



National Audit Office

The privatisation of QinetiQ

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL | HC 52 Session 2007-2008 | 23 November 2007

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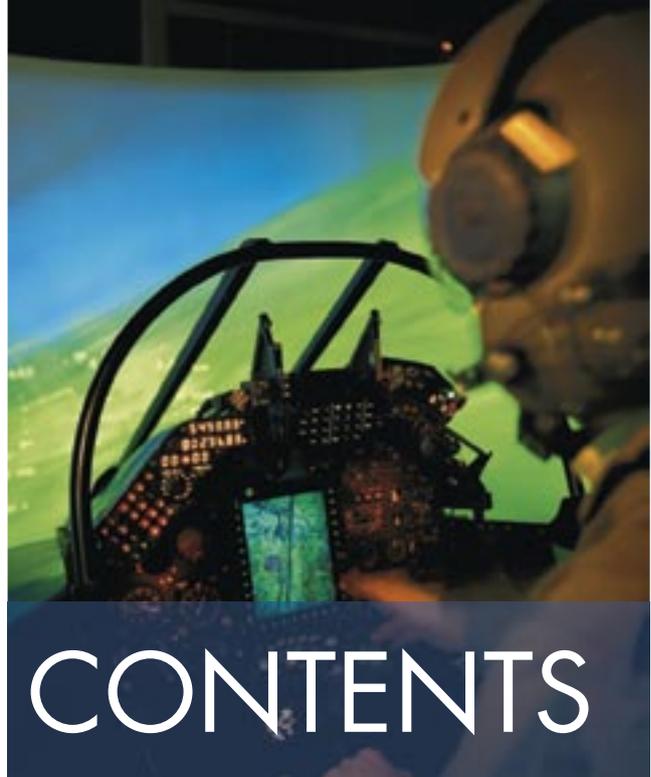


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15 November 2007

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SUMMARY

1 This report examines whether the privatisation of the defence technology business QinetiQ was a good deal for the taxpayer. The privatisation was carried out in two stages – the sale of 37.5 per cent of the business in February 2003 (33.8 per cent to the Carlyle Group and 3.7 per cent to management and employees). The aim of this was to help develop the business ahead of a flotation on the London Stock Exchange, which took place in February 2006. The privatisation has generated net proceeds of £576 million and the Ministry of Defence (the Department) still holds a 19 per cent stake in the business worth £235 million as at 31 October 2007. A complete timeline for the process is shown in **Figure 1 on pages 6 and 7.**

2 QinetiQ has a vital role in carrying out research and advising the Department on the development and procurement of equipment as well as managing the testing and evaluation of this equipment. It also engages in wider commercial activity and since the privatisation

has expanded into the US. It was created out of the Defence Evaluation and Research Agency (DERA) in 2001 specifically to allow the majority of DERA's activities to be privatised. To protect defence interests the most sensitive aspects of DERA's business were kept in the public sector and a system – the Compliance Regime – was put in place to protect the independence of QinetiQ's advice to the Department once it had become a commercial supplier.

3 The decision to split DERA followed wide consultation on the form of the privatisation. Implementing the split was challenging and carried out to a tight timetable. The Department handled this process well. Although the Department did more than was legally required and there have been no legal challenges to date, there were complaints from some elements of the defence industry about the handling of their intellectual property.

4 The decision to sell a minority stake in the business to a strategic partner, rather than float the business on the Stock Exchange soon after incorporation, was taken in early 2002 in the light of poor market conditions and the absence of a commercial track record. Nevertheless, the competition for a strategic partner began in March 2002 even though the market was poor and the commercial terms of the important Long Term Partnering Agreement (the LTPA) had not yet been agreed.¹ The Department considered that a delay to the privatisation process could have had an adverse impact on long term value by undermining staff morale, damaging customer relationships and restricting QinetiQ's commercial freedom at a key stage in its development. In recognition that QinetiQ was hard to value and that the timing of the sale would have an effect on proceeds, the Department decided to sell only a minority of shares, in line with relevant recommendations from the Public Accounts Committee and National Audit Office.

5 Achieving a good price in a sale relies on there being strong competition. Twelve investors were selected to participate in the competition and four were shortlisted. The difficult timing and complexity of QinetiQ's business increased the market's perception of risk and contributed to there being only two compliant bids, in July 2002, both from private equity firms. The Carlyle Group were appointed 'preferred bidder' in September 2002, before the detailed terms of the LTPA had been agreed. The sale to Carlyle was signed in December 2002 and completed in February 2003, when the LTPA was signed.

6 After Carlyle were appointed preferred bidder they negotiated a reduction in the value of the business of £55 million, £25 million relating to the pension fund deficit (see paragraph 2.29) and £30 million relating to the value of the LTPA (see paragraph 2.27). Our analysis shows estimated cash proceeds in the final bid falling by £32 million to £155 million in the final deal. This was a result of a number of changes including the sale of 2.5 per cent more of the shares than initially agreed (see paragraph 2.32). Decisions on restructuring and funding of the services included in the LTPA had been going on since 1998. Due to the uncertainties stemming from the lack of agreed terms for the LTPA, we consider that the sale to Carlyle may have yielded less money than the Department could have received if the LTPA had been signed prior to the sale. The Department told us it was

concerned that delaying the sale would have an adverse impact on the value received from the privatisation. To help reduce uncertainty in the bidding process the Department included draft terms for the contract within the sale documentation.

7 As is normal for private equity firms, Carlyle used share incentives to align management's interests with their own, that is, to realise the maximum possible increase in the value of the equity in the short to medium term. The Department considered that its interests in terms of incentivising management to increase the value of the business were aligned with Carlyle's. Although it did not want management to make very large returns purely as a result of the privatisation it accepted that management could make significant amounts of money if this was linked to the growth in the value of the business. The Department did not, therefore, seek to influence the structure of the share incentive scheme. Carlyle amended their proposed management incentive structure before being appointed preferred bidder to reflect advice from QinetiQ management. The Department subsequently approved the scheme after Carlyle were selected as preferred bidder. Its approval was based on a review of a limited range of potential outcomes, which it believed were realistic at the time (see paragraph 2.17). Up to 20 per cent of the equity was made available to management and employees, subject to performance targets being met (see Appendix 4). Unusually for such deals, but in line with the Department's objectives, share incentives were made available to all QinetiQ staff, including a small allocation of free shares. Not all staff took the opportunity to invest their own money in the business.

8 The structure of the deal resulted in QinetiQ having a relatively low equity value of £125 million and high levels of debt. The equity value increased to £1.3 billion² between the 2003 sale and the 2006 stock market flotation. This was strongly influenced by the improved business performance achieved by QinetiQ management following expansion into the US defence market and into the civil market in the UK and elsewhere. This contributed to a 36 per cent increase in revenue and a 261 per cent increase in operating profit between 2003 and 2006.³ The increase in the equity value was also influenced by an upturn in the value of defence and technology stocks.

1 The Long Term Partnering Agreement is a 25 year contract to operate and maintain the test and evaluation ranges.

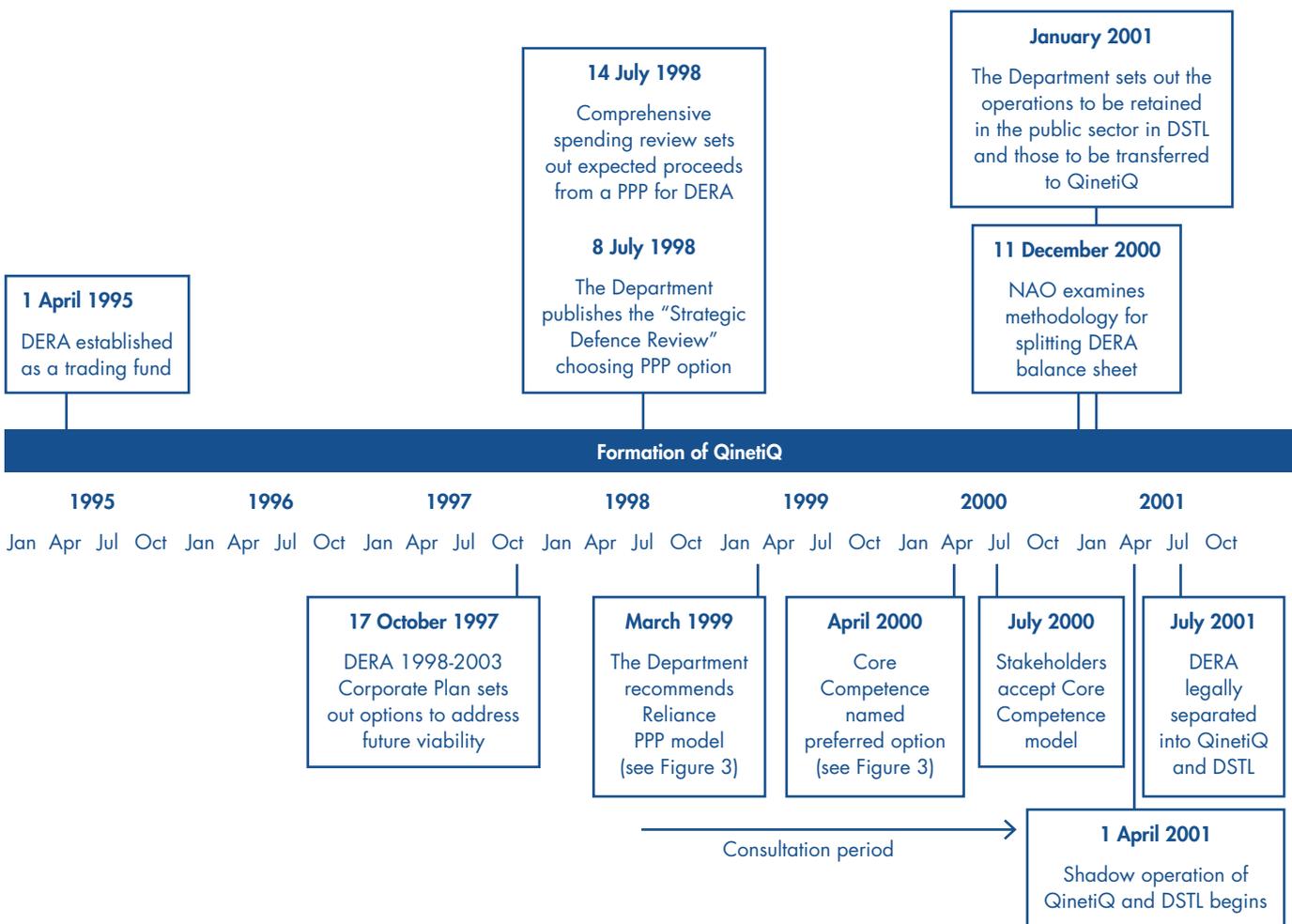
2 Including £150 million of new money raised by the company.

3 International Reporting Standards were introduced in 2005 which affected the presentation of financial results. The impact of this is shown in Figure 13.

1 Timeline of the privatisation of QinetiQ

Key

- DERA – Defence Evaluation and Research Agency
- PPP – Public Private Partnership
- HCDC – House of Commons Defence Select Committee
- DSTL – Defence Science and Technology Laboratory
- LTPA – Long Term Partnering Agreement



Source: National Audit Office analysis

The process of appointing a strategic partner

8 March 2002

Strategic Investor advertisement

23 April 2002

Information Memorandum issued

22 May 2002

Seven indicative bids received valuing QinetiQ in the range £450 million – £600 million, all bidders requested 51 per cent of QinetiQ

28 May 2002

Bidders shortlisted to four

8 July 2002

Bidders requested to bid for 51 per cent and 35 per cent of QinetiQ

15 July 2002

Two final bids submitted in range £325 million – £350 million

16 August 2002

Revised final offers received

4 September 2002

Carlyle announced as preferred bidder with offer of £374 million

**4 September 2002 –
28 February 2003**

Carlyle negotiate as preferred bidder

3 December 2002

Share Purchase Agreement signed

QinetiQ's Acquisitions up to the flotation

Date	Acquisition	Price
March 2002	Motionbase (UK)	£0.8 million
August 2004	HVR Consulting Services (UK)	£10.9 million consideration
September 2004	Foster Miller Inc. (US)	£96.9 million consideration
September 2004	Westar Aerospace & Defense Group Inc. (US)	£73.0 million
August 2005	Planning Systems Inc. (US)	£23.1 million consideration
August 2005	Apogen Technologies Inc. (US)	£160.1 million consideration
September 2005	90% of Verhaert Design and Development NV (Belgium)	£6.0 million
October 2005	Broad Reach Networks Ltd. (UK)	£0.3 million
Consideration includes acquisition costs and is net of cash acquired on purchase and deferred consideration		

January 2002

Potential investor market testing

28 January 2002

Early flotation abandoned

Sale to strategic partner

Route to Flotation

2002

2003

2004

2005

2006

Jan Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul Oct

28 February 2003

Financial close – 37.5 per cent of QinetiQ sold (including 3.7 per cent to employees)

QinetiQ equity established at £125 million

QinetiQ sign LTPA

Flotation

25 January 2006

Flotation prospectus issued

10 February 2006

Flotation valuing equity in QinetiQ at £1,300 million, £2 per share (including £150 million new money)

9 The value of the shares of the top 10 managers was £107 million at the time of the flotation, from an initial investment of £537,250. The Department considers that the management incentive scheme met the objective of maximising value. The returns achieved by management reflected a greater increase in the value of the business than it had expected, which also generated higher than expected returns for the taxpayer. Although we accept that limiting returns to management can diminish the attraction of such deals to potential investors, we consider that the returns in this case exceeded what was necessary to incentivise management to deliver this growth in the value of the business.

10 The 2006 flotation was well executed and benefited from favourable market conditions, with the Department realising £300 million of additional proceeds, net of costs. The decision to sell only a minority of shares to Carlyle enabled the Department to benefit from the majority of the growth in value. The absence of a dedicated offer to the public, which had been present in most previous privatisations, had an adverse effect on the media perception of the privatisation. This decision was taken because the shares were only considered suitable for sophisticated investors and the costs of marketing the issue to the public would not have been outweighed by the benefit of extra demand because of the limited size of the offer. The public were able to buy limited shares through brokers.

Value for money assessment

11 The Department considers that privatisation has delivered excellent value for money on the basis that it has generated approximately £800 million for the taxpayer, net of costs (£576 million in cash proceeds to date and a 19 per cent stake in QinetiQ worth £235 million as at 31 October 2007). The equity value of QinetiQ increased from £125 million to £1.3 billion as a result of the introduction of a strategic partner in 2003, despite difficult market conditions and the complexity of QinetiQ's business. The Department also considers that the process has established QinetiQ as a successful new British company and that it has provided a sustainable future for key defence capabilities and the employment of 13,500 staff.

12 Our assessment of the outcome in terms of value for money is mixed. The privatisation achieved a key objective of improving the viability of a business of national strategic importance by allowing QinetiQ to expand its business into the US and other civil markets. The measures put in place to protect defence interests at present appear to be working as intended. It is, however, too early to tell if all the Department's objectives in privatising DERA will be met.

13 We consider that more money might have been raised from the 2003 sale to Carlyle, which generated total proceeds of £155 million. The resulting business strategy, however, was instrumental in increasing the value of QinetiQ and the 2006 flotation maximised proceeds. In the long term, the value for money of the privatisation to the taxpayer will depend on a range of factors, such as the value for money of the Long Term Partnering Agreement and the continued availability of independent advice, as well as the proceeds received.

14 We have calculated that as at 31 October 2007 the Department made a notional internal rate of return⁴ of 14 per cent from the privatisation. This calculation uses the book value of QinetiQ on incorporation as an estimate of the Department's past investment in the business and takes account of the costs the Department has incurred throughout the privatisation and the value of the Department's remaining stake in QinetiQ; it does not attempt to quantify non financial benefits. The Department does not accept that the book value of QinetiQ at incorporation is a robust measure of the value of the business at that time and considers that it is not possible to derive an accurate estimate of the return it has achieved over the whole privatisation.

15 Carlyle made an internal rate of return of 112 per cent⁵ on their investment in QinetiQ. The internal rate of return achieved by the Department over the same period was 99 per cent.⁶ The Department's internal rate of return was similar to Carlyle's because both parties invested on the same terms at that stage. The Department, however, incurred significant costs during the 2003 sale.

⁴ The internal rate of return (IRR) is the discount rate at which the present value of all cash flows will be zero; it is used to rank investment opportunities, the higher the IRR the more profitable the investment. For our analysis we have included the value of the retained shares of the Department as at 31 October 2007.

⁵ This is based on the price paid by Carlyle for their stake in 2003 and the subsequent proceeds received from the sale of this stake.

⁶ This ignores the receipts from the sale to Carlyle, assumes that the Department's initial investment in QinetiQ was equal to £78 million, the value of its shares in QinetiQ at that time, and includes the value of the retained shares of the Department as at 9 February 2007, the date Carlyle sold their remaining stake in the business; the Department's eventual return will depend on the value of these shares when sold.

Recommendations

The Department's ongoing relationship with QinetiQ

The Department must actively manage the risks that privatising QinetiQ has created if the transaction is to realise value for money.

- 1 Although the Long Term Partnering Agreement (LTPA) has brought benefits to the management of test and evaluation services, the Defence Procurement Agency and its successor need to act as an 'intelligent customer' to ensure the savings envisaged in the contract are realised. We welcome the fact that in February 2007 the Department has decided to review some of the services conducted by QinetiQ and to build appropriate cost benchmarks. In the absence of other comparable service providers, cost benchmarks should be based on QinetiQ's past performance and should have regard to the cost of providing test and evaluation services by other bodies abroad. The Department should ensure these are developed in advance of the first price review period in March 2008.
- 2 The Compliance Regime appears to be working as intended but, as QinetiQ continues to expand its customer base and is able to bid for defence manufacturing work beyond April 2008, maintaining the effectiveness of the regime will become more difficult. We welcome the Department's September 2006 decision to audit the robustness of the Compliance Regime. The Department intends that the initiative to award an increasing proportion of research contracts through competition will reduce its dependency on QinetiQ, provide access to new sources of innovation and improve value for money. It should revisit its aspirations for this initiative and ensure that they are realistic in light of the market capacity for this work.

Lessons from the privatisation of QinetiQ

The decision to sell a minority stake to a strategic partner ensured the Department shared in the growth in value at the flotation. There are, however, lessons that can be applied to benefit future deals.

Achieving best value from a sale

- 3 When marketing a sale to potential strategic partners, it is important to gauge market interest by approaching as many potential investors as is feasible to assess their understanding of the business and their ability to participate in the process within the proposed timetable. In cases where the market is difficult and

the business is unique or complex and lacking a commercial track record, as in the case of QinetiQ, the public sector should educate potential investors about the opportunity. This would include providing written information on the business and the transaction timetable to a wide range of potential investors.

- 4 If marketing activity demonstrates that there is limited interest in the opportunity, the public sector should reconsider the timing and structure of the proposed deal. In the public sector the impetus is often to press ahead in difficult circumstances rather than to attempt to maximise proceeds. It is not unusual for private sector deals to be postponed if the market is less favourable than anticipated.
- 5 It is undesirable to negotiate a significant contract with the company to be privatised in parallel with the privatisation, as was the case with the Long Term Partnering Agreement (LTPA), and the public sector should avoid this. If, nevertheless, the public sector finds itself in this position it will have additional risks to manage.
 - a Bidders need certainty over the terms of key contracts in order to value the business. If there is any uncertainty it is likely this will lead to a lower price or discourage bidders from submitting binding, unconditional offers. The public sector should not appoint a preferred bidder until the terms and price of the contract have been substantially agreed.
 - b To achieve the maximum value the public sector needs to have a full understanding of the value of the business and of the interactions in value for money. There is a trade-off between the value received from a contract as a customer and the level of proceeds achieved from the sale. In the case of QinetiQ the Department relied on a financial model developed for customers and had not substantively valued the contract (see Appendix 5). It was therefore not in a position to understand the true value of the contract to QinetiQ and whether the fall in proceeds was balanced by a benefit to the Department as a customer. Departments should achieve this by ensuring there are robust independent valuations of all the key aspects of the business and that these are updated where contractual terms change.

Managing differing interests

- 6 When private equity firms are involved in a privatisation process they typically offer incentives to management to maximise the value of the business in the short to medium term. This may create the scope for a successful management team to make returns that are far in excess of the rewards available in the public sector. The interests of the public sector may not be fully aligned with those of the private equity bidders, especially in respect of the potential scale of returns for management. If Departments wish to limit the scope for such returns then they should consider mechanisms such as capping arrangements, taking appropriate professional advice if required. Such mechanisms may diminish the attraction of the deal to potential investors.
- 7 Departments should protect their interests by not allowing management to discuss incentive schemes with potential partners until the main principles have been agreed and a preferred bidder chosen.
- 8 Non-executive directors have an important role to play in safeguarding shareholder interests. Their participation in employee share schemes could lead to a perception of a conflict of interest. We recognise, in the case of QinetiQ, that the timing of the offer was after the deal had been substantially agreed. Following the QinetiQ privatisation, however, non-executive directors may anticipate the possibility of making significant financial gains. Any such expectation has the potential to create conflicts of interest. There is no specific guidance to prevent non-executive directors from participating in share ownership schemes put in place as part of a privatisation. To avoid any perception of a conflict of interest, the Government should ensure that they are not offered an opportunity to participate.

Managing the separation of intellectual property

- 9 The Records Audit and Segregation Process, carried out as part of the separation of QinetiQ from DERA, involved auditing all intellectual property held by DERA so that QinetiQ was not unlawfully in possession of any intellectual property belonging to third parties. This exercise went beyond what was legally required. Elements of the defence industry, however, had significant concerns over the transparency of the process and the time allowed for them to confirm the correct treatment of intellectual property they had given to DERA before its successor was to become a competitor. The Department should ensure that in future privatisations, the defence industry is given adequate time to satisfy itself that all intellectual property has been treated appropriately prior to the business becoming a corporate entity. This can be achieved by engaging with industry during the process and reflecting the need to agree the treatment of intellectual property within the timetable for the transaction. This would be consistent with the Department's aspirations to promote 'closer working, greater trust [and] increased partnerships' with the defence industry as set out in the Defence Industrial Strategy.⁷

⁷ Section A8.1, *Defence Industrial Strategy*, Defence White Paper, published December 2005.

PART ONE

The decision to privatise was taken because the status quo was not sustainable

1.1 The defence technology business QinetiQ was formed in 2001 out of the Defence Evaluation and Research Agency (DERA). DERA was established in April 1995 and drew together some twelve science and technology offices and the Defence Research Agency. DERA's role was to support defence capability by providing technical advice in relation to the procurement of equipment and to support the development of advanced and affordable technology. DERA received the vast majority of its revenue from the Ministry of Defence (the Department), which funded specific research programmes in areas of vital strategic importance. This research allowed the Department to call on unique expertise that allowed it to better formulate its future strategy and better specify its requirements. The head of the Defence Research Agency, Sir John Chisholm, who had formerly started the defence software company CAP Scientific, was appointed the chief executive officer of DERA.

DERA proposed several approaches to managing threats to the business

1.2 Over the period 1992-1998 the Department's budget for research fell in real terms by over 40 per cent – faster than the wider defence budget – to less than £500 million.⁸ This decrease in spending challenged DERA's ability to maintain the breadth and depth of its capability, which is of vital strategic importance to the Department. In advance of the 1998 Strategic Defence Review, DERA's chief executive officer proposed a range of options to address this situation. These were presented

in the DERA Corporate Plan 1998-2003, published in October 1997. The options were based on the principle that DERA needed to strengthen its links with the science and technology base outside the defence sector to help achieve more for less. Options were appraised against three criteria:

- The impact on expected business performance.
- The risks to DERA's stakeholders (including the Department).
- The likely return to the Exchequer.

1.3 DERA's corporate plan considered five options, set out in **Figure 2 overleaf**. It recommended adopting either the Federated Laboratories case or the Public Private Partnership (PPP) case, though it noted that only the PPP would give returns to the Exchequer significantly greater than from continuing with DERA's current form.

1.4 The Strategic Defence Review, published in July 1998, stated that the Department would 'harness the opportunities offered by a Public Private Partnership' for DERA. The Department did not judge it necessary to consult the Defence Industry about this decision although it had been involved in some other aspects of the review. Although DERA's top management could potentially benefit personally from the involvement of private investment, the case for a PPP was not validated by the Department. The Department sees no reason why it should have validated this policy decision which was based on analysis prepared by DERA management.

8 House of Commons Defence Committee 6th report, 6 July 1998, HC 621.

1.5 The Department clearly set out its objectives for the PPP, which are listed in full in Appendix 2. Principally, its objectives were:

- The continuing availability to the Department of the scientific and technical capabilities required to support UK defence needs and maintain international collaborative research programmes.
- The introduction of commercial disciplines, to achieve reduced contract prices for the Department and other public sector customers.
- Enhanced flexibility to develop commercial business partnerships and engage in a greater range of joint ventures.
- Giving DERA access to private capital through either equity or debt in order to build capability and support future investment in technology.
- Strengthening the links between civil and military technology so the Department and the wider economy would benefit from broader application of technological advances.
- Effective and productive relationships between private and public sector.
- The ability to address skills shortages in critical technologies through greater flexibility in pay structures.
- Establishing a structure that would provide international partners and other stakeholders with confidence that collaborative relationships would be maintained and protected.

The potential for privatisation proceeds was attractive

1.6 In recommending a PPP in autumn 1997, DERA estimated that total proceeds from privatising the entirety of DERA would be £780 million. The 1999-2002 Comprehensive Spending Review, published in July 1998, assumed that the PPP would be completed by April 2002 and would generate a receipt of £250 million for the Department. It had been agreed between the Department and the Treasury that any receipt in excess of this would be returned to the Exchequer. We consider that this agreement meant there was less incentive on the Department to obtain more than £250 million.

1.7 The inclusion of a £250 million receipt in the 1999-2002 Comprehensive Spending Review had the potential to create pressure for the PPP to be completed by the end of the financial year in March 2002. Although there was an expectation that the PPP would be completed in this timescale, both the Department and the Treasury recognised that this should not be at the expense of achieving overall value for money. The Treasury therefore agreed to credit the Department's 2002 budget with £250 million even if the project was delayed up to 31 March 2003 to preserve value for money.

2 DERA proposed five options to address the threats to the business

Option	Description
Base case	Continuing with DERA's current form
Federated Laboratories case	Franchising DERA's activities to laboratories managed by leading academic institutions and retaining a core of DERA staff to coordinate the activity
Diversification case	Vigorously pursuing entries into civil markets
Public Private Partnership case	Making the whole of DERA into a separate corporate entity with an increasing institutional shareholding
Defence Industries Council case	Withdrawing from all non-MoD work and from that MoD work which could be fulfilled by the defence industry (suggested by the Defence Industries Council)

Source: DERA Corporate Plan 1998-2003, October 1997

The decision to split DERA into two and privatise QinetiQ was taken following extensive consultation

1.8 The Department commissioned an analysis of the potential forms the PPP could take and consulted widely on their suitability. A ministerial steering group was established to ratify all decisions. The steering group was chaired by the Minister of State for Defence Procurement⁹ and made up of senior officials from the Department, including representation from the main customer groups, and wider Government, including the Treasury and the Chief Scientific Adviser. External members were also invited from the private sector to provide a different perspective, these included Dr. Michael Lawrence¹⁰ and Sir Alan Rudge.¹¹ DERA was also closely involved in the process and the chief executive officer of DERA also sat on the steering group. The Department established an internal team, the DERA Partnering Team, in September 1998 to manage the project.

1.9 After competition, the Department appointed PricewaterhouseCoopers and UBS Warburg to advise jointly on the possible route to a transaction and to support the process. Four principal PPP options were developed by the Department and its consultants as shown in **Figure 3**.

1.10 The Department and DERA management initially favoured the Reliance model, although the Department rejected this in May 1999 following consultation with international partners, DERA staff and trade unions, other government departments, the UK defence industry and academia. This was primarily due to concerns expressed by collaborative partners in the US Department of Defense over the sensitivity of privatising certain elements of DERA, such as those responsible for collaboration with foreign laboratories. The Core Competence model addressed these concerns as it retained around a quarter of DERA's staff, including the most sensitive elements of the business, within the public sector. A further consultation exercise on the Core Competence model was undertaken and this was eventually chosen as the preferred option in July 2000.

1.11 The House of Commons Defence Select Committee produced four reports looking into the decision to pursue a PPP for DERA between 1998 and 2001.¹² Although some of the concerns held by the UK defence industry and the US Department of Defense were addressed over this period the Committee concluded that the risks associated with the chosen strategy outweighed the proposed benefits. The Department took note of these concerns but concluded that the PPP represented the best way forward for providing the UK's future defence, science and technology requirements.

3 The Department considered four principal PPP models

Model	Description
Reliance	The vast majority of DERA would be privatised but certain constraints would limit its ability to work with third parties
Core Competence	The Department would retain elements of DERA's capabilities in the public sector in order to safeguard its ongoing interests, and privatise the remaining business
Go Co plus	Discrete elements of DERA would be sold but the majority would be retained in the public sector
Trust	The majority of DERA's facilities and staff would be jointly owned by a retained public sector organisation and a privatised DERA; each would take the lead on different elements of work depending on their sensitivity

Source: DERA PPP options paper – interim report, February 1999

9 At that time the Minister of State for Defence Procurement was Baroness Symons of Vernham Dean.

10 Non Exec Director London Transport; Chief Exec London Stock Exchange 1994-1996; Finance Director of Prudential Corporation 1988-1993.

11 Former Technical Director of BT; Chairman of Engineering and Physical Science Research Council; Chairman of WS Atkins; Founder and President of the Association of Independent Research & Technology Organisations.

12 *The Defence Evaluation and Research Agency*, 6 July 1998; *Defence Research*, 10 November 1999; *The Future of DERA*, 20 June 2000; *The Draft DSTL Trading Fund Order 2001*, 13 March 2001.

The Department chose to place the critical test and evaluation services with QinetiQ

1.12 The Department divided DERA by reviewing each division and keeping the most sensitive areas of the business within a new trading fund, named the Defence Science and Technology Laboratory (DSTL). All other functions were transferred to a new corporate entity, 100 per cent owned by the Department, which became QinetiQ. The divisional structure of QinetiQ on formation is shown in **Figure 4**.

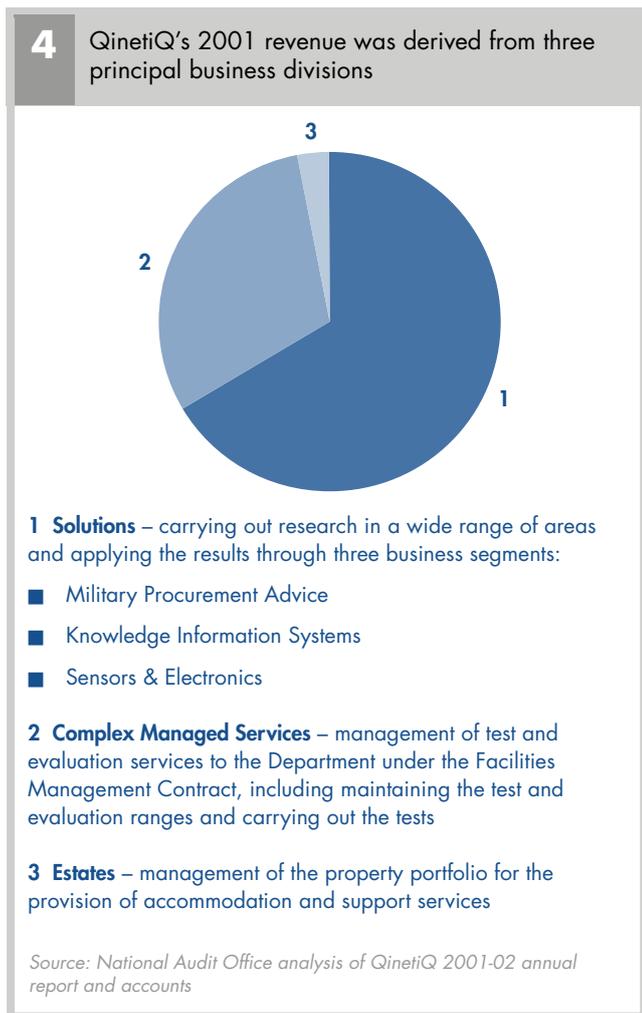
1.13 One of DERA's key strategic roles was the provision of testing and evaluation services for the Department and other customers. This included managing firing ranges, testing facilities and instrumentation and measurement equipment that are critically important to the UK's ability to procure defence equipment. By 1998 the Department had identified that significant funding was required for rationalisation and to upgrade equipment

and infrastructure. The decision to place these activities with QinetiQ without competition followed an options review carried out by a Departmental customer group independent of the DERA Partnering Team. QinetiQ was awarded a Facilities Management Contract on an interim basis whilst a long-term solution was negotiated.¹³ Several sub contracts for test and evaluation work that had previously been awarded to SERCO were terminated and included in the Facilities Management Contract.

The restructuring was completed in a challenging timetable and largely managed well

1.14 The restructuring of DERA into two viable businesses involved significant risk and was a challenging project, made more so by the tight timetable in which it was achieved. It was originally intended to complete the project by March 2001 and although completion eventually slipped to July 2001 this was only 15 months after the PPP Core Competence model was chosen as the preferred option. The separation involved the allocation of over 12,000 staff between DSTL and QinetiQ and had to be carried out without disrupting the critical services DERA was delivering to its customers. As a limited company QinetiQ was subject to a new set of regulatory requirements and licenses had to be obtained for a wide range of activities and a new contracting framework established between QinetiQ and its customers. The Department had to agree the allocation of historic liabilities between itself, QinetiQ and DSTL, taking account of which was best placed to take these on. It was crucial to separate fully the operations of QinetiQ and DSTL in order to satisfy all stakeholders that the two organisations were independent of each other. To achieve this, the Department established separate IT systems and filing systems, security accredited to a high standard, and – wherever they shared a site – separate facilities.

1.15 The Department established separate working groups, each responsible for identifying, managing and reporting on the risks to delivery for different aspects of the project (see Appendix 3). The DERA Partnering Team coordinated the process, liaising closely with DERA's management. Consultants were heavily involved throughout. Following a competition, the Department appointed Simmons & Simmons to provide legal advice and retained PricewaterhouseCoopers and UBS Warburg (see paragraph 1.9) to provide advice in support of the Department's strategic, accounting and financial decisions. QinetiQ appointed Rothschild and KPMG to provide financial advice and Herbert Smith to advise on the legal aspects of the transaction.



¹³ The Facilities Management Contract was replaced by the Long Term Partnering Agreement, signed on 28 February 2003.

1.16 The Department attempted to set high-level budgets for consultancy costs but this proved difficult given the evolving nature of the transaction. Instead the Department agreed hourly rates with the majority of the consultants through competitive appointment processes and set monthly caps on expenditure based on the expected short-term workload. UBS Warburg was remunerated through monthly payments and the agreement of a success fee based on a percentage of the eventual transaction receipts. Our review of the invoices and correspondence shows that the Department monitored expenditure closely. The costs incurred by the Department throughout the privatisation process are set out in paragraph 4.8 and Figure 17.

The defence industry had some concerns over the treatment of intellectual property

1.17 One of the key areas of concern for the defence industry was the ability of QinetiQ to exploit commercially the wealth of intellectual property it had been given by the defence industry. Because DERA was seen as an extension of the Department, contractors had in the past exchanged intellectual property with DERA without regard to whether this was required under their contract and sometimes without maintaining thorough records.

1.18 The Department and DERA management undertook an extensive audit of all intellectual property held by DERA, known as the Records Audit and Separation Project. Under this process all intellectual property held by DERA, some 148,000 records, was classified to determine where it had come from and processed accordingly. The intellectual property that had been internally generated by DERA could transfer to QinetiQ if the relevant division was transferring. Intellectual property relating to international collaboration projects was in most cases transferred to DSTL and all intellectual property originating from the defence industry could only be retained by QinetiQ if it supported ongoing work for the Department. The Department did more than was legally required in auditing the intellectual property and there have been no legal challenges to date.

1.19 Although the defence industry was consulted throughout the process, the Department judged it impractical to involve it in adjudicating on the treatment

of specific intellectual property. After completion of the exercise, defence contractors were sent a list of all intellectual property originating from them, detailing how it had been treated. It was often difficult, however, to establish the provenance of intellectual property as the challenging timetable for the exercise, which was largely completed between November 2000 and June 2001, meant that the descriptions were often inadequate. These limitations damaged the confidence that defence industry members of the Commercial Policy Group¹⁴ had in the robustness of the exercise. The Department considers that further work would not have changed the views expressed by industry critics, who were likely to be sceptical of the benefits of privatising DERA given their position as competitors.

QinetiQ was established as a corporate entity on 1 July 2001

1.20 In advance of the legal separation, the Department ran DERA as two organisations in order to test the separate IT systems and management structures that had been put in place to ensure they operated independently. This shadow operation lasted three months and was successful in demonstrating that the new arrangements were working as intended. QinetiQ and the Defence Science and Technology Laboratory were legally separated on 1 July 2001.

1.21 The opening balance sheet of QinetiQ is set out in **Figure 5 overleaf**. This was prepared in line with accepted practice and as such the value of shares in joint ventures that were commercially exploiting intellectual property did not reflect their potential to generate future revenue. The Department held share capital with a book value of £346 million and long-term loans amounting to £156 million.¹⁵

1.22 When QinetiQ was formed the Department had appointed five non-executive directors, including a chairman with relevant private sector experience,¹⁶ to uphold good corporate governance and protect the Department's interests. In addition, two senior members of the Department were appointed as observers to the QinetiQ Board.¹⁷ At this time there were also three executive directors – the then chief executive officer, chief financial officer and chief executive officer of QinetiQ Ventures.¹⁸ The Board formed a remuneration committee comprising the chairman and three of the other non-executive directors.¹⁹

¹⁴ The Commercial Policy Group is a joint Ministry of Defence and defence industry body that itself is a subgroup of the National Defence Industry Council.

¹⁵ Incorporating a £150 million loan note and £6 million relating to DSTL relocation costs. All loans were on a commercial basis.

¹⁶ Mr Jonathon Symonds, Dame Pauline Neville Jones, Mr Clay Brendish, Mr Jack Fryer and Sir John Egan respectively (Sir John Egan resigned in May 2002 and Dame Pauline Neville Jones became chairman).

¹⁷ Colin Balmer and Terence Jagger.

¹⁸ Sir John Chisholm, Mr Graham Love and Mr Hal Kruth respectively (QinetiQ Ventures is responsible for exploiting defence research in the wider commercial sector).

¹⁹ The remuneration committee comprised Sir John Egan (chair), Dame Pauline Neville Jones, Mr Johnathon Symonds and Mr Clay Brendish.

The Department put in place measures to safeguard UK defence interests

1.23 The Department had identified and consulted on the risks posed to UK defence interests by the privatisation of elements of DERA, and it developed measures to address these risks. A special share was created within QinetiQ that confers certain powers on the Department. These comprised the right to:

- require QinetiQ to operate and maintain the Compliance Regime (paragraphs 1.24 and 1.25);
- exercise stewardship over strategic assets used in QinetiQ's business but strategically important for UK defence purposes; and
- have powers of veto over any contract, transaction or activity where, in the opinion of the Department, it would constitute unacceptable influence or control over the company contrary to the defence interests of the UK.²⁰

1.24 One of the Department's key concerns was maintaining the impartiality of QinetiQ's advice. Conflicts would exist where QinetiQ sought to advise or bid on the supply side of a procurement project while also acting as an independent advisor to the Department. To mitigate this, the Department established the Compliance

Regime. Under this regime, QinetiQ is legally required to inform the Department of all potential conflicts of interest arising through each contract it advises or bids on and how it proposes to mitigate the risk. QinetiQ must prepare a 'firewall proposal' which is then approved by the Department. The firewalls typically require QinetiQ to maintain separate teams for each role as well as separate IT and filing systems. The Compliance regime is overseen by a committee of the Board, the Compliance Committee, and the Department has an observer on this committee.

1.25 The Department has legal rights to a robust set of remedies under the Compliance Regime. These include the right to force QinetiQ to withdraw from bidding for supply side work where the conflict of interest cannot be managed satisfactorily and QinetiQ is the sole source of independent advice to the Department.

The decision against an early flotation was well founded

1.26 In parallel to the restructuring of DERA, the Department, its consultants and DERA management considered two options for the route towards privatising QinetiQ: an early flotation, via an Initial Public Offering, or seeking a strategic partner to help develop the business in advance of a flotation. The Department and DERA management had already held several meetings with potential investors, many of whom had been monitoring the situation closely since the announcement of a PPP in 1998.

1.27 Although the QinetiQ Board argued strongly for an immediate flotation, in January 2002 the Department, advised by UBS Warburg, decided against this. This was in part because at that time the market for flotations was poor, with the lowest number of flotations for over ten years: 2001 had seen only 78 companies newly listed on the London Stock Exchange, compared to 138 in 2000. Market sentiment toward Government offers was also affected by a deterioration in the financial position of the privatised business Railtrack, which had culminated in it being put into administration in October 2001. The Department also concluded that QinetiQ's potential as an investment opportunity was not yet clear, as it had had less than a full year's trading as a corporate entity. Furthermore, QinetiQ could not yet demonstrate its ability to operate in a competitive environment because the vast majority of DERA's contracts had been awarded without competition. Uncertainty over the future of the Facilities Management Contract (paragraph 1.13), which at the time accounted for almost 30 per cent of QinetiQ's revenue, would also have affected sentiment towards a QinetiQ flotation.

5 QinetiQ was established with a balance sheet of £346 million

	£ million	£ million
Tangible fixed assets	548	
Current assets	240	
Current liabilities	(230)	
Provisions	(56)	
Long term loans	(156)	
		346
Share capital	346	
		346
Annualised turnover for the year ending 31 March 2002¹		
Turnover		870

Source: National Audit Office examination in February 2002 of the transfer of assets and liabilities from DERA

NOTE

¹ QinetiQ was established on 1 July and therefore only traded for nine months to 31 March 2002.

²⁰ In the lead up to the flotation there were several amendments to the special share; these are explained in paragraph 3.8.

PART TWO

The priority was to obtain a strategic partner to help develop the business rather than maximising initial sale proceeds

The Department saw advantages in progressing the privatisation despite difficult timing

2.1 In early 2002, having decided not to proceed directly to a flotation, the Department was concerned that any loss of momentum in the PPP process could undermine staff morale, damage customer relationships and restrict QinetiQ's commercial freedom at a key stage in its development. Following a review of options, the Department elected to bring in a strategic partner to develop the business in advance of a flotation. It considered that waiting for more favourable market conditions before pursuing an investor would be damaging to QinetiQ.

2.2 The Department believed that the introduction of a strategic partner would assist in developing the business, provide access to private capital to help fund growth and allow QinetiQ to develop a commercial track record in advance of a flotation. Sir John Egan, QinetiQ's chairman at the time, was unhappy with the prospect of the introduction of a strategic partner. He told us that the poor markets presented an opportunity to get the business in shape ahead of privatisation and could not see what value could be added by private equity houses or the trade partners who were likely to bid. Sir John Chisholm, who was the chief executive at the time, was also concerned about the impact of an outside investor on the future direction of the business. He told us that he had also raised concerns about the potential risk of management making large returns from the involvement of a private equity investor. The Department concluded that it would be appropriate to sell only a minority shareholding to a strategic partner thereby allowing the Department to realise the majority of any future financial gains.

The Department held exploratory meetings with potential investors

2.3 From as early as 1999 the Department had received expressions of interest from potential investors that were aware of the possibility of a privatisation. UBS Warburg maintained contact with 44 of these potential investors. In November 2001, the Department held meetings with eight trade investors and 15 private equity firms. In January 2002 further exploratory meetings were held to test the market. Under the instruction of the DERA Partnering Team, UBS Warburg arranged meetings with the following investors: 3i, Charterhouse, Candover, Permira, Legal & General, Cinven, CVC, Electra Partners, the Carlyle Group (Carlyle), and SERCO. Four of these firms – Permira, Carlyle, CVC, and Cinven – had also attended earlier meetings with the Department and QinetiQ management. All parties expressed a strong interest in a partnership that would give them day-to-day management control and allow them to exit the business within three to five years via a flotation.

2.4 The Department made it clear that, despite the scope for synergies, defence manufacturers would not be considered as potential strategic partners to guard against potential conflicts of interest. Following the exploratory meetings, the Department was aware that the strategic partner was most likely to be a private equity firm. The Department foresaw two major risks associated with this:

- Private equity firms desire a higher rate of return on their investment than trade investors. They were, however, less likely to be concerned about the lack of an established commercial track record. The Department also felt that a private equity firm would maintain the independence of QinetiQ and have a greater focus on developing the value of the company prior to an exit.

- The top management of QinetiQ were likely to be offered substantial financial incentives by a private equity investor, a politically sensitive issue. The Department believed that this risk could be managed by seeking to ensure that it would only happen if the public sector also earned substantial returns from the eventual flotation.

2.5 Although QinetiQ was a complex business with some challenges, it had many of the characteristics of a candidate for a private equity deal. It had a solid asset base, good cash flows, and stable customers. It also had a number of significant contracts, including the Long Term Partnering Agreement (see Box 1, page 23) which, although not in place at the time, would be finalised before the deal was completed. QinetiQ's growth prospects were less certain and it did not have an established track record as a commercial business. Approximately half of its revenue was subject to competition and this figure was set to increase. This meant that a strategic partner would need to adopt a hands-on approach to managing their investment. QinetiQ was, however, capable of generating sufficient cash to service a reasonably high level of debt and had the prospect of asset disposals to accelerate this process.

The competitive process produced one credible bidder

2.6 The formal process for selecting a strategic partner began on 8 March 2002 with an advertisement in the *Financial Times*, which attracted significant press coverage and which UBS Warburg drew to the attention of its investor network. The sale process began with interested bidders submitting written applications to receive a Pre-Qualification Questionnaire (PQQ). 40 PQQs were requested by the closing date of 15 March 2002 and 16 were subsequently returned by 22 March 2002. SERCO were the only trade bidder, although two other bidders proposed the involvement of trade investors: WS Atkins bid as part of the Carlyle Consortium and the Science Applications International Corporation (SAIC) had expressed an interest in joining the Charterhouse bid.

2.7 The PQQs were evaluated by the Department and UBS Warburg against pre-agreed criteria. They were also evaluated by the QinetiQ Board who expressed serious reservations about the involvement of trade bidders; the Board believed that they would have different objectives from the purely financial investors and would not achieve full value at the flotation. In addition, the Board was concerned about there being possible conflicts of interest throughout the sale process from negotiating with

competitors. The Department approved the elimination of four parties on 15 April 2002. The Department decided, against the wishes of the Board, to include the Carlyle and Charterhouse consortia in the next phase of the process but eliminated SERCO on the grounds that their response was weaker.

2.8 Keeping as many credible bidders in the field as is feasible at the early phase improves competition. The proposal from SERCO was the only response that did not involve a private equity firm. There may have been advantages to retaining a different type of bidder in the competition: a trade bidder would have been likely to require a lower rate of return, have a different view on the value of the business, and potentially offer a higher price that would improve competition amongst the bidders. The Department believed that a trade bidder would create conflicts of interest, in terms of the ability to maintain the independence of QinetiQ's advice, that would need to be managed and took the view that SERCO's response did not address these concerns adequately. It also believed that the need for SERCO shareholders to approve the proposal added additional risk. We consider that more could have been done to work with SERCO at this early stage of the process to allow them to strengthen their proposal.

2.9 On 23 April 2002 the Department issued an information memorandum to the remaining 12 bidders and requested indicative bids setting out the Enterprise Value²¹ of QinetiQ to be submitted by 22 May 2002. Seven indicative bids were received and these valued QinetiQ within the range of £450 million to £600 million, subject to deductions for debt in the business. All the potential partners submitted bids to purchase 51 per cent of QinetiQ in conflict with the Department's aim of retaining a majority stake. The five investors who chose not to submit bids gave reasons consistent with the Department's concerns when ruling out an early flotation (paragraph 1.27).

2.10 The Department had intended to shortlist six of the seven bidders but subsequently decided to take forward a shortlist of four. It evaluated the indicative bids with UBS Warburg, with input from the QinetiQ Board. Advice prepared by UBS Warburg concluded that three of the seven bidders were not strong enough to be taken forward to the next round. The Department decided on 23 May 2002 to shortlist Carlyle, Permira, Goldman Sachs, and Candover; this decision was approved by the Treasury on 27 May 2002. Our analysis of the three eliminated bids concluded that they were not as strong as the four shortlisted bidders but that they were strong enough to be included in an expanded shortlist. The Department and UBS Warburg do not accept our conclusion and do not

21 The total value of a business irrespective of the levels of debt and equity.

believe an analysis of the bids carried out five years after the deal can accurately reflect all the considerations at the time. Our expert panel considers that there was a strong case for taking forward more bids at this stage given the complexity of the business and uncertainty over significant contracts (see paragraph 2.25). In our view it is likely that an expanded list would have improved competition and potentially avoided the eventual outcome of receiving only one bid that was acceptable to the Department. The Department has said it was concerned that bidders would have been discouraged from carrying out extensive due diligence if the shortlist had been greater than four and did not want to overburden QinetiQ management, who had expressed reservations about managing more than four bidders. It was also concerned about potential calls to refund bid costs if a larger shortlist was taken forward.

2.11 On 8 July 2002 the Department invited the remaining bidders to submit bids on the basis of purchasing both 51 and 35 per cent of QinetiQ. Carlyle and Permira submitted the only compliant final bids on 15 July 2002 following due diligence that had highlighted the expected capital expenditure under the Long Term Partnering Agreement. Carlyle submitted a conditional bid that now valued the business at £350 million before adjustments. Permira valued the business within the range of £325-£350 million before adjustments but submitted a highly conditional bid that had greater risk attached. Permira proposed to submit a binding bid following further due diligence, on the basis that they could immediately appoint a new chairman to carry out a strategic review and develop a new business plan. In addition, they also proposed the introduction of a new investment partner.

2.12 The two final bids were evaluated by the Department and UBS Warburg with input from the QinetiQ Board. The Department decided to seek revised final bids from Carlyle and Permira, with the aim of receiving an increased offer and reducing conditionality. Carlyle and Permira both submitted revised final offers on 16 August 2002. Carlyle offered an increased value of £374 million before adjustments. Permira introduced Candover as their new equity partner but the conditions of their original offer remained the same, including the value they assigned to the business. Carlyle were then appointed preferred bidder with a bid to purchase 35 per cent of QinetiQ.

Private equity deals involve significant inherent differences of interest

2.13 Some of the Department's interests, as owner of QinetiQ, were different from management's. The Department was aware of these differences and had agreed a memorandum of understanding with management in 2001, the purpose of which was to ensure that management acted in the best interests of the Department as a shareholder and to enhance the value of any future transaction. The Department did not want management to make very large returns simply by virtue of the privatisation. It was content, however, that there should be a share scheme to incentivise management to increase the value of the equity so long as the returns made by management were proportionate with the growth in the value of the business. The Department's interests also differed in some respects from those of the private equity bidders. Such bidders want to buy the equity as cheaply as possible. The Department's decision to sell a minority stake helped to mitigate the impact of any undervaluation of the business as it ensured the Department would also benefit from the resulting growth. Private equity bidders also have no interest in restricting management returns as long as they were linked to their own returns; the Department considered its interests were fully aligned with bidders in this respect.

2.14 Apart from initially ensuring that management are competent and have a credible business plan, the main objective of a financial investor is to structure a deal so that management are incentivised to maximise the value of the business in the short to medium term. Typically, management will be offered the opportunity to invest their own money in an equity stake in the business. Sometimes this is structured with a ratchet mechanism that can increase the return significantly, subject to certain performance targets. The choice of target will depend on the main focus of the investor, for example, growth in equity value or growth in profitability.

The Department was not involved in the design of the share incentive scheme although it assessed and approved it

2.15 A key objective of the PPP was to “implement a share scheme for all employees consistent with achieving value for money”. Accordingly, all bidders were required to set out the terms of an employee share ownership scheme or other incentivisation arrangements. In their offer of July 2002, Carlyle proposed a two-tier structure allocating 10 per cent of equity to management and staff but with greater rewards available for senior management. Permira also proposed to offer staff 10 per cent of the equity but with a three-tier structure that gave higher rewards to middle management as well. Following the QinetiQ management team’s assessment of the bids the then chief executive and chairman both wrote to the Department suggesting that Carlyle should revise their offer to include a three-tier structure to encompass middle managers. The chief executive also expressed the view that the 10 per cent of equity offered by Carlyle was low and wanted the incentive arrangements to offer higher returns based on exceptional performance. Informed by his previous privatisation experience, the then chief financial officer discussed this with Carlyle before final bids were submitted. Carlyle’s revised final offer in August reflected the management team’s suggestions, including ratchets to reward senior management for outstanding performance by increasing the amount of equity available to management and staff.

2.16 In late August 2002, as part of the ‘preferred bidder’ selection process, the Department approved the structure of the Carlyle incentive scheme including the maximum twenty per cent of equity available to staff. The Department accepted the scheme and did not seek specific professional advice believing that its interests were aligned with those of Carlyle, i.e. to ensure that the returns were linked to the growth in the value of the business.

2.17 On the basis of the scheme agreed, following input from the chief financial officer, the then chief executive officer proposed the specific allocation of shares to management and staff. This was on the basis that Carlyle considered he was best placed to decide the levels of incentivisation for individual staff. The Department did not seek to involve the Board or the remuneration committee in approving the allocation of shares. It has told us that it considered that it would not have been appropriate for the remuneration committee to be involved because the remuneration committee had no formal remit to

advise on the proposed management incentive scheme. This was because it was a committee of QinetiQ Group, wholly owned by the Department, and, under the deal agreed with Carlyle, a new company, QinetiQ Holdings, would be formed (see paragraph 2.33). The Department considered that it is normal for the purchaser of a business to agree such a scheme, subject to the approval of other shareholders. It approved the final scheme in October 2002 based on the modelling of a limited range of outcomes. This anticipated a maximum growth in the value of the equity of five times, which indicated a maximum return to the then chief executive officer of £10 million. The Department expected the growth in value to be less than this and on this basis concluded that the returns available were at the modest end of market practice. It was aware, nevertheless, that the scheme that it had accepted could result in much larger returns to management, as in fact it did. In November 2002, after the share scheme had been approved, the non-executive directors of QinetiQ separately commissioned the company’s financial advisors to model the outcomes of the employee incentive arrangements under a range of scenarios. This included modelling higher levels of growth and higher returns than those envisaged in the Department’s analysis.

2.18 The Government’s objective to extend share ownership to all staff was achieved and resulted in wider participation than usual in a private equity transaction. The final share incentive scheme comprised four elements, targeted at different groups of staff. The full details are set out in Appendix 4. All employees received 40 share options for free and had the opportunity to buy shares in a co-investment scheme that was largely made up of preference shares.²² The co-investment scheme reduced the shareholding of Carlyle and gave staff the opportunity to invest on the same basis as Carlyle and the Department. The top 245 managers could invest in ordinary equity, intrinsically more risky than the preference shares, that benefited from a performance ratchet and the top ten could invest in ordinary equity that benefited from an additional performance ratchet. The ratchets worked through diluting the shareholdings of the Department, Carlyle and the co-investment scheme proportionally to the size of the shareholdings if performance thresholds were met, thereby increasing the shareholdings of the top managers. The maximum of twenty per cent of equity available to QinetiQ management and staff was at the high end of market practice for private equity deals.

2.19 The potential return was linked to the growth in value of the equity of the company at the flotation. The performance ratchets amplified the returns of the top 245 and top 10 managers, acting as an additional

²² Preference shares have less risk than equity as the returns are paid out prior to dividends. They pay a fixed percentage return, in this case nine per cent.

incentive on management to increase the value of the company. To meet the first ratchet the value of the Department's and Carlyle's equity investment needed to increase by more than three times by the flotation. The second ratchet could only be triggered if the value of the equity increased by more than four times. If the equity value of QinetiQ failed to increase by 1.2 times by the flotation the staff who had invested in ordinary equity – the top 245 and top 10 managers – would have lost their investment. Furthermore the top 245 and top 10 managers could be requested to sell their shares for the lower of the purchase price and the prevailing market value, as determined by the Board, if they left voluntarily or were dismissed from the company before a flotation. **Figure 6** sets out the impact of the ratchets on the shareholdings of staff, the top managers, the Department and Carlyle; the full criteria for the operation of the ratchets are described in Appendix 4.

2.20 All the shares allocated for the senior management were eventually fully subscribed, with almost all of the managers investing the maximum permissible; not all senior managers who were originally entitled to invest subscribed for shares. The majority of staff were reluctant to invest in the co-investment scheme and even after management had made a second presentation to all staff there were still shares available. Sir John Chisholm has told us that many staff did not believe that a public sector organisation such as DERA could be transformed into a successful private company and they were concerned that the Department would squeeze margins in the business. Our contact with QinetiQ staff has indicated that the

complexity of the investment opportunity and the short time available to make a decision in January 2003 also had an impact.

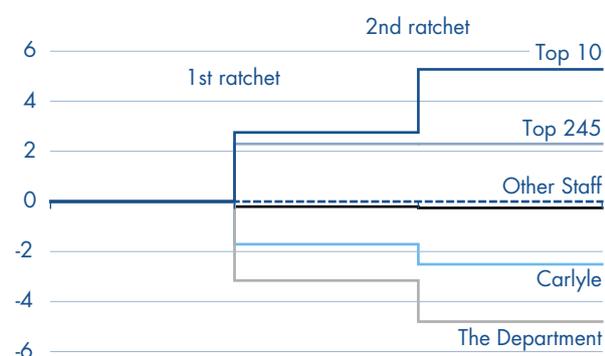
2.21 The co-investment scheme shares not taken up by staff were offered to the non-executive directors and senior management after the deal had been substantially agreed. Two non-executive directors accepted the offer and invested £100,000 in total, eventually making returns of over £800,000. It is not unusual for non-executive directors to buy shares at market value in the businesses on whose boards they sit to align their interests with those of other shareholders. In this case the shares were not freely traded. Moreover, if the business performed in line with expectations the equity would increase rapidly in value ahead of a flotation due to the highly leveraged structure of the final deal. The expectation of high returns could have resulted in perceived conflicts of interest in relation to the non-executive directors' role in the privatisation. We found no evidence, however, to suggest that the Board or the Department considered this possibility or how such a perception should have been managed. In light of the timing of the non-executive director's investment, the Department and QinetiQ consider that there were no grounds for such a perception.

The final bids were lower than earlier valuations had suggested

2.22 Soon after incorporation in July 2001, the value of QinetiQ had been appraised jointly by KPMG and PricewaterhouseCoopers (PwC). The report, prepared by KPMG, gave KPMG's initial judgement of the value of the business as in the range of £551–£571 million. The report also referred to PwC's initial view that a value of £862 million was more realistic. PwC do not now have the inputs and assumptions supporting that figure and are therefore unable to confirm its robustness or comparability with other valuations. In August 2001 the Department requested that PwC halt the joint valuation work and instead carry out a review of KPMG's valuation, which had by this time changed to between £467–£649 million. PwC suggested that KPMG's revised valuation was low and that there was strong evidence that it could be increased by £170–£250 million based on the market value of land and buildings owned by QinetiQ, which had not been valued by KPMG as part of their work. Following due diligence, Carlyle, in their bid dated August 2002, valued the business at £374 million (paragraph 2.24). The range of historical valuations is shown in **Figure 7 overleaf**.

6 The ratchets increase the percentage shareholdings of senior management

Movement in percentage shareholding

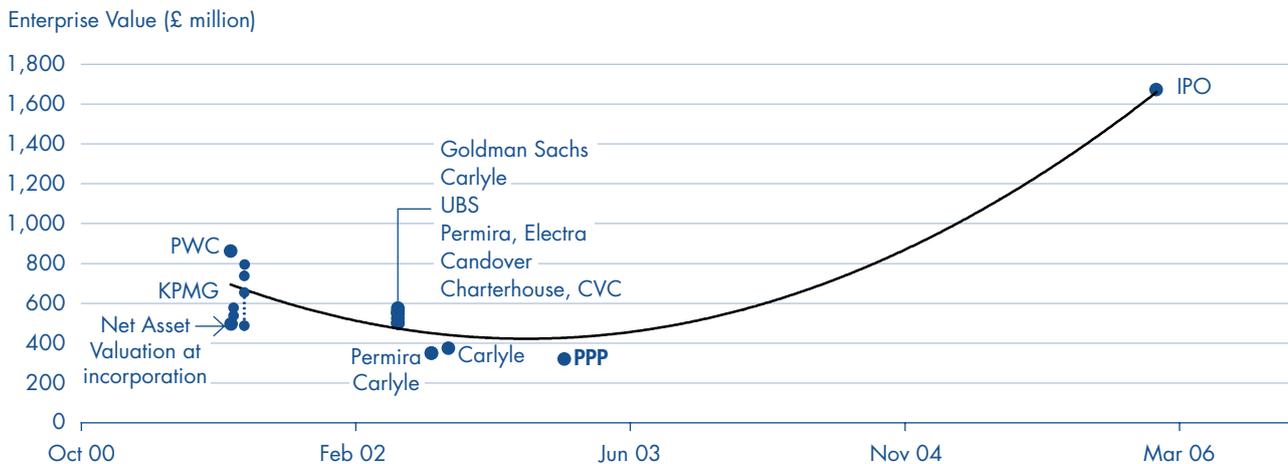


Source: National Audit Office analysis

NOTE

This figure shows the change in the percentage of QinetiQ's shares held by the Department, Carlyle and QinetiQ staff when the ratchets in the share incentive scheme are triggered.

7 The value attributed to QinetiQ fell during the sale process



Source: National Audit Office analysis and the Parthenon Group report on the Formation and Privatisation of QinetiQ commissioned by the National Audit Office, July 2006

2.23 The seven indicative bids received on 22 May 2002 valued QinetiQ at between £450 million and £600 million before adjustments for debt in the business. At the same time UBS Warburg, acting for the Department, valued the business within the range £495–£625 million on the same basis, which confirmed that the indicative bids were within an acceptable range. This decline from the value in 2001 was attributed to the depressed market for technology and research stocks.

2.24 Following due diligence, the final bids received from Carlyle and Permira on 15 July 2002 valued the business within the range £325–£350 million before adjustments. The decline was due to significant changes in forecasts for the Solutions and Estates business (see Figure 4), following the release of year-to-date performance, and due diligence findings relating to expected future capital expenditure requirements. Carlyle's final bid valued QinetiQ at £374 million before adjustments.

2.25 Two price-sensitive commercial issues were still outstanding when Carlyle was appointed preferred bidder in September 2002: QinetiQ's pension fund deficit and the finalisation of the Long Term Partnering Agreement (LTPA) between QinetiQ and the Department. Carlyle were granted an exclusive negotiation period from 3 September 2002 to 30 November 2002 although the Department retained Permira as a reserve bidder to try to maintain an element of competitive tension. The negotiation period with Carlyle was later extended to 2 December 2002, although the deal was not finally completed until 28 February 2003 following delays in signing the LTPA. Over the three months Carlyle were preferred bidder, the value attributed to the business

declined to £319 million after Carlyle negotiated reductions of £55 million: £30 million relating to the LTPA and an immediate reduction of £25 million for the deficit in the QinetiQ pension fund. Due to the decision to sell a minority stake, these reductions in the value of the business are equivalent to a £21 million reduction in the value received by the taxpayer from the sale (£11 million relating to the LTPA and £10 million relating to the pension fund deficit). The actual impact of the reductions in value on the proceeds received by the Department is shown in **Figure 9 on page 25**.

2.26 By appointing Carlyle as preferred bidder with price-sensitive issues outstanding, the transaction changed from a competitive to a negotiated process. If the competition had remained open while these issues were being resolved, the other shortlisted bidders could have had sufficient time to submit binding and compliant bids (paragraph 2.11). This could have resulted in improved competitive tension, potentially leading to greater proceeds from the sale. The Department disagrees with this conclusion and notes that Permira did not improve significantly their offer when asked to submit a revised bid (see paragraph 2.12). The Department took advice from UBS Warburg prior to signing the deal with Carlyle that stated that the negotiated adjustments were not such that they materially affected the basis of the competitive process insofar that other bidders would have been likely to act in the same way. The Department and UBS Warburg believe that a delay to the process could have resulted in Carlyle withdrawing from the competition and that greater proceeds could not have been achieved from the sale.

The commercial value of the Long Term Partnering Agreement was not fully understood

2.27 When the Department began the sale process in March 2002, the long-term arrangements for QinetiQ's provision of test and evaluation services had not been finalised. The Department included draft terms and conditions of the 25-year contract known as the Long Term Partnering Agreement (LTPA) in the information memorandum in order to mitigate the risk of uncertainty affecting the sale process; these terms incorporated both tasking and non-tasking revenue (see Box 1). The financial projections used in the information memorandum did not form part of the agreed outline terms of the LTPA at that time. To avoid a potential conflict of interest the LTPA was negotiated between the Department's customer group, which was distinct from the team managing the sale to a strategic partner, and QinetiQ, in tandem with the sale, and was signed at the end of February 2003. Carlyle's final bid was conditional upon the LTPA delivering £30 million EBITDA²³ per year. The detailed assumptions underlying this condition were not known. Subsequently, on the basis of the condition, Carlyle tried to negotiate a £50 million reduction in the value of their bid. This was eventually agreed at £30 million²⁴ and the sale of an additional 2.5 per cent of equity (see paragraph 2.32).

2.28 The Department sought advice on the proposed value reduction from UBS Warburg. In preparing its advice UBS Warburg compared the cash flows of the LTPA from an agreed financial model with the conditional cash flows in Carlyle's bid. The financial model was developed jointly by QinetiQ and the Department's customer group. It represented the contractual payments for maintaining and operating the facilities and did not therefore incorporate tasking revenue. It also reflected the expected cash flow profile, including planned capital expenditure, agreed between QinetiQ and the Department's customer group, although not all the capital expenditure had been contractually committed (full details are given in Appendix 5). Based on the comparison UBS Warburg concluded that the value of the cash flows had declined and that a reduction of £30 million was justified. UBS Warburg did not advocate a negotiation based on detailed valuation of the contract as the negotiation covered a range of issues, of which the LTPA was the most significant. We have reviewed the negotiations and consider that the £30 million reduction in value was not sufficiently justified and that the commercial value of the LTPA was not fully understood by the Department (see Appendix 5). The

BOX 1

The Long Term Partnering Agreement

This agreement between the Department and QinetiQ was signed in February 2003. It is a 25-year contract under which QinetiQ operates facilities to provide test and evaluation services for the Department and other customers. In total it is worth up to £5.6 billion in revenue to QinetiQ over the 25 years. It comprises two revenue streams: non-tasking revenue that is centrally funded by the Department, and tasking revenue that is contractually distinct and funded by individual customers.

- Non-tasking revenue covers the fixed costs of maintaining and operating the facilities (including associated infrastructure). The non-tasking revenue is contractually guaranteed and defined in the financial model.
- Tasking revenue is payable by the customers and covers the direct cost of conducting each trial or test. It is not contractually guaranteed.

Previously, customers were charged a portion of the total fixed costs of operating all the facilities, which made each trial or test extremely expensive. This deterred customers from using the ranges which had led to prolonged underinvestment in the assets. The Department believed that the new funding arrangements would act as a powerful incentive for customers to use the QinetiQ facilities rather than other UK or overseas facilities.

The contract incorporates review points every five years; at these points the costs of delivering the services over the next five years are renegotiated and a minimum 'step down' in price agreed.

Department and UBS Warburg disagree with this assertion. They consider that this was a challenging commercial negotiation and do not believe that a different approach would have yielded greater proceeds.

The QinetiQ pension fund had a significant deficit

2.29 At the time of the sale to Carlyle, actuaries advising QinetiQ estimated the pension fund deficit to be £75 million. The Government Actuary's Department, advising the Department, believed that actuarial evidence supported a total reduction in value in the range nil to £70 million. Carlyle negotiated from the Department an immediate reduction in the value of the business of £25 million²⁵ plus a pension indemnity capped at £45 million to cover any future deficit. This effectively gave the Department the opportunity to benefit from a future recovery in the market. The indemnity was payable on the earlier of a flotation, sale, or 28 February 2008 if the deficit remained. At the flotation the total pension deficit was greater than £45 million and therefore the

²³ Earnings Before Interest, Tax, Depreciation and Amortisation.

²⁴ Equivalent to an £11 million reduction in the value received by the taxpayer (see paragraph 2.25).

²⁵ Equivalent to a £10 million reduction in the value received by the taxpayer (see paragraph 2.25).

full £45 million indemnity was paid into the QinetiQ pension fund; the Department, as one of the shareholders of QinetiQ, benefited from the increase in the value of the company. At the time of the sale to Carlyle, the present value of the total reduction in value was £59 million.

The National Audit Office consider that the business may have been undervalued in the sale to Carlyle

2.30 A range of valuations were undertaken during the privatisation process, including the market valuation placed on the business by Carlyle. To understand what drove the change in value the NAO commissioned the

Parthenon Group to provide an opinion on the valuations undertaken at the various stages of the privatisation.²⁶ As part of this process, the Parthenon Group also undertook its own valuations. Although these valuations are based on the financial data that would have been available to other parties at the time they cannot take account of the prevailing market sentiment or other intangible factors that could influence the value of QinetiQ. The values ascribed to QinetiQ at key stages, with explanations for the differences, are set out in **Figure 8**. The Department believes that Carlyle's bid was the first market valuation by a willing buyer and dismisses any other estimated value as unproven and theoretical. We note, however, that to achieve market value the competitive process needs to be strong (see paragraphs 2.8 to 2.10).

8 The Parthenon Group's analysis suggests that QinetiQ was undervalued

Date	Comparative Valuation (£ million)	Parthenon Group Valuation (£ million)	Explanation
Jul 2001 ¹	£862 (PwC) £467 – £649 (KPMG)	£773 – £856	Broadly in line with PwC valuation. KPMG used more conservative assumptions.
May 2002	£495 – £625 (UBS Warburg)	£577 – £657	UBS Warburg used conservative assumptions to value Solutions Business. Intellectual Property Rights held by QinetiQ were valued at cost although these could potentially generate significant revenue. UBS Warburg valuation of the estate was based on net asset values not cash flows.
Nov 2002	£319 (Carlyle)	£341 – £513	Carlyle did not value potential revenue from Intellectual Property Rights. Reduction of £30 million for the LTPA was insufficiently justified. All excess property excluded from the valuation.

Source: The Parthenon Group report on the Formation and Privatisation of QinetiQ commissioned by the National Audit Office, July 2006

NOTE

1 See paragraph 2.22.

26 The Parthenon Group analysis includes the following disclaimers:

- 'Value can only be truly determined in an open market. Valuation of companies is a matter of judgement which is impacted by the valuer's interpretation of available financial information, prevailing market sentiment and other factors, including, but not limited to, the quality of management.
 - 'Valuations undertaken by parties involved in the formation and privatisation of QinetiQ may (and probably would) have used additional data sources to support their assessment for QinetiQ.
 - 'While Parthenon has used professional judgement and knowledge of QinetiQ and the private equity and capital markets as we deem appropriate at the time to qualify our valuations for the business, there will have been market factors and prevailing market sentiments among the participants that were not then quantified and that cannot be incorporated in our retrospective valuations.
- 'Parthenon has not had access to management in forming retrospective valuations, which would be a critical part of advising any client on valuation of their business or prospective acquisitions.'

In the final deal, proceeds fell to £155 million

2.31 Proceeds fell between the final bid and the close of the deal. Negotiated deductions of £55 million relating to the LTPA and pension fund deficit (see paragraphs 2.27 and 2.29) reduced the value of the business (see Figure 9). The impact of these reductions on cash proceeds was offset by three factors:

- the capital structure of the business changed leading to extra proceeds of £7 million and a £7 million reduction in value of its retained equity stake;

- the Department sold an extra 2.5 per cent of the equity to Carlyle increasing proceeds and reducing the value of its retained stake by £3 million; and
- there was £13 million less external debt in the business at completion of the deal than in the NAO's analysis of information set out in Carlyle's bid.

At completion of the deal, NAO analysis shows therefore that the final cash proceeds reduced by £32 million to £155 million. £60 million of proceeds, relating to the sale of a surplus property located in Chertsey, were deferred until the property sale was completed. This amount was subsequently repaid in full.

9 National Audit Office analysis of changes to proceeds after Carlyle were appointed preferred bidder

	Final bid £m	Final deal £m	Difference £m	Explanation
Enterprise Value ¹	374	319	55 ²	Negotiated reductions (LTPA and pension fund deficit) ²
Less value of retained stake ³	(88)	(78)	(10)	The amount of debt and equity in the new QinetiQ Holdings company changed and 2.5 per cent more shares were sold (paragraph 2.32)
Cash proceeds (on the assumption of no external debt in the business)	286	241	45	
Less net external debt/provisions ⁴ (In final bid based on NAO analysis, actual given for final deal)	(99)	(86)	(13)	NAO analysis shows less external debt at completion than estimated at the time of the bid
Cash proceeds (In final bid based on NAO analysis, actual given for final deal)	187	155	32	

Source: National Audit Office analysis

NOTES

- Enterprise Value is the total value of the business, irrespective of the levels of debt and equity, as offered by Carlyle (see paragraphs 2.12 and 2.24).
- Reductions of £30 million relating to the LTPA and £25 million for the pension fund deficit, equivalent to a £21 million reduction in value for the taxpayer – see paragraph 2.25.
- Carlyle initially proposed a capital structure for the new company, QinetiQ Holdings Limited, based on equity of £135 million which was changed in negotiations to equity of £125 million. The major part of this was to be preference shares offering a 9 per cent return. The Department agreed to sell Carlyle an extra 2.5 per cent of equity. The value of the residual stake in the final bid was, therefore, 65 per cent of £135 million (£88 million, £79.2 million as preference shares) compared to 62.5 per cent of £125 million (£78 million, £70.2 million as preference shares) in the final deal.
- External net debt/provisions is the amount of QinetiQ Group net borrowing from commercial lenders and other agreed liabilities. It varies with the needs of the business and the figure given for the final bid is based on National Audit Office analysis of information in Carlyle's bid document based on the 30 June 2002 balance sheet.

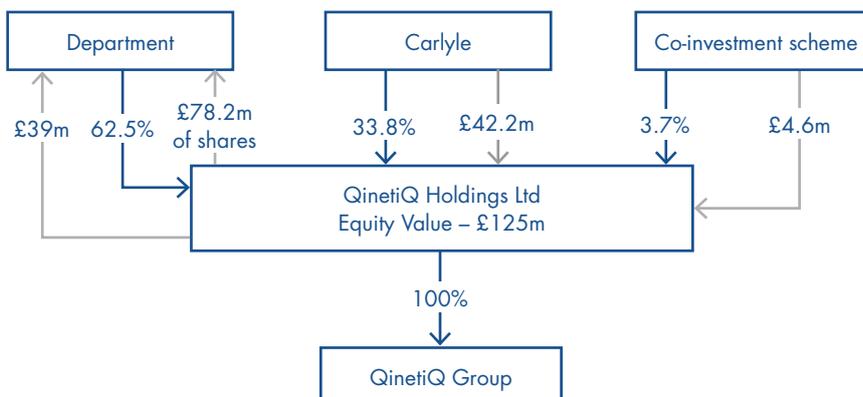
2.32 The Department told us that it agreed to sell Carlyle an additional 2.5 per cent of equity on top of the 35 per cent specified in their bid as part of a package of adjustments following the negotiations surrounding the Long Term Partnering Agreement (see paragraph 2.27). The Department also told us that the sale of an additional 2.5 per cent of equity gave Carlyle a greater incentive to protect their investment through close stewardship, although it recognised earlier in the process that there would be future financial benefits from restricting the amount sold to the strategic partner (see paragraph 2.2).

2.33 In February 2003 QinetiQ Holdings Ltd was formed as the acquisition vehicle to complete the transaction. It was established with an equity value of £125 million.²⁷ QinetiQ Holdings Ltd acquired 100 per cent of the shares in QinetiQ Group from the Department for £117 million. The £117 million was made up of £78.2 million of shares in QinetiQ Holdings Ltd (62.5 per cent of the equity) and £39 million in cash. Although the Department had agreed to sell 37.5 per cent of QinetiQ, 3.7 per cent was to be set aside for QinetiQ staff under the co-investment scheme. Carlyle paid QinetiQ Holdings Ltd £42.2 million to acquire 33.8 per cent and QinetiQ employees paid a further £4.6 million for 3.7 per cent. The top 10 and top 245 managers subscribed for new shares in QinetiQ Holdings Ltd worth £0.5 million and £0.4 million respectively; these shares diluted the shareholdings of the Department, Carlyle and the co-investment scheme proportionally. The structure of QinetiQ Holdings Ltd at the completion of the deal is set out in **Figure 10**.

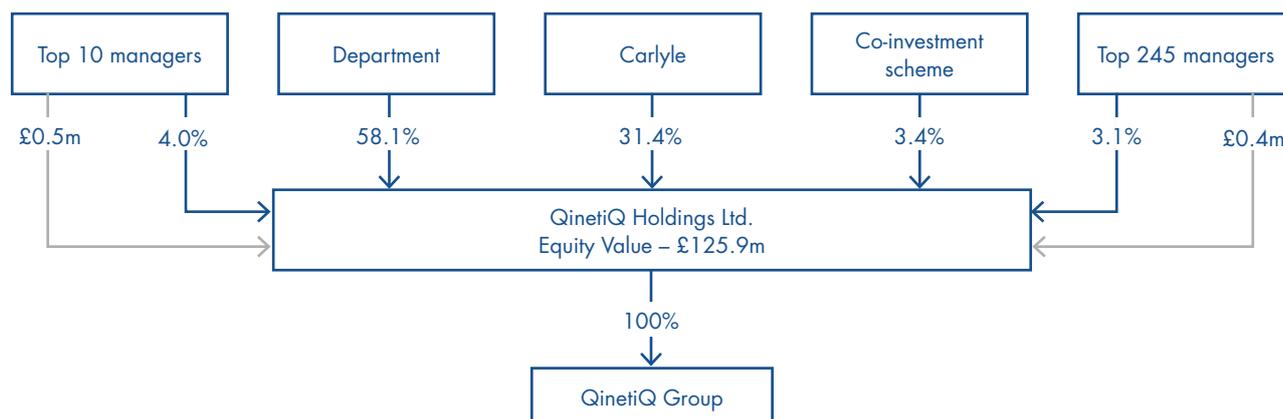
2.34 The Department had told bidders that they would not become entitled to be reimbursed for any costs associated with preparing their offer. Both Carlyle and Permira bid on the basis that costs would be reimbursed by QinetiQ Holdings Ltd and the Department told us that it approved this treatment of the bid costs when it accepted Carlyle's offer. The Department considers that if it had prevented the reimbursement of these costs, bidders would have asked for a proportionate reduction in the value ascribed to QinetiQ. Reimbursement of costs by the business being bought is common practice in a private equity deal where 100 per cent of the company is purchased. It would therefore have been reasonable to refund Carlyle's costs only if the Department's costs were also fully reimbursed. At the completion of the deal QinetiQ Holdings Ltd reimbursed fully Carlyle's bid costs of £16 million. The Department believes that Carlyle had an incentive to minimise their costs as they were a shareholder in QinetiQ Holdings Ltd and it did not seek to separately verify or validate the reimbursed costs.

²⁷ The equity value of QinetiQ Holdings Ltd was not directly linked to the price paid for QinetiQ Group.

10 Percentage Shareholdings in QinetiQ Holdings Ltd at completion of the deal



Step 1. The Department receives a mix of ordinary shares and preference shares valued at £78.2 million as part of the compensation when QinetiQ Holdings Ltd acquires QinetiQ Group (£39 million in cash, £56 million in loan repayments and £60 million deferred proceeds were also received). Carlyle invests £42.2 million in a mixture of ordinary shares and preference shares to purchase 33.8 per cent of QinetiQ Holdings Ltd. Employees invest £4.6 million to purchase 3.7 per cent of ordinary and preference shares in QinetiQ Holdings Ltd under the co-investment scheme.



Step 2. Senior management invest in new ordinary shares in QinetiQ Holdings Ltd which reduces the percentage shareholdings of the Department, Carlyle and the co-investment scheme.

Source: National Audit Office analysis

PART THREE

The Department executed the flotation well and achieved a good price

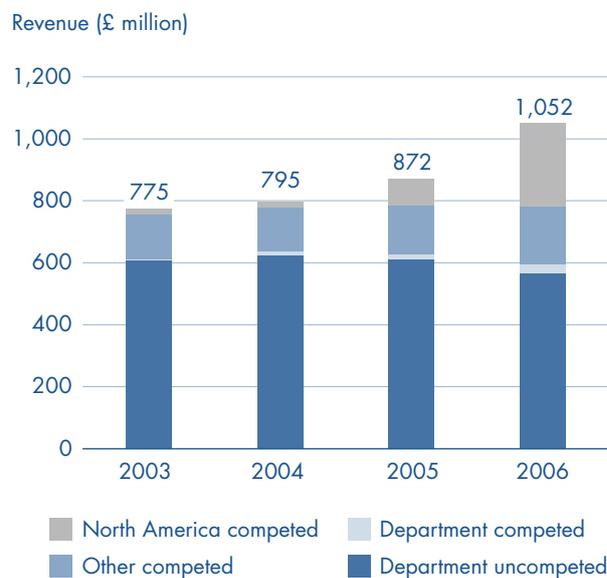
The business was well prepared and able to demonstrate growth

3.1 From 2002 Carlyle worked with QinetiQ management to strengthen financial controls in the business. Over the period 2003-2006 a concerted effort was made to improve cash management within the company. The quality of profits²⁸ rose from minus 34 per cent in 2003 to 155 per cent in 2006.²⁹ Carlyle was also instrumental in strengthening the Board of QinetiQ through the addition of private sector executives, including Sir Denys Henderson who formerly chaired ICI, Astra Zeneca and the Rank Group.

3.2 QinetiQ increased the level of revenue from outside the Department significantly from 2002. QinetiQ had been planning to move into the US defence market and had started identifying potential acquisition targets before the sale to Carlyle. It acquired eight businesses between March 2002 and October 2005, half of which were based in the US. These acquisitions were perceived successful by the market and the share of QinetiQ's revenue originating from the US increased by over 1440 per cent to £268.7 million between 2003 and 2006, as indicated in **Figure 11**. Over the same period the level of revenue from the UK increased by three per cent, so the overall growth in revenue was largely a result of the US acquisitions.

3.3 Despite this increased focus on revenue from other sources, QinetiQ kept the level of revenue from the Department broadly constant over the period 2002-2006. The Department was still by far the largest customer, accounting for some 57 per cent of QinetiQ's revenue in 2006. The majority of this business was awarded without competition.

11 Growth in revenue has come largely from US acquisitions



Source: The Parthenon Group report on the Formation and Privatisation of QinetiQ commissioned by the National Audit Office, July 2006

²⁸ The quality of profits is the cash generated from operations divided by the profit before interest and tax and signifies how much of the profits have been generated in cash.

²⁹ Figures are calculated from the 2003 and 2006 financial report and accounts. The 2006 figure has been computed under International Financial Reporting Standards (rather than UK GAAP) and therefore is not directly comparable.

The Department took steps to protect its interests

3.4 The Shareholder Executive³⁰, formed in 2003, seconded an individual to the Department to manage the Government shareholding in QinetiQ jointly with the Department. This strengthened the team responsible for the eventual flotation of QinetiQ. The Department recognised that whilst the interests of Carlyle were broadly aligned with its own in terms of growing QinetiQ's business, it was important to protect the Department's specific interests in any flotation. The Department staffed the team with people who had been directly involved in the creation of QinetiQ so that this experience was not lost.

3.5 The Department successfully protected its interests by planning for an early flotation. For QinetiQ to be marketed as a successful growth story its financial results had to support this. Following good growth in 2004-05 the Shareholder Executive and the Department examined three broad options for a flotation:

- as soon as practicably possible, by November 2005 at the earliest but up to February 2006, to capitalise on the favourable markets;
- June or July 2006, following the publication of another year's financial results; and
- after February 2007: following this date a decision on the timing would fall to Carlyle alone under the PPP contract.

3.6 Although it was recognised that waiting until after March 2006 would better demonstrate the growth potential of the business following the publication of the 2005-06 annual report and accounts, the Department chose to float the business as soon as possible. This decision was made to take advantage of the favourable market, to preserve the Department's control over the timing of the flotation, and with the knowledge that an early flotation would enable QinetiQ to develop its business strategy more rapidly. The Department agreed with Carlyle that both parties would sell down their shareholdings pro rata, thereby ensuring the continuing involvement of Carlyle in the business and adding credibility to future expectations of QinetiQ.³¹

3.7 The Department conducted a thorough analysis of the risks associated with reducing its shareholding in QinetiQ, recognising that this would significantly reduce its influence. Although the Department felt that the future provision of critical test and evaluation services was well protected under the Long Term Partnering Agreement contract, it took steps to ensure that it would not be overly reliant on QinetiQ in other areas. The programme to award a higher proportion of the defence research budget through competition is aimed at improving value for money and will eventually reduce the Department's reliance on QinetiQ. In recognition of this, the Department put in place measures to lift the restrictions on QinetiQ engaging in defence manufacturing work from April 2008. The Department created a Customer Group to monitor and advise on dependency issues and develop mitigation strategies if necessary. The Department has also retained the right to appoint a non-executive director on the Board of QinetiQ³² although it will lose this right if its stake in the business falls below ten per cent.

3.8 The special share established when QinetiQ was formed in 2001 (see paragraph 1.23) was reviewed and amended in light of the planned flotation. There were changes to the powers of veto granted under the share so that so that they also covered the ownership of QinetiQ shares. Broadly these extensions give the Department the right to:

- require the disposal of some or all of shareholdings of three per cent or more of QinetiQ where the shareholding would be contrary to the defence interests of the UK; and
- require any shareholder that has a material conflict of interest, such as through its involvement in defence manufacturing, and owns ten per cent or more of QinetiQ to dispose of shares so that it holds less than ten per cent of QinetiQ.

30 The Shareholder Executive was created to fundamentally improve the Government's performance as shareholder in wholly and partly Government owned business.

31 Carlyle subsequently announced the sale of their remaining shares in QinetiQ on 8 February 2007.

32 This role is currently fulfilled by Mr Colin Balmer.

The process for appointing advisors for the flotation was robust

3.9 Advisors to manage the flotation, called the Global Coordinators, were appointed jointly by the Department, Carlyle and QinetiQ through a robust competitive process. Seven banks were shortlisted from a field of twelve and were asked to respond to a detailed questionnaire on their approach to valuing and presenting the company to investors. As part of the competitive process, they were also asked to amend the draft underwriting agreement³³ provided to them. Advisors were scored across several areas including their understanding of the business, their ability to distribute the shares and run an efficient flotation, the strength of the team, and their proposed fee.

3.10 The Department, Carlyle and QinetiQ elected to appoint another advisor to provide independent financial advice in relation to the advice provided by the Global Coordinators. This decision was taken to avoid the potential conflict of interest arising from banks advising on the form of the offer when their fee was linked to this. As a result banks were asked to bid on the basis of providing independent advice, for a fixed fee, as well as coordinating the offer.

3.11 Three banks were appointed as joint Global Coordinators, and a fourth bank appointed to provide independent advice and critique the Global Coordinators' approach. The agreed fees were in both cases the lowest quote provided across the field of bidders. ABN AMRO

Rothschild were paid a fixed fee of £1 million for advising and the Global Coordinators – Credit Suisse, JP Morgan Cazenove, and Merrill Lynch – were paid a commission of 2.5 per cent of the gross proceeds of the offer, 1.75 per cent of which was discretionary; all fees were paid jointly by the Department, Carlyle and QinetiQ.

3.12 The Department's analysis of recent flotations showed the commission to be towards the lower end of the range. The percentage agreed was higher than paid in previous privatisations (**Figure 12**) when commissions generally were much lower, at two per cent. Moreover, at the time of the QinetiQ flotation the market was strong with many other deals competing for funds.

The marketing was successful in building demand although the lack of a dedicated offer to the public created adverse publicity

3.13 The Global Coordinators conducted extensive marketing from 5 to 25 January 2006, carrying out over 350 one-to-one meetings to educate potential investors in Europe and the US. Responses were broadly positive although there were some concerns about the projected decline in guaranteed income from the Department, which intended to award more of the research budget through competition. The Global Coordinators proposed a price range of 165–205 pence based on the marketing and the issue price was set at 200 pence.

12 The commission for the QinetiQ flotation was higher than in past privatisations but in line with market practice

Company	Date	Type	Size of offer (£ million)	Total Commission (%)
Private Co. A	mid 2005	Flotation	993	3.8
Private Co. B	mid 2005	Flotation	702	4.0
Private Co. C	mid 2005	Flotation	403	3.5
British Energy	July 1997	Privatisation	1,400	1.25
Railtrack	May 1996	Privatisation	1,916	1.5
QinetiQ	February 2006	Privatisation	650	2.5

Source: National Audit Office and Simmons & Simmons analysis

³³ The underwriting agreement sets out the basis on which the Global Coordinators guarantee to buy the shares in QinetiQ at a predetermined price in order to sell them on to the market.

3.14 The Department took advice from the Global Coordinators on whether an offer to the general public was appropriate and were informed that this would be unlikely to have a positive impact on the share price achieved. They also felt that the complex nature of QinetiQ did not make it an ideal investment for the general public and would add significantly to the cost of marketing the issue. There was always an option for the public to apply for shares through a broker although there would be a low likelihood of a broker being allocated a significant number of shares for this purpose. The Global Coordinators cautioned that promoting this route could be seen as favouring affluent investors. Although ABN AMRO Rothschild, in their role as independent advisors, felt there was little downside to providing access to the public through brokers, the Department did not publicise this option until a late stage in the process.

3.15 Following the preliminary marketing, the Global Coordinators facilitated roadshows between 25 January and 9 February 2006 to establish the level of demand for the shares. These covered over 290 potential investors and indicated that the demand was over eight times greater than the available shares, including a greenshoe³⁴ of 15 per cent, at the bottom end of the price range. The flotation took place on the 10 February 2006 and valued the equity of QinetiQ at £1.3 billion including £150 million of new money raised by QinetiQ. This represented an increase of over 10 times the £125 million equity value in February 2003. The Department received net proceeds of £300 million from the flotation after paying £45.3 million under the pension indemnity, agreed during the sale to Carlyle, and advisors' costs of £10 million.

3.16 The decision not to promote the ability of the general public to purchase shares through a broker created a great deal of adverse publicity. Many members of the public applied for shares through financial intermediaries although the demand was such that they received only one sixth of the allocation they requested in common with the average for institutional investors. The negative publicity could have been avoided if this route had been publicised at the outset, while clarifying the risks this shareholding carried.

³⁴ A greenshoe option permits the sale of an additional tranche of shares to stabilise the share price if demand is high.

PART FOUR

It is too early to be able to assess authoritatively if some of the objectives have been met

The business appears to be performing satisfactorily in the private sector

4.1 The financial performance of QinetiQ has improved significantly over the period 2003 to 2007 following the appointment of a strategic partner as set out in **Figure 13**. The increase in the Return on Capital Employed occurred despite increased long term debt to finance acquisitions. The overall growth in revenue has been almost completely as a result of the US acquisitions. Although UK revenue has not grown significantly, QinetiQ has been able to find new sources of revenue to balance the decline in the Department's research budget.

4.2 In 2003, the ventures business, responsible for commercialising past research, generated revenue of £0.7 million, by 2007 this had increased to £12 million. Despite this increase in turnover the ventures business still generated an operating loss of £6.9 million in 2007 (down from £11.8 million in 2003) due to the high level of investment required to develop these products. Specific ventures include the Tarsier radar for detecting debris on airport runways, which has been sold in Dubai and Vancouver and is being trialled at Heathrow, and SatID technology for detecting satellite interference. In June 2004 QinetiQ sold their stake in the joint venture pSiMedica, a company exploring the use of porous silicon for medical applications; this realised a profit of £17 million at that time.³⁵

4.3 **Figure 14 on page 34** shows the movement of the QinetiQ share price relative to the most appropriate market indices;³⁶ the share price and indices are based to the issue price of 200 pence. This shows that for a large part of the time since the flotation the share price has been below the issue price. The success of the flotation was principally driven by the strong growth story which relied heavily on expansion into the US market through acquisition. More recently, QinetiQ's ability to win significant contracts, including its involvement in the consortium-named preferred bidder for one element of the Defence Training Review and provisional preferred bidder for the other, has contributed to an increase in the share price.

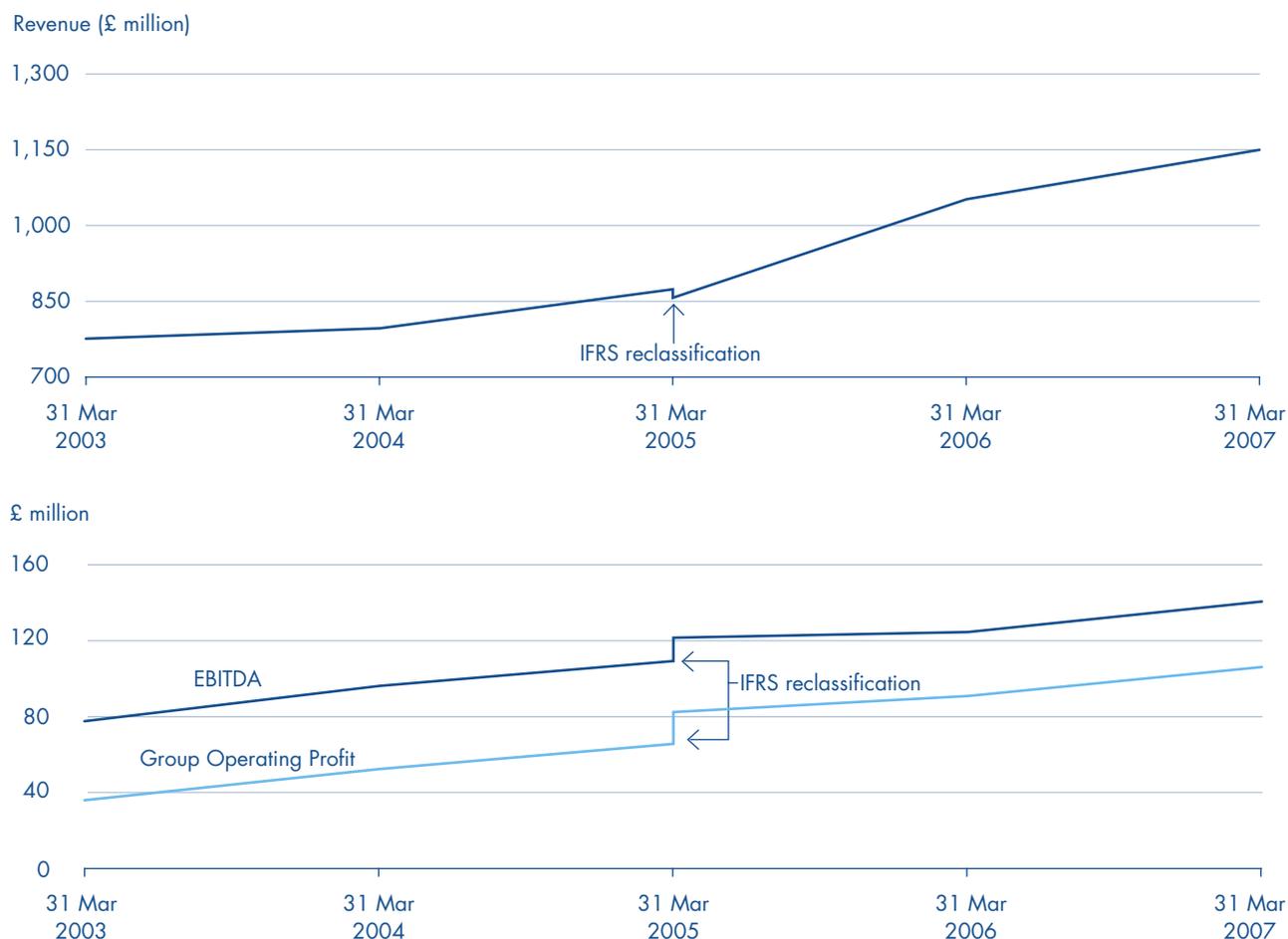
The mechanisms for protecting defence interests appear to be working as intended

4.4 In seeking to develop its commercial business and use its expertise to influence the development of equipment, QinetiQ has had to manage the inherent conflicts of interest that arise from its role as the primary source of independent advice to the Department. The Department acted to prevent the most severe conflicts by its decision not to allow defence manufacturers to bid for a stake in the business. The Compliance Regime (paragraph 1.24) provides the framework by which the residual risk is managed through the creation of 'firewalls'. From June 2001 to June 2006 QinetiQ reported over 310 potential conflicts of interests, and the treatment of these is set out in **Figure 15 on page 34**.

³⁵ QinetiQ received cash and shares in consideration for their stake in pSiMedica.

³⁶ Indices used are: SPADE, FTSE 250, FTSE Technology, FTSE Techmark and FTSE Techmark 100.

13 QinetiQ has significantly improved its financial performance from 2003 to 2007



Source: QinetiQ Group Financial Accounts 2002-03 through 2006-07 and IPO prospectus

NOTE

1 QinetiQ was required for the first time to prepare the Group's 2005-06 annual financial statements on the basis of international financial reporting standards (IFRS). The financial information prepared in accordance with IFRS for FY 2005 is presented for comparative purposes only.

4.5 QinetiQ and the Department regard the Compliance Regime as a success, although there are a number of residual risks that must be managed adequately to ensure that all stakeholders' interests continue to be protected:

- Although QinetiQ must agree all firewalls (paragraph 1.24) formally with the relevant Departmental project team, their operational integrity is not verified independently beyond the oversight provided by the Compliance Committee. The Department believes that it has high visibility of the operation of the regime and the firewalls through its frequent interaction with QinetiQ at company level. It also considers that its legal rights and the potential negative impact on the company's reputation serve as an adequate incentive on QinetiQ to avoid breaching the compliance requirements.
- The removal of the constraints on QinetiQ's expansion into defence manufacturing after April 2008 may create logistical difficulties if it leads to an increasing number of firewalls that need to be managed. This could potentially impair the effectiveness of the firewalls.

14 The QinetiQ share price since the flotation

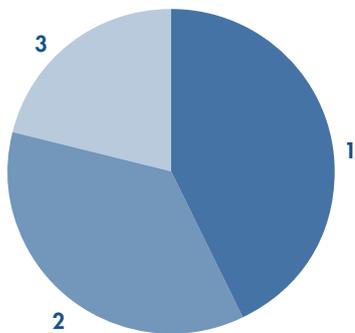


Source: National Audit Office analysis

NOTE

¹ Indices used are: SPADE, FTSE 250, FTSE Technology, FTSE Techmark and FTSE Techmark 100.

15 Firewalls were implemented in 43 per cent of cases assessed under the Compliance Regime



- 1 Constituted a real conflict of interest requiring a firewall to be established (43 per cent)
- 2 Did not constitute a conflict of interest in the eyes of the Department (36 per cent)
- 3 Request withdrawn by QinetiQ as they chose not to pursue the commercial activity (21 per cent)

Source: National Audit Office analysis

4.6 The Department and QinetiQ decided in September 2006 that the Department's Internal Auditors should address these risks by auditing the Compliance Regime. The Department's aims are to review the effectiveness of the Compliance Regime process and its application.

Significant proceeds were achieved

4.7 The Department has received net proceeds of £576 million from the transaction to date as shown in **Figure 16**. In addition, as at 31 October 2007 it also retained a 19 per cent shareholding that was worth £235 million. The flotation itself generated approximately £300 million, net of costs, for the Department with the balance of the proceeds coming from the repayment of the debt in the business and the sale to Carlyle.

4.8 The Department incurred total costs of £76 million throughout the privatisation process; £28.0 million on consultants, £2.4 million on internal costs and £45.3 million on contributions to the pension fund. These are set out in **Figure 17 overleaf**.

4.9 DERA, and latterly QinetiQ and DSTL, recorded total costs of £68 million. The bulk of these related to the substantial task of restructuring DERA although QinetiQ also incurred significant costs during the PPP transaction and flotation.

Greater proceeds might have been achievable from sale to a strategic partner

4.10 After taking into account all the negotiated and agreed deductions, the sale to Carlyle gave an enterprise value for QinetiQ of £319 million. To achieve a fair value in a trade sale competition needs to be strong. The competition for the sale of a stake in QinetiQ left the Department with one credible bidder, Carlyle. When Carlyle were appointed preferred bidder two price sensitive commercial issues were still outstanding. The Department notes that it attempted to close down uncertainty for bidders by issuing 'heads of terms' for the Long Term Partnering Agreement (LTPA).

4.11 Carlyle attempted to negotiate a £50 million reduction in value in relation to the LTPA, which was eventually agreed at £30 million³⁷ and the sale of an additional 2.5 per cent of equity. The Department received £3 million consideration for the additional equity.³⁸ The Department has told us that it and its advisors believed the changes were necessary to allow the deal to proceed. We believe that the £30 million reduction in value was insufficiently justified (see Appendix 5). Carlyle also negotiated an immediate value reduction of £25 million³⁹ and an indemnity capped at £45 million in relation to the pension fund deficit (see paragraph 2.29); this gave the Department the potential to benefit if the pension deficit recovered. If the deficit remained at the flotation, the pension indemnity was to be paid into the QinetiQ pension fund; the Department, as a shareholder, would therefore benefit proportionally from the increase in the value of the company. The Government Actuary's Department advised that an amount between nil and £70 million could have been justified. The present value of the total deduction was £59 million at the time of the sale to Carlyle.

16 The Department received net proceeds of £576 million

		£ million
Direct Costs	Advisors	(28.0)
	Internal	(2.4)
Other Costs	Pension indemnity	<u>(45.3)¹</u>
		(76)
Income	Loan repayment: ²	
	in 2002, prior to the sale to Carlyle	57.8
	at completion of the sale to Carlyle (see Figure 10)	56.2 ³
	disposal of Chertsey property	60.0 ³
	Sale of shares to Carlyle	39.3 ³
	Preference share repayment	82.4 ⁴
	Flotation	<u>355.9⁵</u>
		<u>652</u>
Net Proceeds		<u>576</u>

Source: National Audit Office analysis

NOTES

- 1 The pension indemnity was agreed as part of the sale to Carlyle and was paid at flotation when QinetiQ's pension deficit failed to recover from the time of the sale to the flotation (see paragraph 2.29).
- 2 Represents the repayment of the £156 million loans, and associated interest (£18 million), established when QinetiQ was created (see paragraph 1.21) including the proceeds from the Chertsey disposal which were agreed to count towards the repayment of the loans.
- 3 Represents the proceeds of £155 million received at the sale to Carlyle (see Figure 9).
- 4 Represents the repayment of the Department's preference shares (see Figure 9, note 3) and interest at 9 per cent per annum.
- 5 Represents the proceeds from the sale of approximately 32 per cent of QinetiQ after an increase in the share capital following the issue of new shares by the company. The Department still retains a 19 per cent stake in the business.

4.12 The Department considers that its strategy to introduce a strategic partner maximised overall value and that seeking to achieve greater proceeds from the initial sale could have lowered eventual receipts. We recognise that the strategic partner model had benefits in improving the value of the business in advance of a flotation. We consider, however, that weak competition (see paragraph 2.10) and the negotiated reductions in value (see paragraph 2.26) suggest that greater proceeds might have been achievable from the sale to Carlyle. The Department and UBS Warburg disagree with this assertion. Various other indicators support our view:

³⁷ Equivalent to an £11 million reduction in the value received by the taxpayer (see paragraph 2.25).

³⁸ This amount of equity was worth £27 million at the flotation.

³⁹ Equivalent to a £10 million reduction in the value received by the taxpayer (see paragraph 2.25).

17 The Department incurred costs of £76 million (exc VAT) throughout the privatisation

External consultants	Description of consultancy role	(£000)
Simmons & Simmons	Legal advisors throughout the privatisation	10,747
PwC	Consultancy services and accounting advice	3,704
Arthur Andersen	Reporting accountants	1,334
UBS Warburg	Financial advice and managing the sale to the strategic partner	2,520
Rangefield	Accounting advice in the separation of DERA	93
Hogarth	Public relations advice throughout the privatisation	87
GAD	A Government Department and an actuarial consultancy operating on commercial lines giving independent professional advice within the public service	273
Willis	Insurance advisors providing specialist advice relating to division of liabilities between the Department and QinetiQ	60
DJB	Provision of specialist advice on property valuation real estate issues	80
Other	Specialist legal advice	13
Joint Global Coordinators Merrill Lynch Credit Suisse JP Morgan Cazenove	Coordinated the flotation	8,770
ABN AMRO Rothschild	Independent advisors appointed to provide financial advice on the flotation	335
Total Consultants¹		28,016
Cost of Department's staff		2,366
Pension indemnity		45,300
Total		75,682

Source: National Audit Office analysis

NOTE

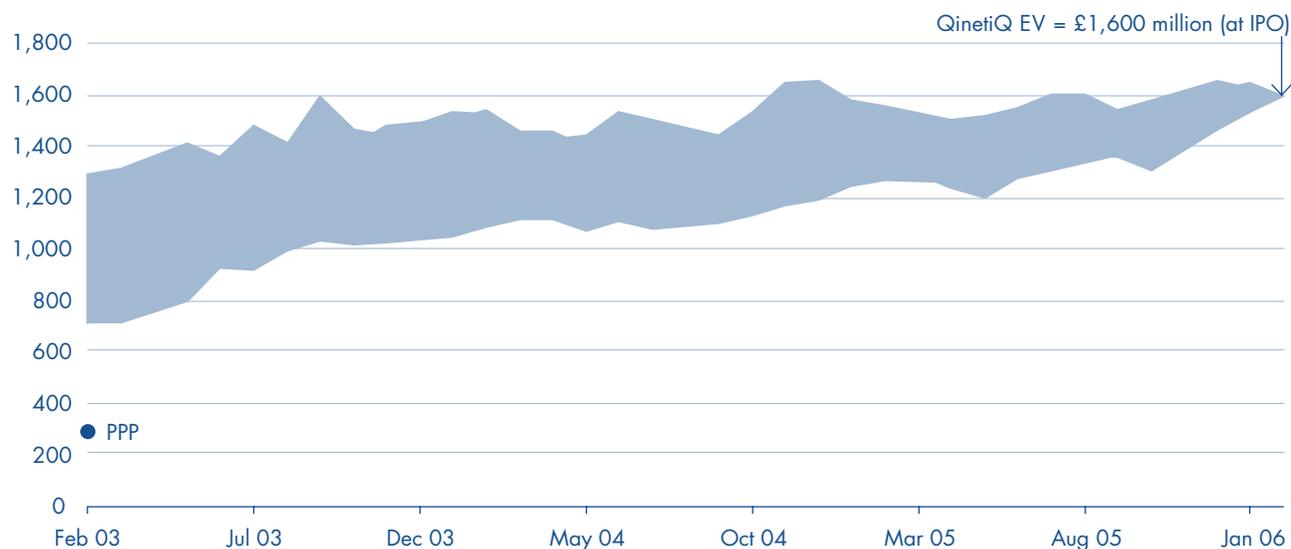
1 Consultant costs exclude VAT.

- The value of QinetiQ in relation to market indices. **Figure 18** shows the enterprise value of QinetiQ at flotation and the sale to Carlyle (PPP) with reference to several relevant market indices.⁴⁰ The indices are all based to the value of QinetiQ at flotation in order to show the expected value at PPP if the value of QinetiQ had tracked the technology and defence market. Based on this, QinetiQ was either undervalued at PPP, has significantly out performed the market or a combination of the two. The Department does not accept that market indices have any relevance to an unlisted company as QinetiQ then was. It also considers that the absence of a commercial track record at the time of the PPP would have reduced the value of the business relative to comparable listed businesses.
- The Parthenon Group analysis that valued QinetiQ, at the time of the sale, within the range £341-£513 million with a mid point of £427 million. The sale arrived at an enterprise value of £319 million. The Department considers that theoretical valuations are of limited relevance and that the price negotiated in the sale to Carlyle is the only true measure of QinetiQ's value at that time.
- The fact that the net assets of QinetiQ were sold for £89 million less than their fair book value. Book value is not a good guide to market value but is often taken to be the minimum value of a business that is not a going concern. The Department does not accept this comparison and notes that some of QinetiQ's assets had book values that did not accurately reflect their market value.

⁴⁰ Although the indices are based on the equity value of comparable companies we have compared this to the enterprise value (i.e. debt plus equity) due to the highly leveraged nature of the returns. Indices used are: SPADE, S&P AD, FTSE 250, S&P 500 system software, NASDAQ, DJUS tech software, DJUS tech, S&P tech hardware, S&P Aero & Defence, FTSE A&D, FTSE Techmark 100.

18 Value of QinetiQ at PPP and flotation with reference to several key indices¹

Indexed to IPO Valuation (10 February 2006) (£ million)



Source: Parthenon report on the Formation and Privatisation of QinetiQ commissioned by the National Audit Office, July 2006

NOTE

¹ Indices used are: SPADE, S&P-AD, FTSE 250, S&P 500 system software, NASDAQ, DJUS tech, S&P tech hardware, S&P Aero & Defence, FTSE A&D, FTSE Techmark 100.

4.13 We have calculated the Department's notional internal rate of return⁴¹ from the creation of QinetiQ to 31 October 2007 and found it to be 14 per cent. This assumes that the significant investment the Department has made in DERA over the years is equal to the opening book value of the shares and loans in the business in July 2001, £502 million. It also takes into account the costs incurred by the Department throughout the process, including the substantial costs incurred in splitting DERA into two organisations, but does not attempt to quantify non financial benefits. The Department does not accept that the book value of QinetiQ at incorporation is a robust measure of the value of the business at that time and considers that it is not possible to derive an accurate estimate of the return it has achieved over the whole privatisation.

4.14 Carlyle achieved an internal rate of return of 112 per cent from their investment in QinetiQ. Over the same period the Department has made a similar return of 99 per cent. The Department's return ignores the receipts from the 2003 sale and includes the value of the Department's retained stake as at 8 February 2007, the date Carlyle sold their remaining shares. The Department's

internal rate of return is less than Carlyle's because it incurred significant costs as a consequence of the PPP process.⁴²

It is too early to judge whether most of the other objectives have been met

4.15 The Department had a broad range of objectives in part-privatising DERA (set out in Appendix 2). Although the Department has told us it plans to carry out a post-project evaluation, no timetable has been set. Fully assessing the extent that objectives have been achieved will be challenging. The tangible outputs from research activity are difficult to measure because of the long lead time before results are realised. The Department's initiative to put in place metrics for measuring these outputs has not yet been fully developed though in time these should allow QinetiQ's performance to be appraised, albeit without benchmarking it to the performance of DERA. We have therefore been unable to reach conclusions on whether QinetiQ has been able to deliver the reduced contract prices, enhanced flexibility and improved service envisaged at the outset of the privatisation.

⁴¹ The internal rate of return is the discount rate at which the present value of all cash flows will be zero, it is used to rank investment opportunities, the higher the IRR the more profitable the investment. For our analysis we have included the value of the retained shares of the Department as at 31 October 2007.

⁴² It is not possible to calculate the Department's final internal rate of return until it has sold its remaining shareholding in the business.

4.16 The Department appears to have created a successful independent organisation in QinetiQ, although its future success will depend on its continued ability to win contracts as a greater proportion of the research budget is awarded through competition. QinetiQ has broadened its customer base but still relies heavily on the Department for the majority of its revenue.

4.17 One of the Department's objectives was to provide QinetiQ with the flexibility to address skills shortages in critical technologies through greater flexibility in its remuneration and incentivisation policies. The privatisation has allowed QinetiQ to link its remuneration to market and individual performance. Flexible benefit arrangements have also been introduced to allow staff to have greater control over their remuneration packages. The extent to which this has resulted in an improved ability to address skills shortages is unclear due to a shortage of information. The annual rate of resignations in QinetiQ, however, has been consistently lower than benchmarks.⁴³

The Department chose to rely on Carlyle's expertise in developing the management incentive scheme

4.18 Although not specified as an objective at the outset of the privatisation, the Department had given assurances to the House of Commons Defence Committee that it did not want to see individuals becoming instantly rich simply by virtue of the privatisation, although it considered that if the management prospered because the business had, this would be acceptable. The Department considers that the eventual returns received by management were consistent with the objective of maximising the growth in the value of the business.

4.19 The success of the flotation ensured that the second performance ratchet in the management incentive scheme, which was based on the increase in equity value, was surpassed. The highly geared structure of QinetiQ at the time of the sale resulted in a relatively low initial equity value, which was the baseline for measuring the increase in equity value. Appendix 4 sets out how the ratchets (see paragraph 2.19) substantially increased the shareholdings of senior management. The value of the shares held by the various classes of shareholder and the top four managers under the scheme are set out in **Figure 19**.

19 The returns to senior management at the date of the flotation

Shareholder	Total investment (£ million)	Value of shares at flotation (£ million)	Return on Investment (%)	Return for each £1 invested
Top 10	0.54	107.45	19,900	200
Top 245	0.45	65.26	14,400	145
Co-investment scheme	4.63	41.04	786	9
The Department	78.12	689.92	786	9
Carlyle	42.25	374.22	786	9
Share options	Free	24.67	N/A	N/A
Chief Executive (Sir John Chisholm)	0.13	25.97	19,900	200
Chief Financial Officer (Mr Graham Love)	0.11	21.35	19,900	200
Group Commercial Director (Mr Hal Kruth)	0.07	13.88	19,900	200
Marketing Director (Ms Brenda Jones)	0.06	11.18	19,900	200
Non-executive Directors	0.10	0.89	786	9

Source: Wilmington Capital report commissioned by the National Audit Office, July 2006

43 QinetiQ uses benchmarks drawn from the PricewaterhouseCoopers/Saratoga HR index.

4.20 In June 2005 the Department negotiated ‘lock up’ arrangements, the provision for which had been set out in the Shareholder Subscription Agreement at the time of the sale to Carlyle. These restricted the ability of the top ten managers to sell more than 15 per cent of their shares at the flotation and set limits on what they could sell for the following three years. This ensures that management continue to be incentivised to grow the value of the business. Although some of the top ten managers sold shares at the flotation, the chairman (formerly chief executive officer) and chief executive officer (formerly chief financial officer) did not.⁴⁴ The lock up arrangement for the chairman, however, allows him to sell all his shares from August 2007 if he relinquishes his non-executive role in the business.

4.21 The share incentive scheme encompassed more staff than most private equity transactions and the total proportion of equity available to staff was towards the high end of market practice, as were the returns to the top four individuals. The Department considers that the incentive scheme was an integral part of the achieving the growth realised at the flotation and that the targets set were challenging given the assessments of likely growth made at the time. We believe that a comparable increase in the value of the business could have been achieved with the prospect of more moderate returns for management. The Department and QinetiQ disagree with this conclusion and believe a different incentive structure could have restricted growth at the top end and reduced the overall return to the taxpayer. Although we accept that limiting returns to management can diminish the attraction of such deals to potential investors, we consider that the returns in this case exceeded those necessary to incentivise management to deliver the growth achieved in the value of the business.

4.22 The Department allowed Carlyle to design the structure of the incentive scheme with input from QinetiQ management, believing that its interests were aligned with Carlyle’s who had experience of designing incentive schemes. It did not seek separate professional advice from specialist consultants, or the remuneration committee, on the structure of the incentive scheme. The Department considers it would not have been appropriate to rely on the views of the remuneration committee in approving the incentive scheme. It believes the review of a limited range of potential outcomes based on the expectations of growth at the time (see paragraph 2.17) gave it appropriate assurance that its interests were protected. The remuneration committee, however, did consider it

had an interest in the scale of returns management could receive and commissioned Rothschild to conduct analysis of the potential extent of the returns (see paragraph 2.17).

The Department must actively manage ongoing risks to ensure it achieves value for money

4.23 The Long Term Partnering Agreement, signed at the time of the PPP, sets out the terms and conditions for the provision of test and evaluation services for 25 years (see paragraph 2.27). The price of these services is fixed for the first five years but subject to negotiation for each subsequent five-year period. This exposes the Department to two major price risks:

- The Department may be exposed to significant price increases if it does not develop appropriate benchmarks against which to negotiate the proposed costs at each review period. This risk is greater in year ten (and at each subsequent review), as QinetiQ has the right to terminate the contract if it does not agree to the outcome of the price reviews. The Department has recognised this and in February 2007 decided to review some of the services conducted by QinetiQ to build cost benchmarks in advance of the first review in March 2008.
- If there are no other contractors that can supply these services in the market, QinetiQ may be able to negotiate significant price increases.

4.24 The Department carried out a detailed study of its dependency on QinetiQ prior to the flotation (see paragraph 3.7). The Customer Group, created following this study to monitor ongoing dependence, must have regard for the initiative to award more of the research budget through competition. A fixed percentage of the research budget⁴⁵ is allocated to QinetiQ and this is set to decrease year by year. The remaining budget is awarded through competition except where it is decided that there is insufficient capacity in the market to support an effective competition. In these cases contracts are awarded to a single supplier. The Department does not currently monitor how much of the total relevant research budget is being awarded to QinetiQ but changes to its reporting systems will make this simpler from 2007. An overdependence on QinetiQ could impact on the value for money obtained from defence research.

⁴⁴ The current chief executive officer, Graham Love, sold 2.9 million shares, approximately one third of his shares in the business, in February 2007 but purchased an additional 50,000 shares in August 2007.

⁴⁵ What formally comprised the Applied and Corporate Research Programmes.

APPENDIX ONE

Our methodology

The study sets out to examine the extent to which the privatisation of QinetiQ has met its objectives. In doing this we have examined the process followed, from the decision to pursue a Public Private Partnership to the flotation. One of the challenges we faced was the significant length of time that had elapsed since the decision was taken. QinetiQ was formed in 2001 and the sale of a stake to Carlyle took place in 2003. Although the NAO has previously reported on aspects of the deal, this has not been from a value for money perspective. For this reason we conducted a thorough review of all available documentary evidence. The main techniques we used to gather and process evidence are as follows:

Examination of key documents and reports

We undertook a detailed review of relevant documents relating to all stages of the privatisation, from the initial decision to pursue a PPP to the eventual flotation. Many of these were requested from the Department's archives. Our review incorporated consultant's reports, minutes of meetings, correspondence, ministerial submissions and the sale documentation as well as past NAO work in this area and the work of the House of Commons Defence Select Committee.

Semi structured interviews

We conducted interviews with the following key stakeholders, maintaining contact throughout the study where this was appropriate:

- The Department, including members of the DERA Partnering Team and the Defence Procurement Agency (responsible for negotiating the LTPA)
- QinetiQ, including the chief executive and chief financial office at the time of the privatisation and a representative selection of staff from across the organisation

- The Carlyle Group
- The Shareholder Executive
- The Treasury
- UBS Warburg
- PricewaterhouseCoopers
- Simmons & Simmons
- Rothschild

We also contacted all those who submitted bids for a stake in QinetiQ in 2002 with a questionnaire and followed this up with interviews where relevant issues were raised.

Engaging consultants

We engaged two independent consultancy firms to carry out distinct packages of work. Consultancy firms that had been involved in giving advice at any stage of the privatisation were omitted from the competition on the grounds of potential conflict of interest. The scope of this work is set out below:

The Parthenon Group

To carry out an independent valuation of QinetiQ at each key stage of the process (incorporation, PPP and flotation) based on the information available at that time.

To review critically valuations of QinetiQ undertaken at all stages of the process. These included valuations prepared by the Department's consultants and those supporting bids for the purchase of a stake in the business. This involved a review of the assumptions and methodology and an assessment of how appropriate these were.

Wilmington Capital

To examine and comment on the capital structures of QinetiQ when it was formed in July 2001 and when it was restructured following the sale of a stake to Carlyle.

To review the share incentive scheme, model its potential outcomes and benchmark the rewards obtained under the scheme against market practice.

Financial analysis

We conducted a thorough examination of the costs incurred and proceeds received by the Department throughout the process. These were used to calculate the notional internal rate of return achieved. We have analysed the publicly available financial information of the company and also the performance of the most comparable listed companies in order to evaluate QinetiQ's performance. We also analysed the cash flows of the Long Term Partnering Agreement through detailed review of the contract, financial model and the evaluation prepared by UBS Warburg.

Expert Review Panel

We consulted with a panel of experts on our evidence base, analysis and the resulting conclusions throughout the project. The panel consisted of the following:

- Jon Moulton – founder and managing partner of the private equity group Alchemy Partners. Alchemy has worked on over 100 private equity deals, with more than £1.8 billion of equity invested to date.
- David Kirkpatrick – Emeritus Professor of Defence Analysis, University College London. He has been a specialist adviser to the House of Commons Defence Select Committee on many occasions.
- David Parker – Research Professor in Privatisation and Regulation at Cranfield School of Management since 1 October 2003. Official Historian for UK Privatisation, Cabinet Office, UK Government.
- Paul Beaver – a respected journalist and commentator on defence issues who writes for the Defence industry publication *Jane's Defence Weekly* and others.

APPENDIX TWO

Objectives in privatising the Defence Evaluation and Research Agency

Objective

Decision to pursue a Public Private Partnership

Deliver two sustainable structures in QinetiQ and DSTL, which will provide value for money and a range of benefits in defence research including:

Introduction of commercial disciplines, to achieve reduced contract prices for the Department and other customers as a result of increased competition, economies and productivity.

Enhanced flexibility to develop commercial business partnerships and engage in a greater range of joint ventures, thereby positioning itself to anticipate, rather than merely react to, customer needs.

Access to private capital through either equity or debt in order to build capability and support future investment in technology.

Strengthening the links between the civil and defence technology so the Department and the wider economy benefits from broader application of technological advances.

Effective and productive relationships between private and public sector reflecting the Department's aims under the Smart Acquisition Initiative.

The ability to address skills shortages in critical technologies through greater flexibility in remuneration.

A structure that provides international partners and other stakeholders with confidence so that collaborative relationships will be maintained and protected.

Sale to a Strategic Partner

The continuing availability to the Department of the scientific and technical capabilities required to support UK defence needs and maintain international collaborative research programmes.

Overall Value for Money for the Department and the taxpayer, including transaction receipts and the continuing provision of cost-effective services to the Department and other government departments.

Implementation of a share scheme for all employees consistent with achieving Value for Money.

Wider UK policy interests, including the strengthening of links between military and civil technology and encouraging the commercial exploitation of defence funded technology.

Overall compatibility with Government policy on: science, defence research, and procurement generally.

Flotation

To ensure that appropriate protections are established/ remain in place to safeguard the defence and security interests of the UK following any transaction.

To ensure that the transaction structure and any associated changes in the legal and contractual framework for QinetiQ are consistent with the key requirements endorsed by Ministers at the time of the original PPP transaction with The Carlyle Group.

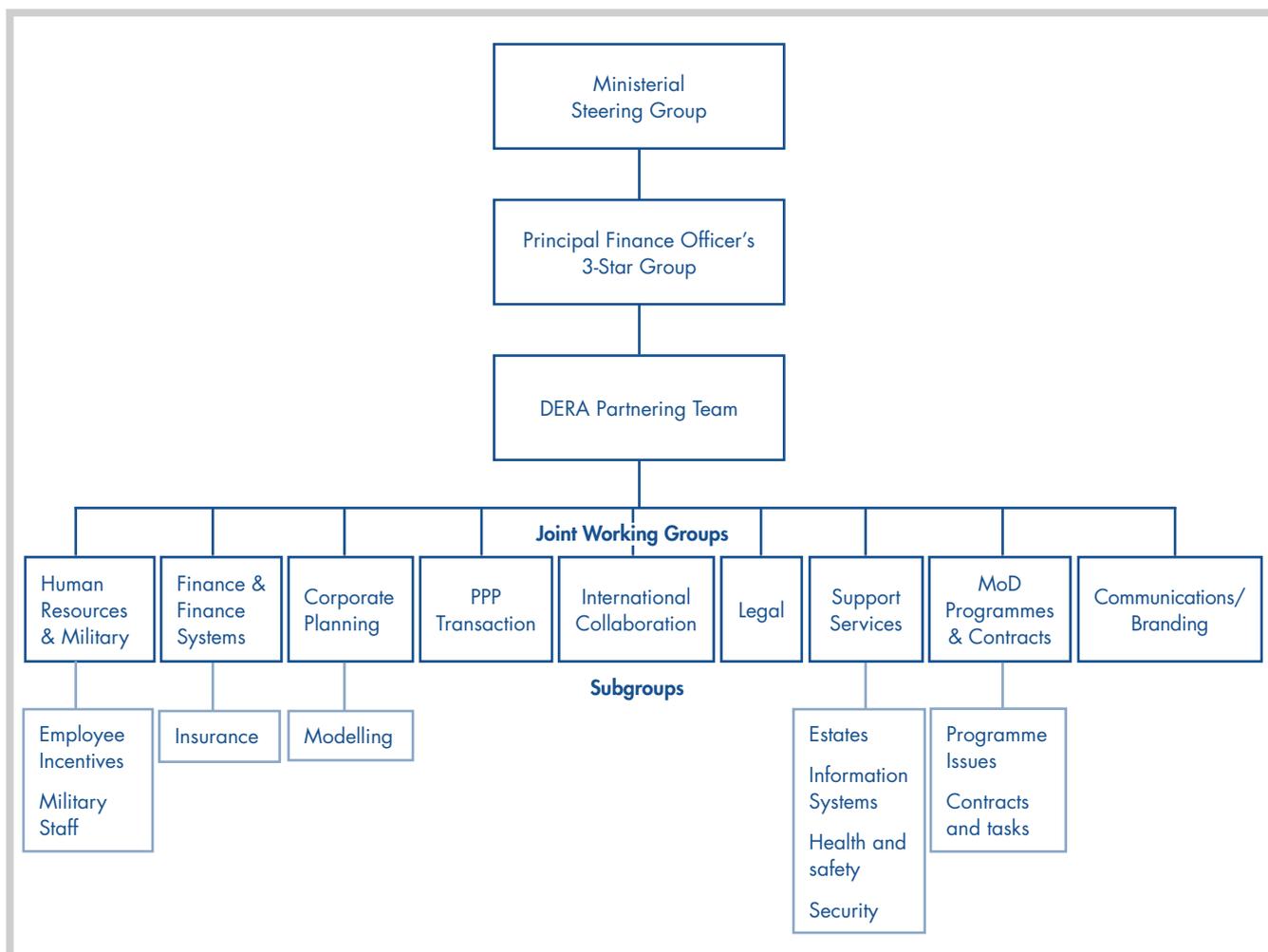
To maximise the value of QinetiQ at sale, while having regard to the requirement to achieve a stable price in the market, and over the longer term to maximise the value of the equity retained by the shareholders.

To identify and actively manage risk to the Department and UK Government throughout the process.

To ensure the achievement of value for money from expenditure related to the sale.

APPENDIX THREE

Restructuring of DERA: project management arrangements



APPENDIX FOUR

Operation of the management incentive scheme

The share incentive scheme had four elements that provided different levels of returns:

- 1 All employees received forty share options (for free) that were exercisable from the flotation onwards.
- 2 All employees could choose to invest a minimum of £500 in the co-investment scheme. This scheme was structured on the same basis as the shares held by the Department and Carlyle that consisted of non-voting redeemable preference shares and ordinary equity in a ratio of 9:1. Essentially, for every £500 investment, £450 was invested as preference shares and £50 as ordinary equity. The preference shares paid interest at 9 per cent that was compounded annually and payable when the preference shares were redeemed.
- 3 The top 245 senior managers were given the opportunity to invest in ordinary equity that benefited from a performance ratchet.
- 4 The top 10 managers were given the opportunity to invest in ordinary equity that benefited from a double performance ratchet.

The top 245 and top 10 managers could be requested to sell their holdings of ordinary equity before a flotation for the lower of the purchase price or the fair market value, as determined by the Board, if they were considered to be a 'bad leaver'. The Board had some discretion in the determination of what constituted a 'bad leaver' but this could cover voluntary departures and dismissals.

The returns available to these different classes were related to the eventual value of the company but the ratchets would award more shares to the top managers when certain performance thresholds were met.

The First Ratchet: This represented an additional allocation of 5.05 per cent of ordinary shares to the top ten (2.75 per cent) and the top 245 (2.30 per cent) senior managers if the value of Carlyle's and the Department's investment increased at flotation by more than three times and achieved an internal rate of return of 30 per cent.

The Second Ratchet: An additional 2.53 per cent of ordinary equity was allocated to the top ten senior managers if the value of Carlyle's and the Department's investment increased at flotation by more than four times and achieved an internal rate of return of 40 per cent.

Effectively, the ratchets diluted the shares held by the Department, Carlyle and the co-investment scheme proportionally to the size of the shareholdings after the operation of each ratchet. The operation of the ratchets awarded senior management an additional 7.3 per cent of equity, 4.8 per cent coming from the Department and 2.5 per cent from Carlyle. The overall effect on the percentage of shareholdings per class of investor is demonstrated in **Figure 20**.

20 The ratchets amplified returns based on performance

Shareholders	Base Case ¹ %	First Ratchet %	Second Ratchet %
The Department	56.70	53.54	51.89
Carlyle	30.67	28.96	28.16
Co-investment scheme	3.36	3.18	3.09
Top 245 managers	3.27	5.57	5.57
Top 10 managers	3.90	6.65	9.18
Option holders	2.11	2.11	2.11
Total senior management	7.17	12.22	14.75
Total senior management and employees	12.63	17.50	19.95

Source: Wilmington Capital report commissioned by National Audit Office, July 2006

NOTE

¹ The percentage shareholdings presented in the Base Case are different from those at the completion of the deal (see Figure 10, page 27) as the shares held by the option holders were not issued until the flotation.

APPENDIX FIVE

Value of the Long Term Partnering Agreement

1 The Long Term Partnering Agreement (LTPA) is a 25 year contract under which QinetiQ manages test and evaluation services for the Department and other customers. The terms of the LTPA were not finalised at the time of the competition to select a strategic partner but the Department included draft terms in the information memorandum provided to bidders. The cash flows of the LTPA are derived from QinetiQ's expenditure obligations and the income it receives under the contract. The information memorandum presented to bidders set out two strands of revenue:

- Non-tasking revenue – guaranteed income in relation to the fixed costs of maintaining and operating the test and evaluation facilities. This is defined by an agreed financial model and is subject to renegotiation at five year intervals to agree a minimum reduction in the fixed costs.
- Tasking revenue – variable income payable by customers in exchange for the provision of tests. Tasking revenue is not incorporated in the financial model.

2 In their final bid Carlyle valued QinetiQ at £374 million with the condition that the LTPA delivered £30 million EBITDA⁴⁶ per annum. This produced a value for the contract of £138 million on a discounted cash flow basis. After being named preferred bidder, Carlyle attempted to negotiate a £50 million reduction in the value of QinetiQ on the basis that the present value of the cash flows in the final contractual model was £80 million. Following advice from UBS Warburg, the Department eventually agreed a deduction of £30 million.⁴⁷ In their advice UBS Warburg did not advocate a negotiation with Carlyle on the basis of detailed valuation arguments as there were a number of other outstanding issues that were being negotiated in parallel. We have reviewed the financial model and the analysis conducted by UBS

Warburg. We note that UBS Warburg's analysis of the financial model shows that the LTPA could at no stage deliver the levels of revenue set out in Carlyle's bid. We believe a more detailed understanding of the LTPA could have demonstrated that the commercial value of the contract had not declined and that the true commercial present value of the cash flows in the financial model was far greater than that which was used in justifying the reduction in value. The Department and UBS Warburg do not agree with this assertion and did not believe that detailed valuation analysis and argument would have been the best way forward at this point in the negotiations. Our conclusion is supported by the following points.

Tasking revenue

3 The information memorandum provided to bidders indicated that the LTPA generated revenue from tasking services and non-tasking services. The revenue from tasking services was forecast to be within the range of £50 million to £60 million per annum. In evaluating Carlyle's bid, UBS Warburg worked on the basis that Carlyle's condition that the LTPA would deliver EBITDA of £30 million per year incorporated both tasking and non-tasking revenue. At this stage UBS Warburg did not know the detailed assumptions behind this condition.

4 Subsequent analysis used to agree the £30 million reduction in the value of QinetiQ compared Carlyle's conditional cash flow profile against the cash flows from non-tasking revenue only. Carlyle have said that tasking revenue was not included in their assumed EBITDA from the LTPA as this revenue was not guaranteed and therefore could not be securitised. We have seen no evidence that the significant value attributed to tasking revenue was included elsewhere in Carlyle's bid.

⁴⁶ Earnings Before Interest, Tax, Depreciation and Amortisation.

⁴⁷ Equivalent to an £11 million reduction in the value received by the taxpayer (see paragraph 2.25).

Capital Expenditure

5 The LTPA was in part established to address the legacy of underinvestment in the assets used in the delivery of test and evaluation services. To this end the contract is based on there being £136 million of capital and rationalisation expenditure in the first five years. QinetiQ receives funding for the depreciation of this capital expenditure through the contract. The expected profile of this capital expenditure was set out in the financial model, which anticipated that the majority would be spent in the early years to deliver the investment required to achieve the cost savings envisaged within the contract.

6 The financial model assumed that all capital expenditure was funded through the cash flows of the contract even though the contract allows QinetiQ to fund this investment through raising debt, which can be repaid over a longer period. The impact of funding the capital expenditure from contractual cash flows is to reduce the value of those cash flows significantly in the early years of the contract; this has a large impact on the present value of the financial model, which was used as the basis for agreeing the £30 million reduction.

GLOSSARY

book value	The net asset value of a company for accounting purposes, calculated as total assets minus liabilities.
Compliance Regime	The QinetiQ Compliance Regime was established to protect the impartiality of the advice QinetiQ provides to the Department, while enabling QinetiQ to engage in commercial activity within the UK Defence supply chain.
Comprehensive Spending Review	Treasury issue spending reviews setting firm and fixed three-year Departmental Expenditure Limits and which, through Public Service Agreements (PSAs), define the key improvements that the public can expect from these resources.
data room	A physically secure continually monitored room, which bidders and their advisers will visit in order to inspect and report on the various documents and other data made available for due diligence.
DERA	Defence Evaluation and Research Agency. The Trading Fund established in 1995 to unify the Department's defence research, testing and evaluation capability and broken up in 2001 into DSTL and QinetiQ.
DSTL	Defence Science and Technology Laboratory. A Trading Fund established to retain the most sensitive aspects of defence research such as chemical and biological research.
due diligence	A process by which bidders have access to detailed material about a company in order to develop a view of its value. This would include interviews with management and detailed review of financial and legal information.
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation which also excludes exceptional 'one off' items of expenditure.
enterprise value	The total value of a business irrespective of the levels of debt and equity.
equity value	The value of the shares in a business.
firewalls	Information barriers implemented within organisations to guard against potential conflicts of interest. They separate and isolate persons, teams and systems from information which may unduly influence decisions. These barriers are also known as 'Chinese walls'.
franchising	Method of doing business wherein a franchisor licenses trademarks and tried and proven methods of doing business to a franchisee in exchange for a recurring payment, and usually a percentage piece of gross sales or gross profits as well as the annual fees.

greenshoe option	Legally referred to as an over-allotment option, a provision contained in an underwriting agreement which gives the underwriter the right to sell investors more shares than originally planned by the issuer. This would normally be done if the demand for shares proves higher than expected.
indicative bid	The first bids submitted which give a very rough indication of the value ascribed to the business for sale by potential bidders.
information memorandum	The formal documentation provided to prospective purchasers which includes financial and other information about the business for sale.
intellectual property	Property rights created through intellectual and/or discovery efforts of a creator that is generally protected under patent, trademark, copyright, trade secret, trade dress or other law.
Initial Public Offering	The first sale to the public of shares in a company and the listing of this company on a stock market, in QinetiQ's case the London Stock Exchange.
Internal Rate of Return (IRR)	The interest rate used to discount cash flows that makes the net present value of all cash inflows and outflows equal zero.
joint ventures	The co-operation of two or more individuals or businesses each agreeing to share profit, loss and control in a specific enterprise.
LTPA	Long Term Partnering Agreement. A 25 year contract, signed on 28 February 2003 between the Department and QinetiQ, for the provision of test and evaluation services.
market indices	An imaginary portfolio of securities representing a particular market or a portion of it. Each index has its own calculation methodology and is usually expressed in terms of a change from a base value. Thus, the percentage change is more important than the actual numerical value.
market value	An asset's market value is the price it would fetch in the open market.
management buyout	When the managers and/or executives of a company purchase controlling interest in a company from existing shareholders.
Net Present Value	The difference between the present value of cash inflows and the present value of cash outflows. NPV is used in capital budgeting to analyse the profitability of an investment or project.
pension fund deficit	A situation in which a company offering employees a defined benefit plan does not have enough money set aside to meet the pension obligations to employees who will be retired in the future.
pension indemnity	An agreement whereby one party will pay the pension liability which may be suffered by the second party.
Pre-Qualification Questionnaire (PQQ)	A set of questions issued to entities expressing an interest in a transaction. These typically cover the bidder's organisational structure, financial position and other information supporting a potential investment.
ratchet	A mechanism used to pass additional value to a shareholder of a company, usually a manager, if the share price rises. Used in order to provide an incentive to deliver that rise in value.

Return on Capital Employed	A measure of the returns that a company is realising from its capital. Calculated as profit before interest and tax divided by the difference between total assets and current liabilities. The resulting ratio represents the efficiency with which capital is being used to generate revenue.
Shareholder Executive	<p>The Shareholder Executive was created in September 2003 to improve the Government's performance as a shareholder.</p> <p>Its role is to be a proactive, intelligent shareholder, working with government departments and management teams to help government-owned businesses perform better. It advises Ministers and officials on a wide range of shareholder issues including objectives, governance, strategy, performance monitoring, board appointments and remuneration.</p>
Smart Acquisition Initiative	A long term initiative to improve the way the Department acquires defence capability. It aims to adopt a through-life approach to acquisition, rather than concentrating resources on the initial procurement.
strategic partner	A strategic partnership is a mutually advantageous, joint business venture between two entities, that produces a commodity or service not otherwise available in that form, and/or results in the sharing of expertise, resources, services or commodities.
underwriting agreement	Before a company issues shares to the public, the underwriter undertakes in consideration of a commission to take up the whole or a portion of such (if any) of the offered shares as may not be subscribed for by the public.