison centres in other countries, or suppliers with experience in other custodial services (e.g. escort of detainees).
- 5.36 Easing pre-qualification requirements appears to be an unacceptable option for increasing participation. In order to make the most of the existing number of potential suppliers, HMPS Procurement Group tries to encourage entry of new suppliers by actively inviting bidders with experience in custodial services, both in the UK and in other countries. For example:

- The Caledonian Correctional Services Corporation (CCS) – a joint venture of British building companies and a US correctional services supplier – was invited to submit bids in 2000, although it has so far failed to secure a contract in either of the two tenders where it participated.
- The prison escort service provider Reliance Custodial Services Ltd has also been encouraged to participate in competitive tenders for running prison centres, although has not submitted any bids so far.
- The Commissioner for Correctional Services announced in March 2004 that two additional US companies could potentially be invited to bid in the UK.⁵¹
- Initially, entry was encouraged by not allowing bids by the in-house team (although this is no longer the case).

Collusion

5.37 With a very limited number of suppliers and significant barriers to entry, there would appear to be some scope for collusive behaviour amongst bidders. The fact that information about prices paid for previous contracts is in the public domain, and therefore available to competitors in future bids, might, at first sight, be considered to increase the likelihood of collusion, as price transparency is generally acknowledged to facilitate collusion amongst firms.⁵² However, information about prices paid for previous contracts does not necessarily mean price transparency

⁵¹ Prison Privatisation Report International, Issue No 61, March 2004.

⁵² Price transparency allows the members of a cartel to monitor whether the remaining members stick to the implicit agreement.

in the case where the services procured are complex and not standardised. The specification of requirements and therefore the cost incurred in meeting these vary considerably across prisons, and therefore information about the contract value does not necessarily provide much information about whether a bidder has been acting in accordance with the collusive outcome, or has been trying to deviate. This information does also not provide much guidance as to the level of future bids.

- 5.38 In addition, the Competition Commission considered that the risk of collusion is reduced because tenders are relatively infrequent, and the value of contracts on offer is large. This would make collusion more difficult to sustain as the incentives to deviate from a collusive outcome are large in each and every procurement situation.
- 5.39 The threat of self-supply can also pose a significant constraint on collusive behaviour. Allowing the in-house team to submit a bid, or having a 'public sector comparator' which allows HMPS to consider whether bids are significantly above the likely cost, can be a good way of undermining collusion incentives, as it introduces a safeguard bid against artificially over-priced bids.

Self-supply

- 5.40 In-house bids may reduce the incentives of private entrants to submit bids; former Minister for Prisons Paul Boateng identified this as the cause for the failure to attract bids from private firms in tendering of management contracts for underperforming prisons, claiming that 'the private sector would show interest if there was no in-house bid'.⁵³ However, in particular where the existing provider has been found to

⁵³ Prison Privatisation Report International, the Prison Reform Trust (ISSN 1363-9552), No. 38 Jan/Feb 2001.

perform poorly, it is far from clear that there are incumbency advantages, let alone incumbency advantages that are so strong as to discourage participation from other bidders. The reluctance of firms to bid for management contracts of failed prisons may well be found elsewhere, for example in the requirement to take over existing buildings and staff (as was the case for Brixton prison where no private contractor was interested in bidding).

- 5.41 It is noteworthy, however, that the only cases in which incumbent holders of MO contracts were beaten at the re-procurement stage, the contract was won by HMPS. Arguably, this might be taken to suggest some discrimination in favour of self-supply, which in the long term could have the effect of discouraging other bidders. However, given the close scrutiny of tenders for prison services (including scrutiny through the NAO), it seems unlikely that HMPS could favour an in-house bid that does not provide best value. For this reason, it may be more appropriate to consider the success of the HMPS bid as an indication that self-supply in these cases was the better option (noting also that HMPS was not allowed to bid for the first contract), or as a sign of over-pricing by other bidders.
- 5.42 A distinct question is to what extent an increase in demand for private provisions through tendering management contracts for more centres might increase the number of suppliers. Given the difficulties faced by HMPS in attracting bids from new entrant bidders and the potential capacity constraints of existing suppliers, this may not be an option, at least in the short term. However, to the extent that future demand is reflected in a certain flow of new contracts open to private bidders, it

may well be possible to interest new firms to enter the UK market, extending the capacity for private provision.⁵⁴

- 5.43 The market for prison services is still an emerging market, and is at present a niche market with a small number of suppliers. Over the last decade, competitive tendering has become the preferred method for awarding contracts for new prisons, and an increasing number of existing prisons are opened to competition in market testing exercises.
- 5.44 Private provision of prison services is also growing elsewhere, for example in Australia and South Africa. At least in the medium term, it is possible that global demand may outstrip supply. Given the existence of significant entry barriers into this market (see below), the shortage of suppliers may not be easily overcome, and the reluctance of firms not currently active in the UK to enter this market may be explained by the fact that suppliers in the market face sufficient opportunities elsewhere.

Incumbency advantages

- 5.45 Incumbency advantages for players in the market may arise from the fact that they have a track record in the supply of prison services and may therefore be considered to be a less risky option than potential new entrants. A better understanding of requirements and experience with the preparation of bids in previous tenders obviously helps to increase the probability of winning and to reduce participation costs for incumbents. Expected advantages in terms of entering other markets (notably South Africa and Australia) from experience in the UK market

⁵⁴ The Competition Commission considered the lack of a future flow of contract opportunities, caused by the inability of the buyer to commit to a certain demand profile, to be one factor that could contribute to an explanation for the reluctance of foreign firms to enter the UK market.

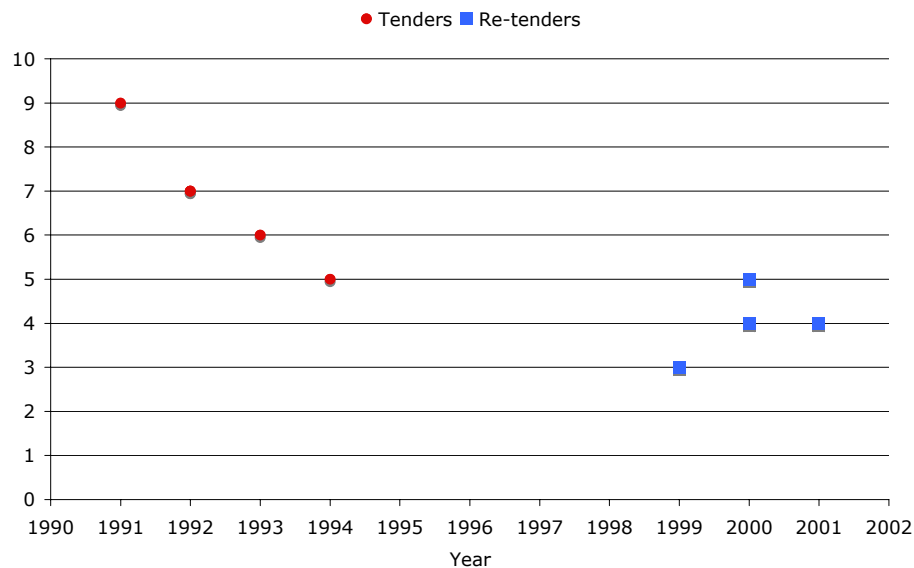
(not least because of the similarity of contracts there with UK PFI contracts) were clearly acknowledged in representations to the Competition Commission.

- 5.46 Group 4, in its representations to the Competition Commission pointed out that the latter advantages might to some extent be reduced if contract requirements were specified in more detail, making it easier for new entrants to gauge precisely what is required rather than having to rely on experience with previous contracts. However, this would reduce scope for innovation and might not be desirable for these reasons.
- 5.47 On the contrary, at least in the case of DCMF contracts there may be incumbency disadvantages owing to the considerable complexity of the underlying contracts. In representations to the Competition Commission, the Prison Service expressed concerns about the capacity of any firm to manage to DCMF contracts at once. These concerns relate to the capacity of construction firms to cope with construction of two centres within the specified timescale; however, these would not affect the outcome of bid selection if the preferred bidder is able to address such concerns, as the award of two contracts to UKDS in 2001 shows. Also in representations to the Competition Commission, one of the providers (Premier) announced that it might review its bidding policy, perhaps deciding not to bid for any upcoming contract in the future because of resource constraints. Unfortunately, the consequence of such incumbency disadvantages would not be a levelling of the playing field, but a decrease in the level of competition if a number of large contracts were put out in quick succession.
- 5.48 It is unclear to what extent the incumbent operator may enjoy advantages where an MO contract is being re-tendered. The fact that the successful bidder has to take over the work force, and that incumbents would not face the associated transition cost, may create some advantages. Superior information about particular details of the centres may further create incumbency advantages.

5.49 Indeed, four out of six re-tenders of expired contracts were won by the incumbent, and in no case has one private provider been replaced by another one. This suggests that incumbency advantages may be pronounced in the re-tendering processes. Current procurement practices aim to reduce incumbency advantages by requiring disclosure of cost information to other bidders, who are also allowed to visit the centre in order to inspect the status of the building, for example, to check the need for renovation and maintenance activities.

5.50 In any case, such incumbency advantages do not appear to be so strong as to significantly discourage participation. Although the number of competitors in re-tenders has always been lower than the number of competitors in the first-round tender, this may simply be because of a general trend towards a falling number of bidders over the first few years of competition, as shown in Figure 2. Clearly, the picture presented there is only suggestive, and experience with a larger number of re-tenders would be required to come to a more robust conclusion.

Figure 2: Number of competitors for MO contracts, 1990-2002



Source: Competition Commission; this includes the re-tender for Wolds in 2002, won by the incumbent provider GLS

- 5.51 HMPS seems to be clearly aware of the potential impact of perceived incumbency advantages on participation incentives. As reported by the Competition Commission, in 1995 and 1996 a DCMF contract was awarded to each of Securicor and GSL, even though one of the two bidders had offered a lower price for both. The Prison service justified this decision to the NAO, which had been critical of the decision not to select the cheapest offer for Altcourse and Parc prisons, with reference to the desire to encourage bidders to participate in future tenders.

Summary

- 5.52 The procurement of prison services from the private sectors shows very clearly the potential difficulties faced when replacing self-supply with procurement from third parties. The lack of certainty over future demand may discourage firms from entering the market, while at the same time capacity constraints faced by private suppliers imposes a limit to the ability of the public sector to market-test in-house provision.
- 5.53 In this situation, a commitment to procure rather than self-supply prison services might lead to the public sector facing a market situation in which competition is much weaker than suggested by the number of suppliers active in the market. Thus, the award of integrated contracts seems to raise concerns about capacity planning, as identified in the Kelly report (OGC, 2003).
- 5.54 Developments so far suggest that HMPS – the sole buyer of prison services in England and Wales – is fully aware of the interaction between short-term and long-term competition, and is taking an active role in promoting new entry. Whether there is sufficient evidence for the claim that the public sector would be both able and willing to exercise countervailing buyer power in the face of a reduction in competition amongst suppliers is unclear. Certainly the Competition Commission in 2002 was split on this issue, with a majority thinking that the public sector would have the ability to exercise such buyer power, but that

there was insufficient evidence to suggest that it would, whilst a minority affirmed both ability and willingness to exercise countervailing buyer power in order to protect the public interest split the Competition Commission.

6 PROCUREMENT OF WASTE MANAGEMENT SERVICES

Introduction

6.1 This case study considers the procurement of waste management services by local authorities. The provision of waste management services has changed over the last ten years from being based almost exclusively on self-supply by the public sector to being increasingly contracted out to private firms.

The market

6.2 Households and businesses generate solid waste as an undesired by-product of consumption and production. The demand for waste services arises from the need to have this waste taken away and disposed of in a practical and legal manner.

6.3 A major distinction can be drawn between hazardous and non-hazardous waste. Compared with non-hazardous waste, collection and disposal of hazardous waste is governed by separate rules and regulations, and such waste is normally collected and disposed of separately for health and safety reasons. This case study focuses on non-hazardous waste.

6.4 There are three major components to waste management services, namely:

- waste collection
- transfer of waste
- waste disposal.

- 6.5 Waste collection, in turn, can be subdivided according to the type of premise from which it is collected:
- household and commerce generating small quantities of waste that need to be collected regularly
 - businesses and industrial sites which produce large quantities of waste; and
 - street cleaning and ground maintenance.
- 6.6 Similarly, waste disposal can be further classified according to the method of disposal: recycling, incineration and landfill.
- 6.7 Household waste collection is a relatively simple economic activity: households leave their refuse at some agreed location and the service operators collect it and drive it to a disposal site. To provide the service, the operator requires loaders and drivers, collection and transfer vehicles, a vehicle depot, transfer facilities and a disposal site. In 2000, household waste collection rounds accounted for 64% of all waste collected (16 million out of 25 million tonnes). The next most significant sources of waste were civic amenity sites⁵⁵ (2.1 million tonnes, 8.3%) and street cleaning (1.1 million tonnes, 4.2%).⁵⁶
- 6.8 In smaller cities, towns and rural areas, the collection vehicle may take the waste directly to the disposal site, without there being a separate transfer service. However, often transfer of waste from the collection vehicles to the disposal site constitutes a distinct and separate activity

⁵⁵ Sites for disposal of bulky waste, either by self-delivery by households and businesses or by specially agreed collection by the service provider.

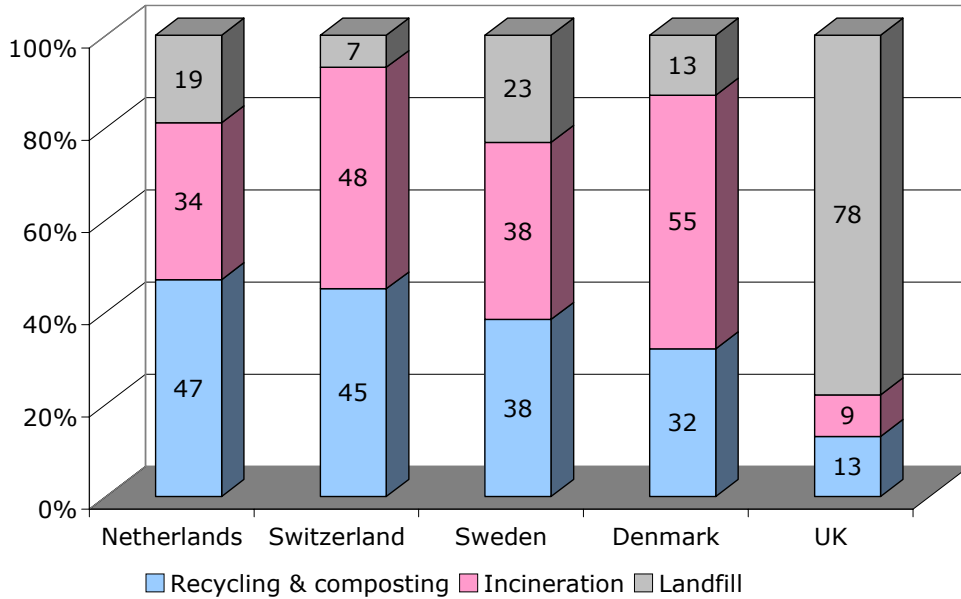
⁵⁶ Key Note (2003).

from collection and disposal. In London for example, some of the collected waste is reloaded from the collection vehicles onto barges and transferred by water to the disposal site.

- 6.9 At the disposal site, the waste may be sorted, recycled or otherwise processed before being burned in an incinerator or dumped in a landfill. Compared with waste collection and waste transfer, waste disposal is a more complex task, subject to a significant range of rules and regulations, and guided by overall policy objectives such as, for example, a reduction in the use of landfill sites or concerns about pollution from incinerators.
- 6.10 The current situation in UK waste management has been influenced by EU Directives on waste disposal, incorporated in the UK Waste Strategy 2000, which set targets for recycling and other methods of waste disposal. Although the volume of municipal waste generated in the UK is broadly similar to other EU countries (taking into account the size of the country), the UK is not as advanced in the recycling of waste as many other European countries (see Figure 3). Increasing the proportion of recycling is an important government objective, with a target of recycling 40% of household waste by 2005, for example. Efforts to meet such targets will have a significant impact on the structure of demand for waste disposal, moving away from demand for landfill capacity towards increased demand for waste recycling facilities.⁵⁷

⁵⁷ DEFRA (2000).

Figure 3: Waste recycling in selected countries, 2000



Source: DEFRA, Municipal Management Survey 2001/02

Demand

- 6.11 The Government sets policy for waste management in the UK including the implementation of Europe-wide policy initiatives as formulated in EU Directives on waste management. Some of the responsibilities for waste management are being devolved to new administrations in Scotland, Northern Ireland and Wales.
- 6.12 However, ultimately the duty to arrange for collection and disposal of household waste in their areas in accordance with the rules and regulations lies with local authorities. Where requested, local authorities are also required to arrange for the collection and disposal of commercial waste in their areas.

6.13 In England, responsibility for waste collection and disposal are shared amongst local authorities:

- **Unitary authorities** are responsible for both waste collection and disposal. According to the Chartered Institute of Public Finance and Accountancy (CIPFA) there are 137 unitary authorities in England (including London boroughs and metropolitan districts, which are also responsible for both collection and disposal).⁵⁸
- District councils are normally **waste collection authorities**, charged with the collection of waste from each household in their area on a regular basis, as well as the collection of commercial and industrial waste from the private sector, if so required. CIPFA numbers suggest that there are 239 non-metropolitan districts in England.
- County councils are **waste disposal authorities**, required by the Environmental Protection Act 1990 to provide disposal sites to which they direct the waste collection authorities for the disposal of their controlled waste, and with providing civic amenity facilities. Waste disposal authorities are to arrange for the disposal.⁵⁹

6.14 The geographic distribution of demand for waste collection and disposal is rather uneven, reflecting differences in population density. For example, English non-metropolitan authorities account for 57.5% of

⁵⁸ Source: Chartered Institute of Public Finance and Accountancy (CIPFA).

⁵⁹ There are also six statutory joint waste disposal authorities established under Section 10 of the Local Government Act 1985 (Greater Manchester Waste Disposal Authority, Merseyside Waste Disposal Authority, Western Riverside Waste Disposal Authority, East London Waste Disposal Authority, West London Waste Disposal Authority and North London Waste Disposal Authority).

waste collection authorities, but only for around a third of the total weight of waste collected (9.5 million tonnes).⁶⁰

- 6.15 In addition to public sector demand, there is also significant demand for waste management services from private entities, which have to make their own arrangements for waste. However, this sector is small relative to public sector demand (household waste alone accounts for more than 60% of all waste collected).

Supply

- 6.16 Waste collection in the UK is mostly carried out by in-house local authority providers, known as direct service organisation (DSOs), or by private contractors⁶¹. Until recently, waste collection was almost entirely dominated by the DSOs. However, from 1998-2002, the share of waste collection services provided by private contractors expanded from 10% to 40%; self-supply by the public sector has thus fallen to around 60%.⁶²
- 6.17 Table 11 provides a breakdown of waste collection and disposal for different categories of waste and by type of provider in 2001-02. Waste collection categories where DSOs continue to account for the majority of provision are: street cleaning; and the collection of household, bulky, fly-tipped, commercial, and mixed and garden waste. Private contractors are responsible for most collection of abandoned vehicles, hazardous waste and for household waste recycling.

⁶⁰ Key Note (2003).

⁶¹ DSOs were established in 1988 in response to the requirement that local authorities divest themselves of any direct role in waste collection allowing them to bid under Compulsory Competitive Tendering (CCT) scheme.

⁶² Source: CIPFA.

6.18 In contrast to waste collection, the majority of waste disposal services is provided by private contractors. They account for over 60% of provision in both the waste disposal and civic amenities categories.

Table 11: Share of local government waste collection and disposal services by type of provider in England and Wales, 2001-02

	DSOs	Private Contractor	Other ⁶³	Total
Waste collection services:				
Household	60%	36%	3%	263
Bulky waste	57%	37%	6%	262
Street cleaning	66%	29%	5%	263
Clinical waste	50%	44%	6%	229
Abandoned vehicles	14%	74%	12%	256
Commercial	63%	28%	10%	221
Mixed	62%	36%	3%	185
Recycling	34%	50%	16%	228
Fly-tipped waste	55%	28%	17%	259
Garden waste	60%	37%	3%	155
Hazardous waste	27%	50%	22%	117
Waste disposal services:				
Waste disposal	3%	63%	34%	131
Civic amenity sites	7%	66%	27%	109

Source: Chartered Institute of Public Finance and Accountancy (CIPFA); data based on a survey with 74% response rate

⁶³ 'Other' includes joint public/private arrangements and Local Authority Waste disposal companies (LAWDC).

- 6.19 The collection of household waste is subject to significant economies of density, provided the collection frequency is at sufficiently spaced intervals and that waste is collected from virtually every house on each collection round. By contrast, economies of density do not arise in the collection from large producers of waste (producers which regularly generate full truckloads of waste), in the collection of unusual or exceptional waste where timeliness is valued, or in the collection of waste requiring special handling. Between the two extreme cases – collection from residential customers who produce small quantities of waste, and industrial customers who produce large quantities of waste – there is a range of small and medium sized enterprises that produce quantities of waste for which it is not possible to delay collection until a full truck load of waste has accumulated.
- 6.20 Although there are clear economies of density, economies of scale in waste collection are small and linked to the fixed minimum efficient size of collection vehicles. Studies show that there are economies of scale in waste collection associated with the increasing utilisation of such vehicles, up to a city size of around 50,000 inhabitants. For larger cities, cost increases proportionally with the number of inhabitants.⁶⁴
- 6.21 For waste disposal, there are substantial capital requirements to set up a waste disposal site; waste treatment facilities and a larger plant can therefore yield lower unit costs per tons treated waste than a smaller plant for equivalent waste received. In addition, the difficulty of obtaining planning permission to open new landfills or incinerators further enhances economies of scale and raises barriers to entry.
- 6.22 Table 12 provides a brief description of the private-sector leaders in the UK waste management industry.

⁶⁴ Stevens (1978).

Table 12: The largest players in the UK waste management industry

Company and UK turnover	Description
<p>Shanks Group PLC</p> <p>Turnover (2003): £551m</p>	<p>Main activities are waste collection, incineration, landfill, recovery/recycling, remediation on contaminated sites and specialist industrial services. In 2000, Shanks acquired Waste Management Nederland BV (the principal businesses acquired in Holland provide solid and hazardous waste collection, treatment, recycling and industrial cleaning services). In 2000, Shanks acquired contaminated land bioremediation company Bio-logic Remediation Limited and ASM Waste Services of Aylesbury.</p>
<p>Biffa Waste Services Ltd</p> <p>Turnover (2002/03): £510.9m</p>	<p>Provides a broad range of services: collection; special waste services (Integrated Waste Management; Treatment Technologies; Waste Water; Packaged Waste – Hazpak, Backtrack; Forecourt Services; Offshore Services; Clinical Waste); landfill services (Contaminated Land Disposal; Reclaimed Resources; Construction and Demolition Waste; Special and Difficult Waste; (Landfill sites and Transfer Stations). In 2001, Biffa acquired UK Waste and in 2003 it acquired Hales Waste Control and RMC Environmental Service.</p>

Company and UK turnover	Description
<p>SITA Holdings UK PLC</p> <p>Turnover (2001): £386.2m</p>	<p>SITA is the waste management services business of Suez SA, the French multi-utility company, which was formed in 1997 by the merger of Compagnie de Suez SA and Lyonnaise des Eaux. Main services include: collection, sorting, composting, incineration and landfill. In 2001, SITA acquired United Waste company.</p>
<p>ONYX Environmental Group</p> <p>Turnover (2001): £369.8m</p>	<p>Onyx is the waste management business of Vivendi Environment, part of Vivendi Universal. Onyx main waste management services are: waste collection and related services (collection and transfer, sorting and recycling, commercial and industrial cleaning, urban cleaning) and waste treatment (non-hazardous waste, landfill, waste to energy incineration, composting, industrial hazardous waste, recovery of polluted industrial sites, liquid waste management).</p>
<p>Cleanaway Ltd</p> <p>Turnover (Cleanaway, 2000): £243.3m</p> <p>Turnover (Serviceteam, 2001): £113.8m</p>	<p>Main waste management services are: collection, street cleaning, grounds and park maintenance, recycling, reprocessing and trading of recyclables, waste paper and plastics trading; water treatment and disposal; incineration of hazardous waste; disposal. In 2001, Cleanaway acquired Serviceteam - a provider of environmental services to local governments.</p>

Company and UK turnover	Description
<p>Waste Recycling Group PLC</p> <p>Turnover (2002): £305.5m</p>	<p>Main activities comprise: recycling, green waste composting, recycling and recovery of the organic content of household waste; household waste recycling sites; landfill sites; electricity generation from landfill gas; incineration; liquid waste treatment; quarrying. In 2001, Waste Recycling Group acquired Integrated Waste Management Ltd.</p>
<p>Viridor Waste Management Ltd</p> <p>Turnover (2002/03): £152m</p>	<p>Viridor Waste Management Ltd is part of the Pennon Group PLC, which also has interests in the water industry through South Water Ltd. It is a waste treatment and disposal business with activities in landfill and renewable energy generation; transfer stations, recycling and collection. In 2001, Viridor acquired the Suffolk Waste Disposal Company and Lavelle and Sons Ltd, a Manchester based transfer station, recycling and collection company. In 2002, Viridor acquired Richardson Ltd, a specialist glass reclamation company and Roseland Plant Ltd, a Cornish waste management and plant hire company.</p>
<p>Cory Environmental Ltd</p> <p>Turnover (2002): £107m</p>	<p>Main activities include: municipal waste collection, recycling and street cleaning; transport, transfer and disposal services, as well as landfill capacity. In 1997, Cory acquired Exwaste Ltd from Essex County Council and the Waste Company, Gloucestershire County Council's LAWDC. In 1999, Cory acquired Parkhill Reclamation.</p>

Market definition and structure

- 6.23 Relevant markets for waste management services, as defined by the European Commission, are separated according to the type of waste - ordinary waste and hazardous/special industrial waste⁶⁵- and within each category between waste collection and disposal.⁶⁶ The European Commission distinguished cleaning of public infrastructures, i.e. cleaning of streets, parks, public bins, etc. as a separate relevant product market.⁶⁷
- 6.24 The European Commission defined the relevant geographical market for non-hazardous waste as national or even local, for reasons of regulation, local custom and knowledge and transport costs.⁶⁸ Within the UK, it seems reasonable to assume a national market for waste collection, as public procurement procedures applied by local authorities for waste collection are uniform across the country and transport costs are negligible. Geographic markets for waste disposal are often limited in scope, with limited competition between disposal facilities because once the waste has been collected; it is very expensive to transfer it by modes other than bulk transport (e.g. rail or barge).⁶⁹

⁶⁵ Commission Decision in Case no IV/ 1059 - Suez Lyonnaise/BFI; Case no IV/M.283 - Waste Management International/S.A.E.; and case no IV/M.448 - GKN/Brambles/Leto Recycling.

⁶⁶ See, in particular, Competition Commission, Case IV/M295 - SITA-RPC-SCORI and in Case IV/M916 - Lyonnaise des Eaux/Suez.

⁶⁷ Commission Decision, Case IV/M 1059 - Suez Lyonnaise des Eaux/BFI.

⁶⁸ Commission Decision, Case IV/M.283 Waste Management International; IV/M.448 - GKN/Brambles/Leto Recycling.

⁶⁹ Geographical market for disposal of hazardous waste can be much broader and go beyond national borders.

6.25 In 2002, there were 1,830 VAT-registered enterprises engaged in 'Sewage, Refuse Disposal, Sanitation and Similar activities'. However, only about half of these (950 companies or 51.9% of the total) had a turnover within the £100,000 to £999,000 turnover range. 90 enterprises (4.9% of the total) showed a turnover of £5 million or more. The number of registered companies in the category of 'Non-metal Waste and Scrap' was 595; of which 20 enterprises had a turnover of over £5 million⁷⁰. Given the size of contracts awarded by the public sector, there may be only few firms capable of delivering the services required, and the relevant market for such contracts may be relatively concentrated despite there being a large number of firms in the sector overall.

The procurement process

6.26 Refuse collection and street cleaning were amongst those services for which local authorities had to go through a compulsory competitive tendering (CCT) process following the passing of Local Government Act 1988. Where the authority intended to allow the existing in-house team (DSOs) to compete, the Act laid down guidelines to ensure fair competition, including ring-fencing the DSO and setting a minimum rate of return on assets (5 per cent).⁷¹

6.27 By contrast, waste disposal was not subject to the CCT requirements. However, Part II of the Environment Protection Act 1990 required local authorities to divest themselves of their waste disposal operations with the aim of introducing competition for waste disposal in order to

⁷⁰ Key Note (2003) p. 26-27.

⁷¹ A brief history of refuse collection services prior to 1988 can be found in Szymanski S and T. Wilkins (1993), pp. 109-30.

encourage a more efficient service provision and to identify the full costs associated with waste disposal. Under these provisions, waste disposal authorities may either set up an arm's length Local Authority Waste Disposal Company to provide the service or contract out the entire service.

- 6.28 The CCT requirement was abolished with the 1999 Local Government Act, and, since April 2002, local authorities have been required to achieve "Best Value" in their procurement. The Best Value requirement applies to all local authorities with responsibility for waste management, as well as to the six statutory joint waste disposal authorities established under Section 10 of the Local Government Act 1985. The 1999 Local Government Act and the statutory guidance that accompanies it⁷² do not require authorities to subject their functions to competition in the same way as did the CCT. However, the statutory guidance stresses that fair and open competition will usually be the best way of achieving Best Value.
- 6.29 Procurement of waste services is subject to EU procurement rules if the waste management contract exceeds the threshold value.⁷³ However, EU rules still gives local authorities discretion over whether to use an open, restricted (or, in some circumstances, a negotiated) procedure in their procurement.
- 6.30 In-house provision of waste collection and street cleaning services remains an option under the Best Value regime. Local authorities delivering in-house waste collection and street cleaning services need to demonstrate that the self-supply is competitive with the best alternative

⁷² DETR Circular 10/99 in England and NAW Circular 14/2000 in Wales.

⁷³ Regulations covering waste procurement in UK are the Public Services Contracts Regulations 1993, Statutory Instrument 1993 No. 3228.

and does indeed represent best value. The Government believes that the way in which this can best be demonstrated is through a fair and open competition with the costs of in-house provision fully transparent.⁷⁴

6.31 The Best Value criteria on which local authorities are required to award contracts for waste management include the following:

- percentage of total household waste: recycled; composted; recovered to heat, power or other energy sources; and landfilled;
- weight of household waste collected per head;
- cost of waste collection per household;
- cost of municipal waste disposal per tonne;
- number of collections missed;
- percentage of people satisfied with recycling facilities, waste collection and civic amenity sites; and
- percentage of population served by a kerbside collection of recyclable waste.⁷⁵

6.32 The objective is to enable local authorities to select the most effective, efficient and economic means available in order to deliver improvements in service provision. In doing so, all local authorities should have regard to the EC Landfill Directive and UK Waste Strategy, which provides goals

⁷⁴ See DETR Circular 10/99 in England and NAW Circular 14/2000 in Wales.

⁷⁵ DEFRA (2000), part 2, p. 59.

and targets in planning waste management services within the Best Value framework.

- 6.33 Recent Government policies have emphasised the importance of an integrated and sustainable waste management strategy.⁷⁶ This requires co-operation between disposal and collection authorities, and between neighbouring collection authorities. The UK Waste Strategy 2000 also encourages local authorities to work closely with waste management companies in order to develop more integrated waste management facilities. For example, in order to achieve landfill targets, authorities need to alter collection strategies, and develop new facilities for the recycling and recovery of waste. Government targets require greater source separation of recyclables, including green and kitchen waste for composting. Collection and disposal authorities are thus required to develop new collection, disposal and recovery facilities for different types of waste.
- 6.34 Contracts awarded for waste collection and disposal are highly specific and vary across local authority areas, which differ, for example, in terms of size, density, amount of waste produced. For example, contract values for household waste collection range from £1m to £32m per annum, reflecting differences in costs because of:
- contract aggregation, i.e. the extent to which different collection and disposal activities are bundled together
 - authority-specific factors, e.g. the number of collection points, the breakdown between households and commercial premises, the density of collection units and the proportion that are urban or rural, as well as idiosyncratic features

⁷⁶ DEFRA (2000), part 2. section 3.1.

- service specification, e.g. specification of the collection point (back door, kerbside etc), frequency of collection (once a week or more often etc), type of containers (plastic sacks, wheelie bins etc) and whether they have to be provided by the operator (free of charge), occasional collections for bulky items (free of charge) and the provision of recycling facilities (recycling targets to be met)
- input costs, mainly wage bills which may be adjusted to differences in the cost of living (e.g. London weighting), or may have to take account of specific provisions set by the local authority.⁷⁷

6.35 Contract duration tends to vary in line with the investment requirements of the service provided. The minimum contract period for collection contracts is typically four to five years, but shorter time periods may be used where the local authority is expecting changes in government policies that might have a material influence on its waste strategy. By contrast, many waste disposal and treatment contracts are signed as public-private partnerships or under the private finance initiative. It is not uncommon to see 20-25 year contracts being let for integrated waste management facilities, owing to the significant capital costs involved in waste treatment plants. Contract length for landfill disposal varies considerably, from short-term holding contracts or even 'spot' contracts, through five-year disposal contracts, to 25-year contracts. Local authorities may also contract for a minimum tonnage rather than a fixed period of time in order to provide sufficient certainty to a supplier investing in waste disposal facilities.

⁷⁷ For example, Westminster City Council set special provisions in the waste collection contract concerning the number of staff and their pay in order to ensure lower turnover of staff and better quality of service provided.

Potential competition effects

6.36 There are four main areas where competition effects from the procurement of waste management services has to be considered:

- the prevalence of **self supply**, in particular in waste collection, may seem surprising, not least because the introduction of competition has resulted in significant cost savings in the provision of waste management services
- the existence of **entry barriers** which may restrict participation or create incumbency advantages, and the impact that contract aggregation may have on these barriers
- the vulnerability of waste collection tenders to **collusion**, owing to the structure and frequency of contract awards
- the extent to which a trend towards procurement of integrated waste management services might lead to **changes in the organisation of supply and industry consolidation**, which might reduce competitiveness over time, and increase the vulnerability of the procurement process to collusion.

We explore each of these areas in turn.

The role of self supply

6.37 Competitive tendering for waste collection services is widespread in many countries, and has resulted in significant private sector entry. For example, for waste collection and disposal, private companies supply 85% of local authorities in Denmark (up from 27% in 1991), 73% in

Norway, and 63% in Sweden.⁷⁸ Empirical studies suggest that costs are lower when private firms rather than the public sector itself collect waste⁷⁹ and that the cost savings can be attributed to improved efficiency.⁸⁰ By contrast, in the UK self-supply still accounts for around 60% of waste collection and 40% of waste disposal. Given that contracts are usually put out to tender, this might indicate that the public procurement process is not yet sufficiently competitive.

- 6.38 The prevalence of self-supply might well indicate a preference of local authorities to award contracts to the DSOs and to discriminated in favour of in-house bids. According to the OECD, there is at least a perception that some local authorities tend to favour DSOs, which might explain why private contractors may not always bid of contracts.⁸¹
- 6.39 However, some studies point out that cost savings can be achieved even when the contract is signed with DSOs, and that savings are due to competition, not necessarily private provision.⁸² Some local authorities have also claimed that high continued level of public participation in waste management is because private suppliers have focused on cherry picking the best contracts.
- 6.40 In any case, the option to self-supply can play an important pro-competitive role by reducing the scope for collusion through providing a

⁷⁸ OECD (2000), p. 30.

⁷⁹ See, for example, Kitchen (1976), Stevens (1978), Pommerehne and Frey (1977), Dijgraaf and Gradus (2003).

⁸⁰ Cubin et al (1987), Szymanski and Wilkins (1993), Szymanski (1996), Ohlsson (1998).

⁸¹ OECD (2000), p. 155.

⁸² Domberger et al (1986).

credible fall-back option and a much better understanding of the likely cost of service provision which facilitates the evaluation of tenders.⁸³ Thus, maintaining a self-supply option is generally beneficial, provided that local authorities ensure a level playing field between DSOs and private competitors, just as they should between incumbent private providers and potential entrants.

Entry barriers and incumbency advantages

- 6.41 The waste management industry has been identified as particularly suitable for private entry because physical barriers to entry and exit for most activities (with the potential exception of disposal) are low. Nevertheless, a potential concern is that procurement processes may not adequately consider the impact of those physical barriers that do exist, nor the scope for the procurement process itself to create barriers to entry by increasing participation costs or potentially discriminating against smaller companies through contract aggregation.

Physical barriers to entry

- 6.42 Physical and economic barriers to entry and exit in waste collection and street cleaning are low.⁸⁴ Capital requirements are modest, investments

⁸³ For example, Westminster City Council, while tendering for waste collection in 2002, prepared a cost model for the service provision in the borough and used it as a screening tool for evaluating bids.

⁸⁴ *'The sunk costs of entering the tendering process are likely to be low whilst asymmetries in information between incumbent and entrant are unlikely to be large. A contract can be specified for refuse collection in which the expected outputs are measurable and in which monitoring of compliance is comparatively straightforward. The scope for unconstrained opportunistic behaviour by contractors is thus not large, provided that sanctions can be applied if there is a failure to comply, as is the case when contracts are subject to periodic re-tendering. Both these factors suggest a priori that refuse collection is a service where tendering is particularly likely to be effective.'* Domberger et al (1986), p.73.

are generally not sunk, and the economic life of capital goods (mostly vehicles) overlaps with the duration of the contract. However, acquiring land in some local authorities for vehicle depots and waste transfer points can be expensive, and setting up such facilities may be difficult owing to planning constraints. This may give incumbent providers an advantage in tenders.

- 6.43 By contrast, barriers to entry in waste disposal are much higher. Waste disposal facilities are capital intensive and characterised by economies of scale. Contracts are granted for 20-25 years, which can enable the supplier to amortise the shift to capital intensive solutions and reduce unit costs (if economies of scale are fully used). The difficulty of acquiring landfill sites, and the considerable and highly specific investment in incineration and other disposal facilities suggest that incumbent providers are likely to have an advantage as long as they can offer services using their existing disposal facilities (rather than having to invest in new capacity).
- 6.44 Local authorities can design procurement processes in ways that minimise incumbency advantages related to physical barriers to entry. For example, when Westminster City Council was tendering for provision of waste collection services in 2002, it was concerned that the difficulty of acquiring land for depots would discourage bids from potential entrants. Its solution was to divide its area into two parts (North and South) and acquire a depot for vehicles in each area, which could be used by the contract winners. This effectively eliminated the incumbency advantage of the current contractor.
- 6.45 In the case of disposal, local authorities may be able to assist potential entrants by making planning permission for new disposal sites part of any future contract. This could effectively remove the risk that an entrant would face in bidding before having acquired planning permission.

Participation costs

- 6.46 Bidders in public tenders for waste management contracts face substantial legal and administrative costs. Waste disposal is particularly heavily regulated, requiring certificates and licences from the Waste Management Industry Training and Advisory Board and the Environmental Agency in England and Wales (which is separate from, but complementary to, planning permission).
- 6.47 Given that physical barriers to entry in waste disposal are already high, the legal and administrative burden may not have much effect on the level of competition. High participation costs are potentially of greater concern in relation to specific collection activities, where physical barriers to entry are low, and legal and administration costs of bidding may be quite high relative to the value of the contract. This may effectively discourage smaller companies from bidding.

Incumbency advantages

- 6.48 New entrants may be discouraged from bidding in (re-)tenders if they perceive that incumbents are very likely to win, especially if participation costs are high. In general, for collection services, low physical barriers should mean that incumbency advantages are minimal. However, incumbents may still be perceived to enjoy unfair advantages because:
- the evaluation process, which covers factors such as previous experience, security and not just price, may provide scope for local authorities to discriminate in favour of incumbents, with whom they have an established relationship

- bid preparation, especially for large cities, is highly complex, and incumbents can leverage their knowledge of local operations to enhance their bid. In addition, as conditions governing the award and the operation of waste management concessions are uniform throughout the UK⁸⁵, firms who have participated in tenders, and won contracts in some areas, might have an advantage over newcomers without any experience in bidding for contracts, and operating concessions.

6.49 In general, however, most of these concerns should be addressable by local authorities through appropriate specification of tender requirements and transparency in the evaluation process.

6.50 Incumbency advantages are likely to be of greater concern in relation to waste disposal where ownership of an existing facility may provide significant cost advantages in bidding for further contracts, provided there is spare capacity. Given these advantages, which would also extend to competition for private customers purchasing waste disposal services, a contractor may be willing to offer discounted services to local authorities in return for gaining a long term public waste disposal contract and the necessary planning permissions, which would then provide an advantage in bidding for other contracts and private business.

6.51 We do not have sufficient evidence to judge the extent to which incumbency advantages may be influencing re-tenders of waste collection.⁸⁶ However, the European Commission has expressed the

⁸⁵ Commission Case No IV/M.567 - Lyonnaise des Eaux / Northumbrian Water.

⁸⁶ In the case of waste disposal, no re-tendering has yet taken place as contracts awarded in the 1990s were for 20-25 years.

belief that incumbency advantages in waste may be significant.⁸⁷ In the UK, at least one large contractor told us that they have had many of their contracts renewed, but this may simply be an indication of their own success.

- 6.52 A number of industry sources also reported that prices had risen since the first round of procuring waste management services by local authorities in the 1990s, when competition was perceived as particularly intense. Low initial prices may be an indication that suppliers were willing to sacrifice initial revenues in order to win future incumbency advantages.
- 6.53 However, it may also be the case that private suppliers initially lacked information about costs and that there was an element of 'winner's curse' in early tenders. A systematic survey of local authority contract awards and prices would be required to establish these points.

Vulnerability to collusion

- 6.54 Waste collection services appear potentially vulnerable to collusion amongst suppliers. Contracts are re-tendered by local authorities every four to seven years, so there is a constant stream of tendering processes. This means that the same suppliers tend to meet repeatedly in a number of procurement settings across a number of local authorities. This is an example of so called 'multi-market' contact, a situation that is generally considered to facilitate collusion, as it allows for effective punishment of firms deviating from the collusive outcome.

⁸⁷ It noted that some 75% of waste collection contracts that had been re-tendered in Spain were won by the incumbent. European Commission (1999).

6.55 This risk is mitigated, however, by the fact that:

- contracts are rather different, making it difficult for bidders to compare terms and conditions across different contracts awarded for different authorities with potentially significantly different specifications⁸⁸
- the potential for self-supply provides a strong constraint on the threat of collusion.

6.56 The incentive for collusion could potentially be undermined by tendering all contracts at the same time, but this is probably not feasible for waste services and would severely restrict local authorities' flexibility. Furthermore, such a move might simply lead to firms carving up geographic areas between themselves.

Contract aggregation and changes in industry structure

6.57 Local authorities can tender for various elements of waste management services separately (e.g. waste collection, street cleaning, waste transfer and waste disposal) or bundle some or all of them together. The most typical bundling arrangement is a joint contract for waste collection and street cleaning, as this ensures that the company undertaking the waste collection has appropriate incentives to do this in a way that keeps streets clean. However local authorities can also bundle together waste collection and disposal services (which under the CCT regime were strictly separated).⁸⁹

⁸⁸ European Commission (1999), IV/M.1365, p. 10.

⁸⁹ DEFRA (2000).

- 6.58 In general, local authorities appear to favour aggregating demand for various services in one contract. Central government policies promote an integrated solution for waste management; consequently, local authorities have found that using an integrated waste supplier can help to ensure fulfilment of waste targets and waste policy objectives. Local authorities may also find that dealing with less companies and contracts reduces the cost of project management and makes planning easier. Private contractors may also be able to realise cost savings through economies of scale and scope across multiple waste services, which can be passed on to local authorities, although these are likely to be modest.
- 6.59 Notwithstanding these potential advantages of bundling, the trend towards contract aggregation raises a number of potential competition concerns:
- Smaller firms that prefer to specialise in certain aspects of the collection market may be squeezed out of the market. Even where they can offer the most cost effective solution for a particular activity, they may find that they are unable to find suitable partners in other activities, as potential partners are also rivals in their own activity.
 - given the much higher barriers to entry and much stronger scale economies in the latter market, owners of disposal sites could potentially leverage their position in this market to win integrated waste management contracts spanning collection and disposal at the expense of firms who would only be interested in providing collection services, and might be able to supply these at lower cost.
- 6.60 In order to ensure a level playing field is maintained between bidders, regardless of size, local authorities could consider measures to encourage the use of subcontractors. In the case of access to disposal sites, it may be necessary to extract promises of access on equal terms for all bidders.

- 6.61 There have been a number of mergers between waste companies in the last decade, leading to the creation of companies that can handle collection, street cleaning, transfer of waste, incineration, recycling, composting and landfill (see Table 12). A key motivation for these mergers, which involve both vertical and horizontal integration, appears to be the tendency for local authorities to favour integrated waste management services (as described above).
- 6.62 Although in principle there could be effective competition amongst just a few integrated waste management companies, the tendency towards industry consolidation may raise concern that there may be less competition in the long run, reducing pressure for lower prices and quality improvements. Furthermore, with a reduced number of competitors, the vulnerability of the procurement process to collusion (as described above) will be increased.

Conclusion

- 6.63 The waste collection and waste disposal industries have experienced a major restructuring over the last decade. Introduction of CTT and, subsequently, the Best Value regime have opened the door for private contractors to compete for waste management contracts, thus significantly reducing the role of self-supply by local authorities. The industry has also become more sophisticated – notably in its response to government initiatives on waste reduction and recycling – and capital intensive. In general, public procurement has been a huge success in generating competition and increasing efficiency.
- 6.64 Despite these successes, a number of areas can be identified where public procurement may not be doing enough to generate competition, either now or in the future. In particular:
- The level of self-supply in waste collection is high by comparison to European countries that have pioneered competitive tendering for waste. Although the possibility of self-supply clearly has an

important role in disciplining public sector competition, current high levels may be indicative of an actual or perceived bias by many local authorities against private providers.

- Bidders enjoy potentially significant incumbency advantages, especially in relation to waste disposal. Furthermore, the tendency for local authorities to favour large, integrated waste management contracts tends to increase incumbency advantages. There may be a case for special measures to local authorities to level playing fields at the time of contract award.
- Operators with public sector contracts, especially in relation to waste disposal, may gain an advantage in supplying smaller, private sector customers because the public sector is a pivotal buyer.
- There are significant barriers to entry in waste disposal. Bundling of collection with disposal services may restrict the number of suppliers which can participate in tenders.
- The number of private sector providers has fallen owing to industry consolidation, which has gone hand in hand with a trend towards letting integrated waste management contracts.

ANNEXES

A REFERENCES

This section provides details of publications used in the preparation of each of the case studies. These lists do not include details of press releases, press reports and websites (please refer to the footnotes in the case studies for this information).

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B INPUTS FROM STAKEHOLDERS

This section provides a list of stakeholder institutions and their representatives who we contacted as part of the research into the case studies. We would like to thank all these individuals and their institutions for their time and assistance. However, we wish to emphasise that this report is the work of DotEcon Ltd, and does not necessarily represent the views of those people, their institutions or any other group.

Broadband services

Broadband Aggregation
Programme, DTI

Sue Baxter, Director
Ian Sears, Deputy Director

Continence care products

Department of Health
PASA

Colin Pearson
Ian Parker

IT services

Inland Revenue

National Programme for
Information Technology, NHS
Chisholms Computers Ltd
(a SME IT supplier)

Ian Pretty, Head of ASPIRE
Communications
Philip Dunn, Director of
Supply
Peter Roe, TCS Associate

NB: We contacted a number of the larger IT companies that participated in the NHS tenders to request interviews. However, they either did not respond or declined to be interviewed, in some cases on grounds of preserving confidentiality agreements signed with NPfIT.

Prison services

HMPS

John Cavell, Head of Procurement
David Kent, Head of Contracts and
Competition Group

Waste management services

Biffa Waste Services
Improvement and Development
Agency
Westminster City Council

Peter Jones, Director
Lee Diggings
Leith Penny, Director of Cleansing