



National Audit Office

Report

by the Comptroller
and Auditor General

Cross-government

Open-book accounting and supply-chain assurance

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Open-book accounting and supply-chain assurance

Report by the Comptroller and Auditor General

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Sir Amyas Morse KCB
Comptroller and Auditor General
National Audit Office

29 June 2015

This volume has been published alongside
a second volume, Open-book accounting
and supply-chain assurance:
Case studies – HC 91-II

This report focuses on how open-book can be used and for what purpose. We surveyed the current use of open-book accounting across government and undertook nine public and private sector case studies.

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Key data

Approaches to supply-chain assurance

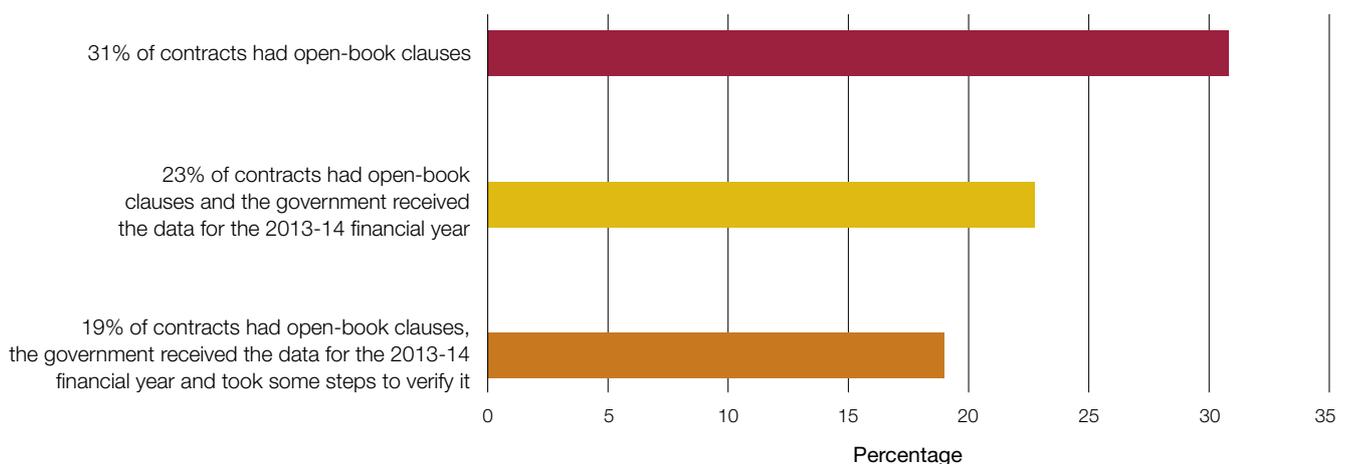
We found five approaches to supply-chain assurance, which can be combined

Approach	Possible uses	Information requirements	Features	Risks to manage	Case study examples
Ensuring price complies with the contract	<p>Price uncertainty, for example:</p> <ul style="list-style-type: none"> • Cost-plus contracts • Rights to share in suppliers' profits (gain-share) • Difficult to validate unit price 	<p>Data on actual supplier cost, margins and volumes</p> <p>Data collected continuously or periodically</p> <p>The data assessed to ensure compliance</p>	<p>Objective: strong enforcement</p> <p>Allowable costs defined in contract</p> <p>Skills should include ability to validate and interpret cost data</p> <p>Can be resource intensive</p>	<p>May create disincentives to innovate and further value for money</p> <p>May lead to an adversarial client-supplier relationship</p>	<p>Ministry of Defence</p> <p>National Grid</p>
Making better informed commercial decisions	<p>Deciding to change scope or length of contract</p> <p>Learning lessons for re-let</p>	<p>Data on supplier cost and margins. Likely to include both actual and forecast data</p> <p>Data collected periodically</p> <p>Data assessed to aid decision-making</p>	<p>Objective: negotiating changes</p> <p>Skills should include ability to validate and interpret financial data and commercial skills</p> <p>May be resource intensive at time of use</p>	<p>May need to ensure that the costs of having and exercising rights to such data do not outweigh benefits</p> <p>Suppliers may worry that client will use data opportunistically</p>	<p>Affinity Water</p> <p>BBC</p>
Process assurance	<p>Compliance with requirements such as:</p> <ul style="list-style-type: none"> • quality; • regulatory; or • sustainability 	<p>Data on process, systems and controls</p> <p>Data collected frequently</p> <p>Data assessed to ensure compliance</p>	<p>Objective: process compliance</p> <p>Skills should include process audit and technical skills linked to what is being reviewed</p> <p>Expected process and standards defined contractually</p> <p>May lead to client-supplier collaboration</p>	<p>May be resource intensive for the client</p> <p>May impose additional costs on the supplier</p>	<p>IKEA</p> <p>Jaguar Land Rover</p> <p>Laing O'Rourke</p>

Approach	Possible uses	Information requirements	Features	Risks to manage	Case study examples
Maintaining control of risk	Client bears risk relating to uncertainty such as: <ul style="list-style-type: none"> • design uncertainty; or • service, especially volume, volatility 	Financial and non-financial data Data collected continuously or frequently Data assessed to help manage the service	Objective: hands-on management characterised by a two-way sharing of risks Skills should include an understanding of supplier's operating processes and risks	Need to be clear that there remains a strong business case compared to doing in-house May be resource intensive for client and supplier	A large high-street retailer National Grid
Achieving step-change innovation	Fundamentally change delivery method to: <ul style="list-style-type: none"> • make substantial cost savings; or • radically improve performance 	Knowledge of existing processes and opportunities to innovate Data collected through observation and communication Data assessed to understand how to improve the service	Objective: change in delivery relationship Skills should include a willingness to understand existing processes and other ways of working Likely to require strong client-supplier relationship with aligned incentives and willingness to change client culture Difficult to do well	May lead to client losing control of solution and ability to challenge supplier May lead to client seeking easy wins at supplier's expense rather than genuine innovation	Affinity Water Surrey County Council

Survey results – government's use of open-book accounting

Based on a sample of contracts with spend greater than £1 million in 2013-14, we estimate that:



Summary

1 This report is about the information that government uses to manage its contracts. Supply-chain assurance is how a client gathers information to understand what is going on inside its suppliers. Open-book accounting is a particular type of supply-chain assurance where suppliers share information about the costs and profits of a specific contract with their client. In this report, we make a distinction between the use of open-book and the need for public transparency over profits:

- The government can use open-book accounting to understand the **specific** costs and profits of its major contracts as an important tool in managing those contracts.
- It is in the public interest to have public transparency over the **general** level of profitability that government suppliers are able to achieve. This can give some confidence, when combined with other information, that the system of public procurement is working. Yet the profit of a specific contract may be commercially confidential as knowing it would allow competitors to price future work.

Background

2 There has been an increased interest over the past few years in how open-book accounting can help government manage its contracts. It gained particular prominence with the over-billing on the Ministry of Justice's electronic monitoring contracts, and the subsequent realisation that poor contract management was systemic across government. This led to a loss of faith in the government's ability to manage suppliers adequately. We have charted this history in our recent reports on contract management.

3 Open-book accounting came to be seen as a way of improving trust in the government-supplier relationship. In particular, suppliers' profits came to be seen as a way to read the health of public procurement. A reasonable profit can be a sign of a healthy commercial relationship, but too high or too weak a profit can be a sign that something is not working in the service, the contract, or the market.

4 Interpreting these profits is not easy; a reasonable profit is difficult to define and varies between types of service, the risk to the supplier, and the market. Although there is now a greater acceptance that open-book should be used, we often find uncertainty and confusion as to how and for what purpose. This arises from a general lack of guidance on what those charged with using open-book should try to achieve, how they should validate and interpret information received and how they should use open-book information in practical ways.

The approach of this report

5 This report focuses on how open-book can be used and for what purpose. We surveyed the current use of open-book accounting across government. We revisited learning from the Ministry of Defence, who have been using a form of open-book accounting to manage UK single-source suppliers for more than 45 years.

6 We also went outside central government to see how others were using information to manage their supply chain. We asked professional institutes and government for examples of where good practice lay. Based on this we visited nine case study organisations to find out how they used information in managing their supply chains.

7 The report starts with an assessment of the current practice of using open-book within government (Part One), looks at the practice in the Ministry of Defence and outside central government (Part Two), and goes on to give recommendations for how government can improve the use of open-book, as part of its efforts to improve government's contract management (Part Three).

8 We are grateful for the help of the case study organisations who volunteered their time to take us through how they manage their supply chains. We conducted this particular element of our work in the spirit of appreciative enquiry. Because we are generally not their auditors we did not seek to validate what we were told and we do not intend this report to provide any assurance on the case studies, their business or the way they manage their suppliers.

9 Our evidence and methodology are set out in more detail in Appendix One. We set out the case studies in further detail in a separate volume.¹

Conclusions

10 Contract management is not a desk job. We are reminded of this in all the best practice and the worst failures we see. For government to be accountable for contracted-out public services; for it to understand its suppliers; for it to exercise oversight; and for it to promote value for money, it requires its contract managers to take a 'hands-on' approach and go to see for themselves what their suppliers are doing.

1 Comptroller and Auditor General, *Open-book accounting and supply-chain assurance: case studies*, Session 2015-16, HC 91-II, National Audit Office, July 2015.

11 Although we asked for examples of organisations that used open-book well, the examples we were given often looked very different from how we understand open-book in central government. Across our case studies we found a range of different approaches being used. None used open-book in isolation and some did not look at their suppliers' costs and profits at all. However, we noted two consistent lessons from these case studies:

- First, they all had clear strategies for their supply-chain assurance, even if they did not call it such. Each focused on equipping themselves with the information they needed to manage the specific risks and issues of their business.
- Second, we consistently heard that scrutiny by the client was expected and that good contract managers see it as their job to be inquisitive about both what and how their supplier is delivering.

12 We have often recommended open-book accounting be used more. We continue to do so. This means using open-book as part of clear supply-chain assurance strategies – being clear about the purpose of open-book. It also means using open-book for more than its traditional use in cost-plus or target-price contracting – where the supplier's fee is not fixed but depends on their costs. Open-book is vital for managing such contracts, and is used in both the public and private sector to do so. These contracts are typically used where there is significant uncertainty, a lack of competition, or the organisation wants to retain control.

13 There is something particular about public sector contracting that makes open-book relevant to other contracts as well.

- First, there is the issue of public accountability. Supplier profits are relevant, if difficult to interpret, to the question of whether public value is being achieved. Furthermore, the right to open-book information reinforces third-party inspection rights and enables government scrutiny of contracts when things go wrong. This in turn enables public scrutiny and strengthens existing National Audit Office (NAO) legal rights of access to these contracts and suppliers.
- Second, the use of open-book can enable better commercial decision-making and aid in commercial negotiations. It removes an element of information asymmetry between the supplier and the government and can help with changes and extensions, as well as refining the contract when it is re-let. This is particularly relevant for public services due to the nature of public procurement and the types of contracts that are often used. Our studies show that upfront competition is not always sufficient to deliver value for money in public service contracts. Contracts tend to be longer in the public sector, because they cannot be rolled over without a new competitive process; public value is harder to measure and define in a contract specification; and technology, the market and the requirement inevitably change during the course of the contract. This can lead to fixed-price contracts that come to resemble cost-plus contracts as each variation is priced by reference to the suppliers' costs.

14 But open-book must also be used wisely. As open-book is extended to other contracts, there is a risk that government will start to adopt cost-plus mechanisms, such as profit caps and gain-share mechanisms, solely to avoid embarrassment about suppliers' profits. This would be changing the suppliers' risks, rewards and incentives, which would not necessarily reflect what government is trying to achieve. It would be a missed opportunity if open-book accounting focused management time on the suppliers' profits instead of achieving the wider objectives of the contract.

Recommendations

15 Based on the learning from our case studies, our own experience of auditing government contracts and our own use of open-book, we recommend:

- a Every major government contract needs a supply-chain assurance strategy.**
The information required to manage the contract needs to link to the type of contract, what is being provided, and the risks of providing it. We identified five simplified approaches that organisations can use to manage the information requirements of contracts, each with a different purpose. These can be combined. The approaches should be set out at the pre-procurement stage and will probably form part of the contract management plan.
- b Government needs to include the roll-out of increased supply-chain assurance as part of its commercial skills programme.** This is about more than the skills to undertake open-book accounting itself, however. Rather, it is about the broader issue of civil service commercial capability and willingness to get involved in managing contracts in greater detail. Changing what the client monitors within the supply chain may require it to change its own culture, so it gives consistent signals to suppliers about what it is interested in.
- c The Cabinet Office should set up a task force of government, suppliers and other stakeholders to explore how to establish a common standard for open-book data.** Suppliers complain that government asks for open-book information in a variety of different formats. This makes it difficult for them to produce the data and for contract managers to interpret it. It also allows profits to be presented in a variety of different ways. A common standard for how suppliers should present their costs, particularly allocations, would standardise practice and help reduce the room for manipulation. The Ministry of Defence already uses such a standard.

- d Government should negotiate the retro-fitting of open-book access rights into old contracts, where appropriate.** Our survey showed that government has access to open-book data in only 31% of its contracts. In 2002, following NAO work, HM Treasury successfully negotiated such a retrospective agreement for PFI contracts and the sharing of refinancing gains.
- e The Cabinet Office should provide better guidance for interpreting suppliers' costs and profits.** This should include how to understand the way profits vary and how to interpret a supplier's business model. Government needs to develop a more sophisticated understanding of these profits, so that it can improve the incentives in its contracts and its negotiations with suppliers. This should be incorporated into government's commercial skills training.
- f Departments need to integrate open-book requirements into the procurement of contracts and use open-book with other information.** Like any data, open-book accounting requires comparatives to be meaningful. This could be trend analysis, budget variance analysis or comparator benchmarks. Furthermore, to give a meaningful representation of value, financial information from open-book should be combined with other types of information, such as quality, performance and productivity. These comparatives and other data cannot be easily added after the contract has started, so should be set out before procurement begins.

Part One

Supply-chain assurance within government

1.1 Open-book has been used in government since at least the 1960s. **Figure 1** overleaf summarises our analysis of what we, the Committee of Public Accounts and, since 2010, the government has said about open-book.² The figure shows:

- **The Ministry of Defence has been using open-book since 1968.**

In 1963 the then Comptroller and Auditor General (C&AG) raised queries on the high profits that some defence suppliers were making. In 1968 the Ministry of Defence agreed a memorandum with industry that gave it access to supplier information, after which it started using something similar to modern open-book accounting.

- **Our value-for-money reports begin to mention open-book accounting following the introduction of the Private Finance Initiative (PFI) in 1992.**

PFI was first used for construction projects, but later it was used for other purposes. This may have brought tools from construction contracting, such as open-book, into greater prominence within government.

- **PFI refinancing brought attention to supplier profits.**

In the late 1990s some early PFI deals were refinanced to reduce the total interest payments, and investors made significant gains. Several of our reports focused on the public sector needing to see such gains and have the ability to share in efficiencies that suppliers brought. Open-book was often promoted as a means to achieve these aims, and in 2002 the Committee of Public Accounts recommended that open-book be part of all PFI contracts.

- **In 2008 we published our *Good practice contract management framework*.³**

Several reports published after this recommend the increased use of open-book. This includes reports on, for example, the NHS, HM Revenue & Customs, the Ministry of Defence and the BBC. From around 2010, the Committee of Public Accounts has recommended that the Cabinet Office mandate open-book in a variety of contracts. The focus of the reports published around this time was still mainly around the need to share cost savings.

² See Appendix Three for a full list of references.

³ National Audit Office, *Good practice contract management framework*, December 2008. Available at: www.nao.org.uk/report/good-practice-contract-management-framework-2-2

Figure 1
History of open-book in government



Notes

- Abbreviations used: C&AG = Comptroller & Auditor General, DfT = Department for Transport, GP = General Practitioner, HMRC = HM Revenue & Customs, NAO = National Audit Office, PAC = Committee of Public Accounts, PFI = Private Finance Initiative, MoD = Ministry of Defence.
- See Appendix Three for references for this figure.

Source: National Audit Office

1.2 More recently, the focus on contracting has led to a growing consensus that open-book can help the government increase transparency and improve contract management. Two main factors have contributed to this:

- **Recent contract issues**

Without strong contract management, suppliers cannot always be trusted to act in their client's interest. This was particularly highlighted by events at the Ministry of Justice when, in July 2013, it announced it had found significant over-billing in its electronic monitoring contracts dating back to 2005.⁴

- **The Cabinet Office review**

The Cabinet Office's *Review of major contracts across government* found that open-book accounting arrangements were often not being used to monitor the financial performance of contracts.⁵ Our September 2014 *Transforming government's contract management* report concluded that the civil service's culture needs to change if contract management is to improve.⁶

1.3 In March 2014, the Committee of Public Accounts found that: "There needs to be far greater visibility to government, parliament and the public about suppliers' performance, costs, revenues and profits".⁷ It went on to make recommendations on using open-book accounting, extending Freedom of Information requirements and regularly publishing standardised data on contract duration, value and performance against key performance indicators.

1.4 Many suppliers also recognise that open-book can help to increase public trust as part of wider reforms of contracting to improve transparency. The Confederation of British Industry (CBI) argued that suppliers "must work hard to build trust in open markets to deliver better results for less. They need to make performance clearer and easier to compare".⁸ It recommended increased transparency of public services to the public.

4 Hansard HC, 11 July 2013, vol. 566, cols. 573–584.

5 Cabinet Office, *Review of major contracts across government*, December 2013. Available at: www.gov.uk/government/publications/review-of-major-contracts-across-government

6 Comptroller and Auditor General, *Transforming government's contract management*, Session 2014-15, HC 269, National Audit Office, September 2014.

7 HC Committee of Public Accounts, *Contracting out public services to the private sector*, Forty-Seventh Report of Session 2013-14, HC 943, February 2014.

8 Confederation of British Industry, *Public services providers must build trust through transparency*, 10 September 2013. Available at: www.cbi.org.uk/media-centre/press-releases/2013/09/public-services-providers-must-build-trust-through-greater-transparency

1.5 In March 2015:

- The professional accountancy body for the public sector, the Chartered Institute of Public Finance and Accountancy (CIPFA), briefed its members that it saw open-book as best practice. It called for its widespread adoption and argued that the suppliers' own external auditors should verify that open-book requirements have been met.
- The Institute for Government, with the support of the NAO, the CBI and other public and private sector stakeholders, published a report with a draft 'transparency clause' for public contracts.⁹ These aim to get government and suppliers to agree a schedule of the information they would publish at regular intervals, such as the performance of the contract and the contract revenues, although this will not include detailed open-book data.
- The Cabinet Office published a paper on the principles of transparency of public contracts. This agreed the principle of publishing information by default, agreed as part of the contract. It also set out the government's expectation that all its strategic suppliers provide it with bi-annual open-book returns, that will not be published, including revenue, gross margin and operating margin for all contracts above £20 million.

Transparency, open-book accounting and supply-chain assurance

1.6 In this report we differentiate between open-book accounting and supplier transparency to the general public. Open-book accounting gives government access to commercially confidential information about how contracts are priced, which, if it were shared publicly, could deter companies from taking on government work and thus harm the competitiveness of markets for government services. However, good supply-chain assurance, in its wider sense, is a pre-requisite for public transparency. Further, government will need to understand the specific costs and profits achieved on many of its major contracts, and the public need to know the general level of profitability of government contracts.

⁹ Institute for Government, *New transparency rules for government contracts*, 24 March 2015. Available at: www.instituteforgovernment.org.uk/news/latest/new-transparency-rules-government-contracts

The current use of open-book accounting across government

1.7 We evaluated how central government uses open-book accounting by surveying:

- whether there is a consistent policy for the use of open-book accounting;
- whether government contracts have open-book accounting clauses;
- whether these clauses are used and what for; and
- the methods used to ensure that data are accurate.

1.8 We also considered a report carried out for the Cabinet Office in November 2014 by the consultancy firm Stradia. This involved workshops and interviews with a range of people from government departments who operate open-book accounting approaches. It also evaluated 20 contract management teams on their maturity in operating open-book accounting.

Policy on open-book accounting

1.9 Full open-book accounting is not appropriate for all contracts because of the cost of operating it (see Figure 7 and paragraph 3.4 for more details). However, we would expect departmental senior management to set a policy on when open-book accounting should be used and to check that this is applied consistently.

1.10 Through our survey we found that just 23% of organisations (3 departments and 6 other entities) have a policy on when to include open-book accounting in a contract. Some organisations that do not currently have a policy on when to use open-book told us that they are developing one. Other organisations told us that they make decisions on whether to include or use open-book on a case-by-case basis. The Cabinet Office is developing policy on when open-book accounting should be included in new contracts.

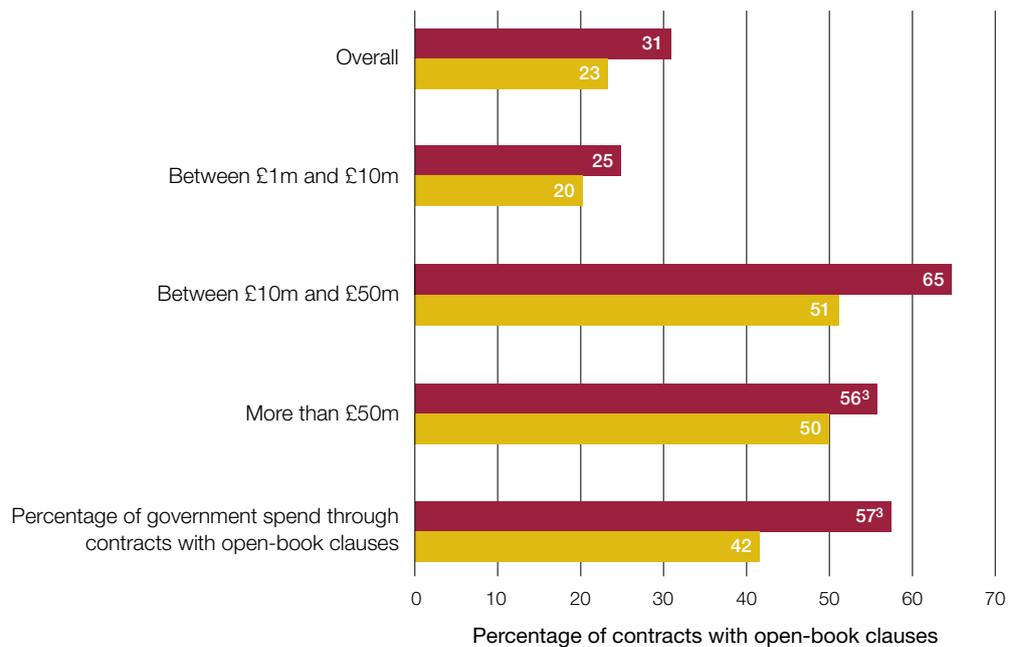
The extent of open-book accounting clauses in existing contracts

1.11 Our survey shows that 31% of contracts have a clause allowing government to receive open-book data. This estimate includes the Ministry of Defence, which, as set out in paragraph 1.1, has used open-book accounting for much longer than the rest of government. Excluding the Ministry of Defence reduces the overall estimate to 23%.

1.12 Government tends to include open-book accounting clauses more often in higher-value contracts. Our survey found that for contracts with 2013-14 spend between £1 million and £10 million, open-book clauses are included 25% of the time. This rises to 65% for contracts between £10 million and £50 million and to 56% for contracts worth more than £50 million (**Figure 2** overleaf).

Figure 2
Contracts with open-book clauses, 2013-14

Government tends to include open-book clauses more often in higher-value contracts



- All central government
- Excluding the Ministry of Defence

Notes

- 1 We defined open-book as the right for the contracting authority to receive data from the supplier showing a breakdown of costs in greater detail than what is in the invoice.
- 2 Results are extrapolated from a sample of 334 contracts (280 excluding the Ministry of Defence) with 2013-14 spend of at least £1 million.
- 3 Our sampling methodology has resulted in us being less certain than normal about the 'All central government' values for the more than £50 million category (56% in the chart above) and the percentage of government spend through contracts with open-book clauses (57% in the chart above). Appendix One sets out the confidence intervals for all our survey results and explains our methodology.

Source: National Audit Office survey of central government data

1.13 Where open-book clauses were not included in a contract, organisations were asked why not. Some organisations told us that they did not consider the contract warranted open-book clauses as it was fixed price or competitively let. Others told us that the supplier had refused open-book or that the framework used for the procurement did not include open-book so it was not put in the contract. Some respondents, including the Department of Health, the Department for Work & Pensions, the Home Office and HM Revenue & Customs, cited cases where open-book was not present but was being introduced as contracts were re-procured or amended. In our view, this all suggests that open-book should be included in a significantly larger number of contracts than it currently is.

Use of open-book accounting

1.14 Through our survey, we asked government bodies whether they asked for and received the data that the contract entitled them to. Our survey showed respondents received data for 2013-14 in three-quarters (75%) of the contracts which included the right to have the data (**Figure 3** overleaf), which is equivalent to 23% of all contracts. Survey respondents were slightly more likely to request data for higher-value contracts. So, when looked at by value, we estimate that government received data for 91% of the 2013-14 spend it could have received data for.

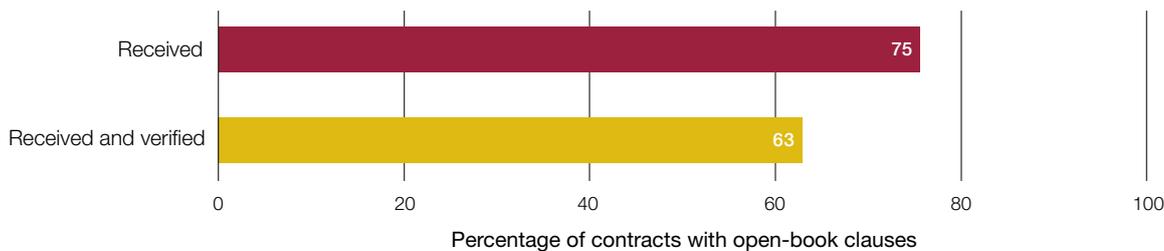
1.15 From our previous experience we know that open-book can help public organisations to improve the value for money of their contracts (**Figure 4** overleaf). Our survey supported this, highlighting how public organisations used it to:

- **Support negotiations**
For example, the Department for Work & Pensions said it uses the data to decide whether to terminate or extend contracts and to anticipate supplier insolvency.
- **Challenge the supplier's costs**
For example, the British Library told us that it uses data to manage spending and to challenge additional costs.
- **Calculate gain-share¹⁰**
For example, the Driver & Vehicle Licensing Agency told us that it uses the data to undertake end of year contract reviews and to calculate whether gain-share payments are due at the end of each contract period.

¹⁰ A 'gain-share' clause gives the government the right to share in supplier profits if they exceed a certain level.

Figure 3
Receiving and verifying open-book data, 2013-14

Government does not always verify the open-book data it receives



Notes

- 1 Verification techniques included desk-based review by the contract manager, review by specialist internal bodies such as the Ministry of Defence’s Cost Assurance and Analysis Service (see Part Two) or by internal audit.
- 2 Results are extrapolated from a sample of 332 contracts with 2013-14 spend of at least £1 million. Appendix One explains our methodology. This does not include 2 contracts for which the department concerned did not know if it had received data in 2013-14 or not. There were 4 contracts where government asked for and received data but did not have open-book clauses in the contracts.

Source: National Audit Office survey of central government data

Figure 4
Examples of how open-book has been used to improve government contracts

Checking costs comply with the terms of contracts

During 2014-15, the Ministry of Defence’s Cost Assurance and Analysis Service (CAAS) provided advice and recommendations to support cost reductions of £541 million. This represents disallowed overhead costs and differences between the industrial provider’s original quote and the final contract price.

Further potential opportunities of £592 million were identified but not confirmed.

These savings do not fall in any single financial year, but across contract life spans.

Recovering overpayments

In 2013 the Ministry of Justice announced that it had found significant over-billing in 5 contracts including electronic monitoring. It employed consultants to conduct a forensic review, including of supplier data.

Following these investigations the suppliers involved repaid £179 million to government. One supplier additionally agreed to forgo future profits on one contract: the Ministry is using open-book to check whether any such profit return is due.

Challenging the way payments are calculated

In 2001, Sheffield City Council signed a 30-year contract for office accommodation, costing some £4.5 million a year.

In 2010-11, using open-book access, the contract manager challenged the formula used to adjust for inflation.

The supplier repaid £232,000 and further costs were avoided as a new, more accurate, inflation formula was introduced.

Reviewing contracts to make savings

In 2011 HM Treasury asked contract managers to look for ways to make savings on operational PFI projects.

Its guidance emphasised the need for mechanisms, such as open-book, that could provide transparency of underlying cost data to aid the identification of savings opportunities and negotiation of contractual changes. It recommended that government bodies take the opportunity to ensure that contracts have such transparency clauses.

The review resulted in evidence for more than £1 billion of savings in 118 contracts.

Source: National Audit Office, Audit Commission

1.16 Through a survey we could not assess how well government organisations are using open-book but in its report for the Cabinet Office (paragraph 1.8), Stradia assessed the maturity of 20 government teams using open-book. Stradia rated just 3 of these teams as ‘mature’ in using open-book, identifying limitations with the other 17, such as not considering how to use open-book early in the contract-design process and poor clarity on how open-book could positively impact the relationship. Stradia also found that departments lacked guidance on how to use open-book. The Cabinet Office worked with the accountancy firm PwC to design an open-book model and the Cabinet Office is now developing guidance for government based on this and Stradia’s recommendations.

1.17 Our survey also included a question on the benefits of open-book accounting. This was an open-ended question which gave respondents the freedom to give more than one answer and provided no prompts. In total, 41 government bodies were asked the question (one gave no response):

- 26 out of 40 (65%) government organisations surveyed told us that open-book can be used to manage costs or profits;
- 15 out of 40 (38%) said it can help improve the supplier relationship; and
- 8 out of 40 (20%) said it can be used to enable benchmarking.

1.18 The most frequently cited limitation of open-book accounting in our survey was the skills and resources (including time) needed to use it well.¹¹ Stradia also found that 15 out of 20 teams felt they did not have the right level of resources or competencies within their teams to use open-book accounting effectively. Such concerns seem to be based on a lack of qualified accountants within contract management teams. However, Stradia argues that major areas of spend, such as staff costs, can be effectively interrogated without such skills. We consider that the primary skill in interrogating data is a willingness to look at the data and ask questions. We set out our views in more detail in Part Three (paragraphs 3.22 to 3.26).

¹¹ Respondents were asked an open-ended question on the benefits and limitations of open-book. Of respondents, 26 out of 40 (65%) cited skills or resource limitations. Respondents were free to give more than one limitation.

Ensuring that data are accurate

1.19 We would expect the government to always validate the data it uses, including data obtained under open-book clauses. The extent of such validation will depend on how the data are to be used.

1.20 Respondents to our survey told us that they received and verified data for 63% of the contracts with open-book clauses (Figure 3), which means that data are received but not verified for 12% of contracts with open-book clauses. The 63% of contracts with open-book clauses is equivalent to 19% of all contracts.

1.21 Respondents were slightly more likely to request and verify data for higher-value contracts. As a result, when looked at by value, government received and verified data for 87% of the spend on contracts above £1 million, where the contract included open-book clauses.

1.22 Verification techniques ranged substantially and included desk-based review by the contract manager, review by specialist internal bodies such as the Ministry of Defence's Cost Assurance and Analysis Service (see Part Two) and the use of internal audit.

Part Two

Supply-chain assurance: case studies

2.1 This Part summarises nine case studies looking at how public and private sector organisations use information from their supply chain to manage contracts, and the five generic strategies that we saw being used.

2.2 These nine organisations were suggested to us as representing potential good practice. Typically, our case studies looked at only part of an organisation's work and our methodology was not designed to give assurance on the organisations themselves. Instead, we sought to understand what the companies were trying to achieve and how they went about that, so as to learn lessons for how government might improve its use of supply-chain assurance.

2.3 The nine case studies are summarised in **Figure 5** on pages 22 and 23, and more information is in a separate volume.¹²

¹² Comptroller and Auditor General, *Open-book accounting and supply-chain assurance: case studies*, Session 2015-16, HC 91-II, National Audit Office, July 2015.

Figure 5
Case studies on supply-chain assurance

	How they use information	Skills and resources deployed	Lessons for government
Affinity Water Water supply company	Worked with suppliers to redesign how they repair, maintain and renew water pipes, sharing best practice with suppliers to reduce cost.	Small commercial team remains involved in operational decisions. Used consultants to observe working practices and identify best practice. Transferred that knowledge to its own staff.	Understand key activities and processes of the supplier. Change own commercial culture.
BBC Broadcaster and media company	Uses information from past audits to inform commercial decisions such as re-procurements. Often uses audits at contract end to facilitate this. Before contracts end, policy is to conduct an in-depth financial audit of strategic contracts every two years.	A team of specialists dedicated to supporting the strategic contracts offer advice to the contract managers. Financial audits are outsourced.	Identify most strategic contracts and target open-book policy on them.
IKEA Retailer of home furnishings	Sustainability is built into the organisation's culture. Mandatory code of conduct for suppliers covers sustainability issues such as preventing child labour and enforcing maximum working hours requirements. Code enforced through inspecting supplier sites. Suppliers must fix violations without affecting workers' conditions or the contract will be terminated. Scope gradually expanding to cover the whole business.	Sustainability audit function has some 85 in-house sustainability auditors including internal compliance and governance functions. Supplemented by external resources. Purchasing team is involved in site audits to learn lessons and help suppliers improve conditions.	Embed sustainability within organisational culture. Work with suppliers to help them meet requirements.
Jaguar Land Rover Automotive manufacturer	To ensure quality of components, engineers co-located at supplier site provide sign-off on quality before payment is made. Quality information is integrated with financial information by a small function for central monitoring of suppliers. This is used to mitigate risk of supplier failure and lack of capacity, which is the key constraint on sales growth.	Central monitoring is small, 6 employees covering 1,000 suppliers. Additionally, each supplier is matched with an integrated team containing skills from product development, cost engineering and commercial.	Understand the impact of supplier failure on the business. Integrated teams for supplier management.

	How they use information	Skills and resources deployed	Lessons for government
Laing O'Rourke Construction	Suppliers audited when adding to approved supplier list, and again before being given a contract. Engineers spend time at facilities to assure that right skills and processes are in place to deliver goods at the right time. Feeds into database for project management, which ensures the internal supply chain has a shared understanding of progress against project plan.	Integrated teams matched to each supplier ensure a range of skills, such as commercial, quality, design, planning and purchasing, is used to manage the supplier relationship.	Shared data using specialist tools enable complex programmes to be monitored.
Ministry of Defence Government department	Where contracts were let without competition in the UK, they scrutinised suppliers' costs, systems and overheads to check whether costs are in line with the contract and to forecast the overall cost of defence equipment and support. It is beginning to collate information on the suppliers' business. Legislation will further standardise and strengthen the Ministry of Defence's access rights for single-source contracts, including requiring standard cost-reporting and access to subcontractors.	A dedicated unit, the Cost Assurance and Analysis Service with 420 staff uses access rights to advise the project team on cost accounting, cost forecasting and cost analysis. The project team, who manage the contract and the relationship with the supplier, are separate.	Significant resources are needed to understand the supplier's systems, costs and the method of cost allocation.
National Grid Electricity and gas infrastructure	Apply a cost-benefit analysis to using open-book. Scope the design of a project internally before the tender is let. Use open-book when the design cannot be fully specified, or where the risk has not been reduced enough to transfer it to the supplier at little cost.	Both commercial and engineering staff involved in the design stage. Consultants are sometimes brought in to provide additional expertise.	Apply a cost-benefit analysis to decide when open-book is necessary to manage the risk.
Surrey County Council Local authority	Appointed a strategic partner to manage improvements to its road network. Reduced costs by working with the partner to change how repairs were made, using new materials. This also increased quality.	Cultural change from holding suppliers to account to a strategy based around joint working to redesign a service.	Skills can be retained in-house when using a strategic partner. Change own commercial culture.
Anonymous A large high-street retailer	Use private sector firms as well as in-house operations to run warehouses and deliver goods to stores and customers. Main business risk is getting right volume of goods to stores. Control this by approving supplier cost-base annually, with quarterly revisions. Performance is monitored and jointly reviewed using both cost and service metrics, such as cost-per-item, which is based on volume data. Volume data is regularly updated and shared with suppliers.	Have both open- and closed-book contracts for similar activities, and find that open-book takes more resources but is viewed more positively as it allows it to better control and flex contracts to respond to changes.	Define clear metrics to help review performance against service and cost targets. Keep control of main data and share it with suppliers.

Five information strategies

2.4 Through our case studies we identified that, where extensive information requirements exist, there are broadly five strategies for collecting such information (**Figure 6**). These strategies are meant as simplified models of what we saw, which do not capture all the detail and complexity. In reality some of the organisations we visited pursued elements of more than one. However, we believe that these five strategies help explain some of the potential benefits and risks of different ways of pursuing supply-chain assurance. The accompanying document to this report summarises how our case studies have used these strategies and how they manage the risks in more detail.

Figure 6
Five simplified strategies for information requirements

1 Ensuring price complies with the contract	Example
<p>Use where price is uncertain or frequently varied, for example cost-plus contracts or those that grant rights to share in provider profits ('gain-share').</p> <p>Likely to require relatively high level of financially skilled resources to validate and interpret data.</p> <p>May lead to adversarial relationship or create disincentives to innovate.</p>	<p>One-off complex construction contract, especially one that has been single-sourced.</p>
<p>2 Making informed commercial decisions</p> <p>Use when exercising contractual rights to extend or to change scope of contracts.</p> <p>Might be useful in learning lessons for re-let.</p> <p>Likely to require occasional peaks of financially skilled resources to validate and interpret data.</p> <p>May lead to cost-benefit concerns around use of data or provider concerns that data is used opportunistically.</p>	<p>Service contract – particularly one that is being outsourced for the first time.</p>
<p>3 Process assurance</p> <p>Use when seeking to monitor the way a product is produced or a service provided for quality or compliance reasons.</p> <p>Likely to require resources skilled in understanding the processes used.</p> <p>May lead to high level of resource requirements in client or inefficiencies for supplier.</p>	<p>Complex facilities management contract, for example in prisons or hospitals.</p>
<p>4 Maintaining control of risk</p> <p>Use when uncertainty leads to a high-risk premium in pricing. Likely to be a cost-plus contract and therefore accompanied by strategy to ensure price complies with the contract.</p> <p>Likely to require hands-on management of the supplier.</p> <p>May lead to inefficiencies or create disincentives to innovate.</p>	<p>Volatile and uncertain volumes, for example services to asylum seekers.</p>
<p>5 Achieving step-change innovation</p> <p>Use when facing substantial cost and performance challenges.</p> <p>Likely to require deep understanding of delivery techniques in client, close relationship with supplier and need to change client culture.</p> <p>May lead to client becoming overly reliant on supplier or to a win-lose relationship.</p>	<p>Any contract where substantial cost and performance change is sought.</p>

Note

1 In practice we found organisations pursuing a mixture of these strategies, depending on the information needs of what they were procuring, and the risks they were managing.

Ensuring price complies with contract

2.5 Some contracts are designed in such a way that open-book is essential to ensure the government pays the right amount. Such contracts may be designed so that what the government pays is determined by the suppliers' costs. This includes target-price or cost-plus contracts.¹³ In others, the amount paid depends on the volume of work done or the outcome achieved, which may be difficult to verify without access to the suppliers' books and management information. Many contracts have gain-share, benchmarking or similar measures that rely on supplier data and form part of the overall price control mechanism. To manage all these types of contracts the customer will need regular information on a combination of costs incurred, units provided and margins earned.

2.6 The Ministry of Defence often uses target cost-based contracts for its large, more risky and complex procurements. These share the risks and benefits of higher, or lower, than expected costs according to a formula. To make this work, the Ministry of Defence needs strong open-book arrangements. Similarly, open-book accounting is used by the Nuclear Decommissioning Authority at the Sellafield site. Payment by results contracts are often not thought of as open-book contracts, but the Department for Work & Pensions' Work Programme contract does allow extensive access to the suppliers' management information for assurance purposes.

2.7 The use of open-book for these contracts has a strong enforcement objective, with the client needing to verify the information because it directly affects the price paid. However, the client can often be very hands off on how the service is provided. Nonetheless, the client is often looking to reduce costs or units charged by the supplier, by disputing unreasonable charges. The Cost Assurance and Analysis Service, part of the Ministry of Defence, estimates that, in 2014-15, it provided advice and recommendations to support cost reductions of £541 million over the lifetime of various contracts, and identified further potential opportunities of £592 million.

2.8 However, too strong a focus on the use of open-book might create issues that need to be managed, including:

- a focus on cost reduction might create incentives for the supplier to obscure its true level of profit (Figure 8 in Part Three). This in turn can require a significant level of investment in the skills necessary to audit the open-book information;
- too much focus on whether a supplier's costs are appropriate can get in the way of a focus on working with the supplier to improve the efficiency and effectiveness of the service. To do cost-plus contracting correctly requires a balance between the two; and
- because cost-plus contracting provides a guarantee that the supplier's costs will be covered, it provides a disincentive for suppliers to innovate or to reduce their costs. The client thus needs technical expertise in the service being delivered to interpret the open-book information and put pressure on the supplier to be efficient.

¹³ Cost-plus pricing means that the price charged by the supplier is equivalent to its costs plus a standard percentage to cover overheads and profits. Target-price contracts are similar except that the percentage for overheads and profits is adjusted depending on how close the supplier's costs are to an agreed target.

Making informed commercial decisions

2.9 Open-book can help the client to make informed commercial decisions about fixed price or similar contracts. This is particularly the case when making changes to such contracts, choosing whether to extend them, and when re-letting them. In these instances an understanding of the supplier's costs and cost structures will aid the contract manager's commercial negotiations. It is also very important for allowing the investigation of the contract if things go wrong.

2.10 The use of open-book to assess suppliers' costs and profits as an aid to commercial negotiations does not seem to be common practice in the private sector. However, as we describe more fully in Part Three, government contracts are let on a very different basis from most private sector business-to-business contracts. There is a reliance on the initial competitive process, after which the supplier is normally granted a near guaranteed period of the contract, meaning there is little or no competitive pressure over the life of the contract. Furthermore, public value is harder to define in a contract and is likely to change over the course of the contract with changing technology, market conditions and client requirements. By contrast, most of our private sector case studies signed short formal contracts, but expected to have much longer-term relationships. They described how this enabled them to work collaboratively with their suppliers, but always with the threat of ending the relationship.

2.11 Public bodies thus need ways of assessing the ongoing value for money of their fixed-price contracts and of making changes to these contracts. These need to be built in from the start to avoid unnecessary negotiations outside of competitive tension, and systems need to be in place to enable it to happen (Part Three). As a result, we and the Committee of Public Accounts have recommended that open-book information remains of value even when it is not required to inform the price.¹⁴ The Cabinet Office also recommends such clauses in its standard terms and conditions for service contracts.¹⁵ Such clauses are useful in contracts:

- likely to change scope, so that there is a basis on which to price the increase or discount for the change;
- with options to extend, so that ongoing supplier costs and margins can be made firmer, using the current market expectations and benchmark assumptions made when the contract was procured; or
- for services unique to government or which are being let through a bespoke contract, such that the lessons can be learned at the re-let to help improve the price and risk incentives.

¹⁴ Comptroller and Auditor General, *Transforming government's contract management*, Session 2014-15, HC 269, National Audit Office, September 2014, and HC Committee of Public Accounts, *Contracting out Public services to the Private sector*, Twenty-third Report of Session 2014-15, HC 586, December 2014.

¹⁵ Crown Commercial Service, *Model Service Contract*. Available at: www.gov.uk/government/publications/model-services-contract

2.12 The inclusion of rights for the organisation to audit the supplier in the contract is also important for public accountability and enabling investigations if things go wrong. For instance, the Local Organising Committee of the 2012 Olympic Games brought in auditors to investigate the G4S security contract using third-party audit rights. The Ministry of Justice also used such rights in the electronic monitoring contract to bring in forensic auditors to investigate their suspicions of overcharging.

2.13 There are three main differences between using open-book accounting for contracts to inform specific commercial decisions and the previous ongoing price-validation strategy:

- To price change or estimate the benefit of contract extensions, forecasts of future spend are likely to be important as well as details of historic costs.
- Data are likely to be required less often. However, collecting data periodically (say at least annually) can be helpful to manage the burden on the supplier and build trust and understanding of the data in government.
- As the data are less critical to pricing, the government is likely to need fewer resources to scrutinise the data. However, the government should seek assurance on the systems used to produce these data occasionally, for example using internal audit, if it is going to use them as part of a commercial decision-making process.

2.14 The main feature of this approach is collecting data that are not used in managing the contract on an ongoing basis. This creates the following issues that need to be managed:

- First, many stakeholders, particularly in the private sector, believe that the costs of providing the information outweigh the benefits. This can create tension and resistance. Contract managers will thus want to design data collection and verification processes that are proportionate and focused on the decisions that they are trying to inform.
- Second, as the data's purpose may only become clear when the opportunity to use it arises, there can be less focus on both the client and the supplier to set up systems to ensure its accuracy and meaningfulness. The suppliers are likely to be more concerned that the data will be used opportunistically to change the contract's balance. It can therefore be helpful to have in mind scenarios where it might be used at the start of the contract.

Process assurance

2.15 Looking at approaches that do not require open-book, supply-chain assurance can be useful to gather assurance over how goods are produced or a service provided. This may be to control quality, ensure compliance with regulatory requirements or ensure that outsourcing does not result in poor working conditions. In government, such situations may include providing front-line services, especially where there are risks to security such as in prisons, or where there is a risk of exploiting vulnerable children and adults, such as in outsourced social services. It may also include services on which front-line services rely, such as hospital cleaning.

2.16 Process assurance usually requires a detailed set of standards for the method of producing goods or services. Compliance with these standards is enforced through the contract and is typically subject to inspection and audit regimes. Such assurance is mostly focused on what is happening at the time of any visit and therefore needs to happen often. However, a continuous presence can be avoided by examining underlying systems and historical records.

2.17 Instances where we saw this type of supply-chain assurance in the private sector include IKEA and its work to assure its manufacturing and service providers are sustainable; Jaguar Land Rover and its need to assure the quality of its vehicle components; and Laing O'Rourke's review of its subcontractors' processes to ensure overall construction projects fit together. All involved the use of on-site inspection and detailed review of their suppliers' processes and systems. This includes the access to detailed financial records where necessary to verify the process. For example, IKEA will inspect pay records to ensure staff are paid appropriately.

2.18 Some told us that fully understanding suppliers' processes requires a combination of financial and other data, such as project progress and quality, in order to understand productivity. They argued that focusing only on cost would drive short-term cuts at the expense of long-term value.

2.19 The compliance nature may lead to two main risks that need to be managed:

- the client may need substantial resources to ensure effective oversight; and
- suppliers may find it difficult to change to meet the client's needs, causing some inefficiency as they adapt to the client's requirements.

Maintaining control of risk

2.20 The public sector has often sought to transfer risk to its suppliers in order to have greater certainty and to incentivise the supplier to innovate, control the project, service and risk, and to drive down costs over time. Although it is possible to create a financial consequence for the supplier if things do go wrong, in practice it is not possible to fully transfer to suppliers the risk of a public service going wrong.

2.21 Some clients contract in such a way as to retain certain risks themselves. Such an organisation might want to benefit from some of the advantages of contracting (such as access to economies of scale or certain innovations) but maintain control of other aspects of the service (such as cost variation or the risk of volume variation) in-house. Such an approach offers the opportunity to respond to circumstances flexibly while reducing the profit, in the form of risk premium, they pay suppliers.

2.22 Where we encountered this strategy in practice it resembled the earlier 'ensuring control of price' approach. Organisations that used it also used cost-plus contracts with the use of open-book to determine the price they paid. However, we believe it was significantly different in both intent and feel with a much greater emphasis on trust and outcomes than the compliance-focused 'control of price' approach. The organisations using this approach:

- did not focus strongly on reviewing the suppliers' costs from a compliance point of view;
- managed the supplier closely, including scrutinising resource levels, the mix of permanent and temporary staff and even pay awards;
- understood the contract's efficiency and productivity because they were embedded in the management of the contract; and
- worked closely with suppliers to achieve a two-way sharing of information so as to drive benefits for both parties.

2.23 As the risk transferred is lower than other strategies, clients must be sure that the benefits such as flexibility, economies of scale, or innovation could not be achieved more cheaply in-house. Furthermore, clients need to ensure that a cost-plus pricing mechanism does not remove the incentive to innovate.¹⁶ This approach also requires considerable contract management and understanding of the supplier's business and processes. In practice, those using this approach emphasised that there is a balance to be achieved between managing the supplier closely where necessary and getting value from the expertise being paid for.

¹⁶ See footnote 13.

Achieving step-change innovation

2.24 The final use of open-book and supply-chain assurance that we encountered was to work with the suppliers to modify both the client's and supplier's approach and achieve a step-change in innovation. Many organisations will at some stage need to completely change how they work with their supply chain, rather than taking a continuous improvement approach. This is often because they face a particularly strong financial or performance challenge.

2.25 Two of our case studies, Affinity Water and Surrey County Council, illustrate this approach of working more collaboratively with their prime supplier to achieve a step-change in productivity. Such collaborative working is often said to require the use of open-book to provide a shared data set. However, these two organisations held their suppliers to the terms of the contract, while being willing to review the overall process. They used supply-chain assurance techniques to step into the prime supplier and discuss how to improve the contract to mutual advantage, including identifying potential efficiencies.

2.26 Both organisations were clear on why they needed to make these changes and showed similarities in how they did so, including:

- creating a contractual framework that aligned client incentives with those of prime suppliers so both parties would benefit from success;
- working with prime suppliers to identify best practice for subcontractors and rolling that out across the supply chain; and
- maintaining or building the technical skills within the client organisation to manage such an approach.

2.27 Our experience suggests this is a particularly challenging strategy to carry out as it requires balancing co-working with suppliers against tight commercial management. The client needs to manage the risk that it:

- might rely on the supplier to define the solution, such that the supplier does so with only its own interests in mind;
- might gain commercial benefit at the supplier's expense, rather than because of the supplier's success, which may not be sustainable in the long run; and
- might fail to recognise that it needs to change its own commercial culture or overcompensates.

2.28 Collaborative working with tight commercial management is often a difficult change from traditional ways of working. The relationships necessary to understand each other's processes, and work out how to improve them, can inappropriately lead to too close a relationship and a lax management of the contract.

Part Three

Implications for government

3.1 This Part draws on the evidence we collected for this report and our wider experience of auditing contracts to provide recommendations to government. It highlights that the government needs to:

- create a more strategic approach to supply-chain assurance;
- have a more sophisticated understanding of profit;
- consider the client's commercial capability; and
- integrate an information strategy into procurement and contract management.

Strategic approach

Every major contract needs a supply-chain assurance strategy

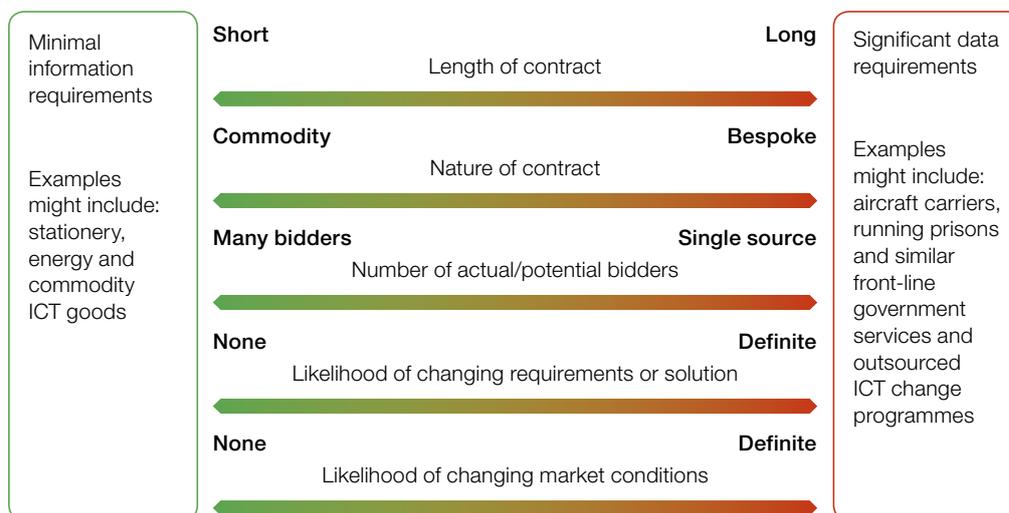
3.2 Our case study organisations all knew their supply-chain information and assurance requirements, including whether or not they needed open-book clauses. For them, this formed part of a negotiation with suppliers, and was an important part of their commercial strategy, aligned with what they were procuring and their risks. This contrasts with government organisations which, as we set out in Part One, do not always have a clear policy on when to use open-book accounting, or an understanding of what they are looking for when they do (paragraphs 1.9 and 1.10).

3.3 This is not to say that every contract needs to adopt a full open-book accounting approach. The resource implications on suppliers and government, as well as its impact on the market would make it untenable and unlikely to be value for money.

3.4 Instead, different types of contract will have different information requirements. The need for open-book accounting depends on the various aspects of the risk being managed (**Figure 7** overleaf). The assurance strategy for buying a commodity should focus on the price and the quality of the product. These strategies might be quite short. For small, short-term service contracts, it is likely that a schedule of how the supplier has priced the service from its individual parts will suffice. But larger, more bespoke, complex contracts would be well served by full open-book accounting procedures.

Figure 7

Different contract types will need different levels of information



Source: National Audit Office

3.5 We thus recommend that every major contract should have a supply-chain assurance strategy. This should be set out, in high-level terms, early in the procurement process, for example as part of the commercial case in the Outline Business Case.¹⁷ It should then be set out in more detail as part of the contract management plan. Part Two of this report provides some guidance on the different strategies that might be adopted.

3.6 There should be a presumption in developing these strategies that suppliers will provide information if asked, and that asking for information will not prejudice competition by dissuading potential bidders from bidding. Our case studies highlighted that, where market conditions require it, suppliers will give customers extensive information. For example:

- IKEA sets ethical standards for its suppliers to follow and scrutinises these closely;
- Jaguar Land Rover agrees detailed production designs with suppliers and then monitors the quality and efficiency of the supplier's production processes; and
- the large high-street retailer uses detailed information to work with suppliers to improve how they run outsourced logistics operations.

¹⁷ HM Treasury, *Public sector business cases using the five case model*, supplementary Green Book guidance, updated in 2013.

3.7 The Cabinet Office is currently considering how to roll open-book out to new large contracts. We expect most suppliers will agree to this. Serco and G4S, for example, told the Committee of Public Accounts in 2014 that they would be happy to open their books to the National Audit Office.¹⁸ In preparing this study we held two workshops with public sector suppliers, one organised by the Confederation of British Industry (CBI) and one organised by the International Association for Contract and Commercial Management (IACCM). There we heard a willingness to accept information requirements if they are set at the beginning of contracts so that suppliers can devise systems to collect the data.

Government should negotiate the retro-fitting of open-book access rights into old contracts, where applicable

3.8 A considerable number of large, fixed-price, longer-term contracts, however, pre-date the current view that open-book can be helpful for fixed-price contracts. If open-book is only inserted into new contracts, then it will take a long time for it to be rolled out. Therefore, in contracts where government would expect open-book and third-party audit rights if it were procuring today then it should seek to negotiate the retro-fitting of such rights as far as possible. In the past, HM Treasury has been very successful at getting suppliers to voluntarily agree to changes to meet updated expectations of public accountability, including in 2002 when it brokered an agreement that all PFI suppliers share in refinancing gains. We would therefore hope that government would be assertive in negotiating retro-fitting of audit and open-book rights, including such rights except where the benefits of doing so are outweighed by the costs.

3.9 In practice the amount of information that government can demand from its suppliers will depend on its market power. It is thus helpful that its market power as a customer is typically greatest where it is demanding bespoke services as this is where full open-book accounting has most benefit. Where government has been demanding bespoke services but has less market power, such as in the defence industry, the government has had to respond by demanding open-book accounting through primary legislation.¹⁹

Government needs a more sophisticated understanding of profit

3.10 Many stakeholders told us they were concerned that when government and other stakeholders look at profit, they take it out of context and do not understand the numbers they see. Others questioned the need to look at profit at all, when, they argued, the value for money of the service is determined primarily by the overall price charged for the service. In our experience this later view is often accompanied by an excessive confidence in the ability of a competitive process to achieve value for money over the lifetime of a contract. It is also accompanied with a false analogy with private sector contracting.

¹⁸ HC Committee of Public Accounts, *Transforming contract management*, Twenty-third Report of Session 2014-15, HC 585, December 2014.

¹⁹ The Defence Reform Act 2014 received Royal Assent in May 2014, but some parts will not come into force for three years. Available at: <http://services.parliament.uk/bills/2013-14/defencereform.html>

3.11 In our view, government contracts are often very different from most private sector contracts, and let on a different basis. This creates a strong need for government to understand its suppliers' profits. More specifically:

- **The initial competition rarely gives strong assurance on value for money over the lifetime of a contract.** There are weaknesses in the public procurement method itself: only a limited number of bids can be readily considered; these bids are not always easily comparable; not every company understands the procurement process so not all that could bid do; and in practice too little focus is given to the capability companies have already demonstrated.
- **Public value can be hard to measure.** It is often harder to judge the value of contracted-out public services than it is for a private company to know that it is acting economically and is competitive against its rivals in the market. Public value can be hard to define in a contract. Benchmarking the broad profitability of its suppliers against their non-public sector contracts can provide the government with a useful indicator on price.
- **Competition for contracts is not sufficient to achieve value for money over the life of the contract.** The government often contracts for services using long-term contracts with fixed prices. Public procurement is designed to apply competitive pressure at the start of these contracts. After this, the supplier normally has a monopoly over the lifetime of the service, but the value achieved from the contract will change with changing technology, market conditions and requirements. Open-book provides a mechanism to manage such change.
- **Government needs to use a broader set of commercial levers.** As we argued in our 2014 report *Transforming government's contract management*, government is at a disadvantage in its commercial capability with its suppliers and should seek to use what advantages it can.

3.12 However, we agree with those that say that government needs a more sophisticated understanding of profit if it is to use it to take assurance on the broad health of public procurement and to manage specific contracts. It is not a simple issue of quoting a target profit margin, which suppliers appear to fear that government will take. We suggest two ways that government needs to improve its interpretation and understanding of its suppliers' costs and profits.

Cabinet Office should set up a task force to explore how to establish a common standard for open-book data

3.13 First, the government should be more consistent in how it calculates profit, especially when dealing with areas of subjectivity in reported cost data. Most obviously this means non-cash costs and the allocation of costs – such as staff costs, subcontractor costs, volume discounts and overheads – across several contracts. These are the areas where the most accusations of manipulating profit margins are focused (**Figure 8**).

Figure 8

Ways of manipulating the reported profit

Type of cost	Example	Key sensitivities
Overall		Open-book accounts may not reconcile to suppliers' own books in a simple, consistent way. New cost categories may be introduced post-bid to reduce reported profits.
Direct costs, wholly on the contract	Staff member working solely on the contract	A staff member may be used on several contracts, for example to bid to other customers. This may cause double counting of costs in project costs.
Subcontracted costs	Main supplier delivers multiple services under the contract and subcontracts a proportion of the work to help with delivery	Have the subcontractors been competitively sourced? Are subcontractors fully independent of the main supplier? Are there any volume discounts that are allocated centrally rather than to the contract? As these costs reduce main-supplier risk, a relatively high level of subcontracted costs should lead to a lower profit for the prime supplier. Where particularly significant to the overall running of the contract, open-book access at subcontractor level may be desirable.
Centrally allocated costs	A building or piece of equipment that is used to deliver multiple contracts	Is the basis of allocation reasonable and consistent between the different contracts using the resource? Are 'new' allocated costs discovered post-contract signature or during contract life?
Centrally allocated overheads	Head office, sales, general insurance, tax, interest, etc.	Very hard to validate how these have been allocated. Government might want to agree definitions for these and always treat them as an element of profit.

Source: National Audit Office – summary of our collective experience at using open-book

3.14 Different contracts ask for the open-book accounting reports to treat these costs differently, which makes it harder for suppliers to assemble and present the data, harder for contract managers to interpret it, and more likely that costs are inappropriately allocated and profits misstated. It also generally means that suppliers present financial data in a different format to their management accounts.

3.15 The Ministry of Defence now requires its single source suppliers to hold their accounting records to a common format to aid open-book accounting.²⁰ While the Ministry's approach would be expensive for general contracting, it would be relatively easy to produce some common standards on how to deal with elements such as capital and the allocation of overheads.

3.16 We suggest that the Cabinet Office sets up a task force of government, suppliers and other stakeholders to explore how best to establish a common set of principles and templates. These could then be tailored in more detail at the start of each contract.

The Cabinet Office should provide better guidance for interpreting suppliers' costs and profits

3.17 Second, the government needs to improve its understanding of how the contractual approach determines the level of profit suppliers achieve. We often encounter assumptions that profits should be consistent across a category of service, such as ICT, or even that the government should pay a small margin regardless of the service. A corporate finance understanding would reflect that profits vary from contract to contract depending on:

- the treatment of overheads;
- the level of investment;
- the level of innovation and product differentiation; and
- the risk transferred to the supplier.

3.18 This corporate finance approach to understanding profit is common among some parts of government, but we do not see it across all contracts. Government needs to understand how profits vary more and, in particular, how its contractual approach affects the profitability of its suppliers.

3.19 As part of this, government needs to better understand how a supplier's profits are impacted by changes of volume. For many contracts, prices are negotiated based on an assumed level of business volume. In reality, volumes will almost always be either higher or lower. Depending on the supplier's costs structure this could mean that profits, and returns, are substantially higher or lower and impact its behaviours.

20 Ministry of Defence, *The Yellow Book*, updated annually.

3.20 Understanding cost structures better could have two benefits:

- A better understanding of how suppliers' cost structures affect their behaviour in different types of contracts can enable government to improve its contract management.
- A better understanding of how suppliers make their money would enable contract managers to better negotiate good deals.

3.21 We set out some further thinking on this in Appendix Two.

Government needs to include the roll-out of increased supply-chain assurance as part of its commercial skills programme

3.22 Government officials told us through our survey and interviews that the biggest barrier to the greater use of open-book accounting is the lack of skilled forensic accountants and resources across government to implement it.

3.23 A greater use of open-book and supply-chain assurance will require enhanced skills and capability. This is in line with the Cabinet Office plan to enhance commercial capability and to create a better commercial profession. However, we believe some are over-estimating the number of accountants needed and under-estimating the broader changes required. We have three observations.

3.24 First, the type of skills that are needed depends largely on the use to which open-book and supply-chain assurance techniques are put.

- A greater use of the compliance approach to open-book would require a considerable number of forensic accountants, cost engineers and technical specialists. Running the majority of government's contracts on a target cost basis, like that used in single sourcing by the Ministry of Defence, would be ambitious.
- Consultants, or a government shared service, could play a larger role in using open-book to inform commercial decisions. These exercises can be less frequent than those currently used by the Ministry of Defence.
- Process assurance requires operational managers embedded in the supplier.
- Maintaining control of risk and achieving step-change innovation requires more technical expertise in the service, and contract management skills.

3.25 Second, an effective use of supply-chain assurance does not necessarily require more people than some of the current models of managing contracts. A common factor in our case studies was an inquisitiveness by the contract manager of the supplier. In some cases there were very few people on the contract management side, but these people were willing and able to go and find out how the supplier was delivering the service. Another common factor was a generally high level of commercial understanding and skills, enabling the contract managers to understand the implications of the open-book and supply-chain assurance, and to maintain a tight commercial relationship. Obviously, the exact resourcing of each contract will depend on factors such as the experience of the supplier and whether the supplier is new to the organisation or service.

3.26 Third, as much as requiring new skills, acquiring the capability to undertake enhanced supply-chain assurance may require a cultural change within civil service departments and organisations. A renewed focus on how suppliers deliver would entail a greater interest in operational delivery and a move away from a focus on procurement. Ensuring supply-chain assurance is embedded would require client senior management to demonstrate that they are interested in the reports produced and use them to manage their contract relationships.

Departments need to integrate open-book requirements into the procurement of contracts

3.27 Like any data, open-book data needs a set of comparatives to help to analyse it and make it meaningful. The most obvious analysis that we would always suggest a contract manager undertakes is to compare the actual costs to those proposed before the contract was procured; those in the bid; and the costs over time. In some cases it may be possible to compare the costs to other contracts, especially where contracts are issued in lots or for elements that are commodities.

3.28 We sometimes hear of open-book and supply-chain assurance arrangements being added to contracts once they are operational. This is not desirable, for three reasons: there is no agreement on arrangements when the contract is let; there is no defined way of interpreting costs or comparative bid to compare actual costs; data have not been collected in a way that allows a comparison with other contracts and benchmarks.

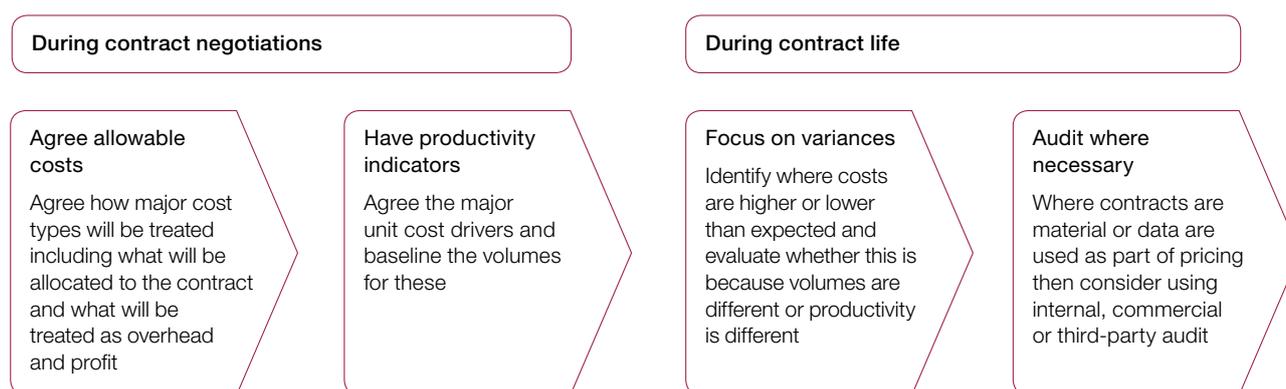
3.29 Instead, information requirements should ideally be set during negotiations so definitions can be agreed. The way information will be used should be part of the contract management plan. Obviously, this may not be possible where retro-fitting the requirement into old contracts.

3.30 Figure 9 illustrates what this might mean for a simplified approach to collecting financial information. A more detailed framework has previously been published by the Chartered Institute of Public Finance and Accountancy.²¹ The Cabinet Office is currently trialling a detailed framework for use in central government.

3.31 It is also important to consider how different types of information can be used together to understand contract performance overall. Some of those we consulted pointed to the perverse behaviour that can be caused by an exclusive focus on costs, driving down short-term costs at the expense of investment, productivity and long-term value. They argued that cost data must be combined with productivity information and with other measures of quality, if it is to be used wisely. Some we consulted also told us of the importance of understanding how contracts interact with other costs in the organisation.

Figure 9

Simplified framework for collecting financial information



Source: National Audit Office

²¹ Chartered Institute of Public Finance and Accountancy, *Open Book Accounting: How to Deliver and Demonstrate Value for Money in the Public Sector*, December 2013.

Appendix One

Our evidence base

1 We collected and analysed evidence on how open-book accounting is being used in government and in the private sector between November 2014 and March 2015. Our methods comprised:

- **Case study visits with nine organisations in the private and public sectors.**

We conducted semi-structured interviews so we could understand how the organisation uses supply-chain information. We did not audit information provided, and we are not endorsing any organisation or approach. We do not cover every approach that industry takes, and sometimes the case study covers only part of the organisation's operations.

- **A survey of how government is using open-book accounting.**

We did not audit the survey responses. Government organisations completed the survey, and we sometimes used our judgement to analyse qualitative responses into categories that we chose to reflect the overall response. Further details are in the next section.

- **A review of the Cabinet Office's documents on open-book.**

In August 2014, the Cabinet Office reviewed a sample of contracts selected from its contracts finder database.²² It found that 39% of total contract value was in contracts with open-book clauses. Later, the Cabinet Office commissioned Stradia to hold workshops with 20 teams managing contracts to find out how they were using open-book. These results are broadly consistent with our survey.

- **Semi-structured interviews with various organisations and individuals to explore the key issues and challenges in using open-book more effectively.**

This report has been informed by evidence from discussions with subject-matter experts and commentators both within and outside of government. We held semi-structured interviews with the Chartered Institute of Procurement and Supply (CIPS), the Chartered Institute of Public Finance and Accountancy (CIPFA), the Cabinet Office and other stakeholders. We also held two roundtable discussions with members of the Confederation of British Industry (CBI) and the International Association for Contract and Commercial Management (IACCM).

22 Contracts Finder. Available at: www.contractsfinder.service.gov.uk

- We reviewed our previous work and other literature on open-book accounting to understand the history of its use in government and thinking on theoretical benefits and limitations.

Our survey of how government is using open-book

2 To find out how much open-book was being used we examined a sample of contracts. The survey comprised two parts:

- The first part asked respondents about their policy for when open-book would be used, the benefits and limitations of open-book and examples of using open-book in the past two years.
- The second part asked for detailed information on open-book accounting in a sample of contracts operating in 2013-14. We asked for contract details, whether it had open-book clauses, whether organisations used such clauses to get data from the supplier, whether and how they had validated that data, and how they used it.

3 We defined open-book as the right for the contracting authority to receive data from the supplier showing a breakdown of costs in greater detail than in the invoice. For example, this could include unit costs, supplier profit, or details of cost absorption by suppliers.

4 We sent all sampled government entities the first part of the questionnaire. We also sent it to all departments who were not randomly selected for the other part. This gave us views from all 17 major departments.

Survey approach

5 Our population was taken from the Cabinet Office's 'spend analysis' tool, which contains data on central government procurement spend. The data is sourced from organisations' accounts payable systems. It reports a total procurement spend of £41.3 billion with more than 100,000 suppliers in 2013-14.

6 The data set is the most detailed itemised source of data on central government contracting spend available. There are, however, various issues with the data set, such as:

- it identifies spend with individual suppliers broken down by government body, but does not show how that spend relates to individual contracts;
- not all government bodies report all of their spend in this data set; and
- data may be incomplete, inaccurate or misclassified.

7 We extracted a list of 2,758 ‘supplier entries’ totalling £35.3 billion (**Figure 10**). This comprises instances where organisations reported that they had spent more than £1 million with a single supplier in 2013-14. We excluded instances where details are restricted and where the supplier is listed as part of the public sector. Each supplier entry may comprise several contracts with the same supplier, and therefore may include contracts with spend below £1 million.

8 We selected an initial sample of 207 supplier entries. We divided our sample into 3 value bands and selected a higher proportion of contracts from higher value bands where open-book is expected to be of more use. We treated Ministry of Defence data slightly differently because it has a large number of higher-value contracts. We asked the sampled government entity to give details of contracts with the sampled supplier where the 2013-14 spend was above £1 million. The Ministry of Defence was unable to supply details of all the contracts initially identified for a sample of 45 suppliers, due to response burden. We therefore selected a sub-sample equivalent to one-quarter of the contracts with these 45 suppliers.

Survey results

9 The departments’ estimates of 2013-14 spend on each sampled contract were used to place contracts into the correct band. This gave us information on 338 contracts. However, we excluded 4 contracts where the department did not know if the contract had open-book clauses, leaving 334 contracts (**Figure 11**). Our analysis of whether departments had received and verified open-book data is based on 332 contracts because there are two contracts where the department did not know whether it had received data due to changes in the management arrangements for the contracts.

Figure 10

Survey population and sample size

Band (£m)	Value 2013-14 (£m, as reported in the spend analysis tool)		Number of supplier entries (as reported in the spend analysis tool)	
	Population	Sample	Population	Sample
All departments				
1-10	6,239	211	2,299	79
10-50	7,358	1,090	340	51
50+	21,669	12,231	119	77
Total (all departments)	35,266	13,532	2,758	207

Note

1 Within each band, Ministry of Defence contracts have a different chance of selection compared with the other contracts. This needs to be taken into account when calculating the estimates shown in the report and in Figure 12 (see para 12).

Figure 11

Departmental data received

Band (£m)	Total spend sampled 2013-14 (£m, as reported by departments)	Number of contracts
All departments		
1-10	664	209
10-50	1,936	92
50+	5,669	33
Total sample	8,270	334

Note

1 Numbers do not add due to rounding.

Source: National Audit Office survey of central government

10 Our results only apply to contracts above £1 million and we estimate that the total spend on such contracts is £35.3 billion. The £35.3 billion figure from the spend analysis tool (see Figure 10) still includes some individual contracts below £1 million. However, the information from our survey suggests that, for the Ministry of Defence, the spend estimate from the tool is lower than the spend reported to us by the Ministry, while for other departments it tends to be higher. Taking this into account, our best estimate of the population of contracts is very close to the £35.3 billion reported by the spend analysis tool.

11 All organisations surveyed responded. Highways England was unable to provide all the information we asked for because they did not have central records of where open-book was being used and it would have taken a long time to collect it from contract managers.

12 **Figure 12** overleaf reports our findings and the associated 95% confidence intervals.²³ We weighted the survey results to ensure that the profile matched that of the population. For example, if a contract had a low chance of being selected, it is weighted-up to compensate for the fact that it is under-represented in the sample. The weights were determined from the probability with which an item was selected.²⁴

23 As with any survey, each result we report is subject to a certain level of uncertainty. The degree of uncertainty is indicated by the '95% confidence interval': broadly speaking, we are 95% certain that the stated confidence interval range contains the value for the population.

24 The weight is the inverse of the probability of selection.

Figure 12
Survey results

	Estimate	95% confidence interval ² (%)
Contracts with open-book clauses¹		
Number of contracts	31% of all contracts	19–46
• excluding the Ministry of Defence	23%	14–36
Value of contracts	57% of total spend	19–89
• excluding the Ministry of Defence	42%	32–51
Contracts with open-book clauses – banded by annual spend¹		
£1m–£10m	25% of contracts in this band	15–38
• excluding the Ministry of Defence	20%	11–35
£10m–£50m	65%	51–76
• excluding the Ministry of Defence	51%	39–63
£50m+	56%	17–89
• excluding the Ministry of Defence	50%	37–63
Contracts where data was received³		
Number of contracts	23% of all contracts	14–34
	75% of contracts with open-book	61–86
Value of contracts	91% of spend on contracts with open-book	82–100
• excluding the Ministry of Defence	73% of spend on contracts with open-book	61–85
Contracts where data was received and verified³		
Number of contracts	19% of all contracts	12–29
	63% of contracts with open-book	47–76
Value of contracts	87% of spend on contracts with open-book	77–98
• excluding the Ministry of Defence	66% of spend on contracts with open-book	53–79

Notes

- 1 Results are extrapolated from a sample of 334 contracts (280 excluding the Ministry of Defence) with 2013-14 spend of at least £1 million.
- 2 As with any survey, each result we report is subject to a certain level of uncertainty. The degree of uncertainty is indicated by the 95% confidence interval: broadly speaking, we are 95% certain that the stated range contains the value for the population.
- 3 The sample size for 'contracts where data was received' and 'contracts where data was received and verified' is 332 because we excluded 2 contracts where the department concerned did not know if it had received data in 2013-14. There were 4 contracts where government asked for and received data even though it did not have open-book clauses in the contracts.

Source: National Audit Office survey of central government

Appendix Two

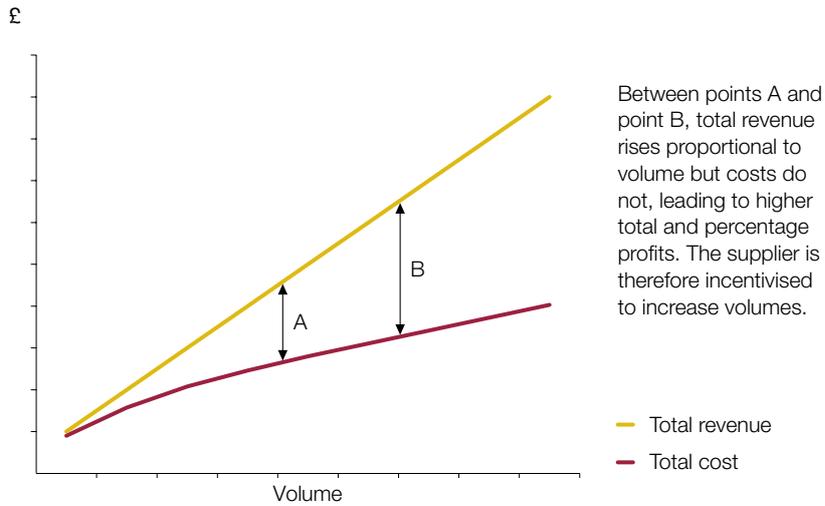
Illustration of understanding suppliers' cost structures

1 We often come across contracts where we suspect that a better use of open-book accounting would aid in the design of better contracts. The examples overleaf are highly simplified models designed to illustrate this point, based loosely on real examples. Each diagram shows a representation of revenue and cost at different volumes of demand on the service. The difference between the two is profit.

Example 1

Volume determined by mutual agreement and managed through a change control mechanism

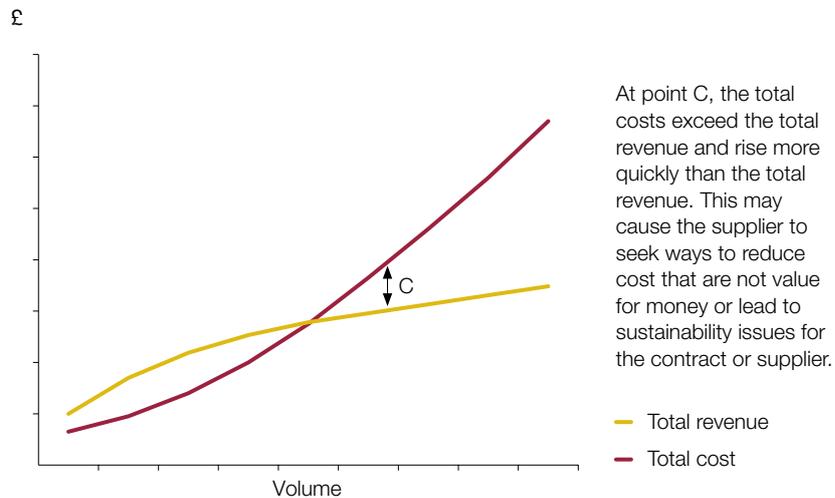
Many government contracts price incremental work with the same margin as the original contract. Without open-book, there is a risk that the pricing of these changes takes no account of economies of scale the supplier can make across the contract. This creates an incentive for the supplier to increase volumes as much as possible as both the overall profit and profit margin rise as volumes rise.



Example 2

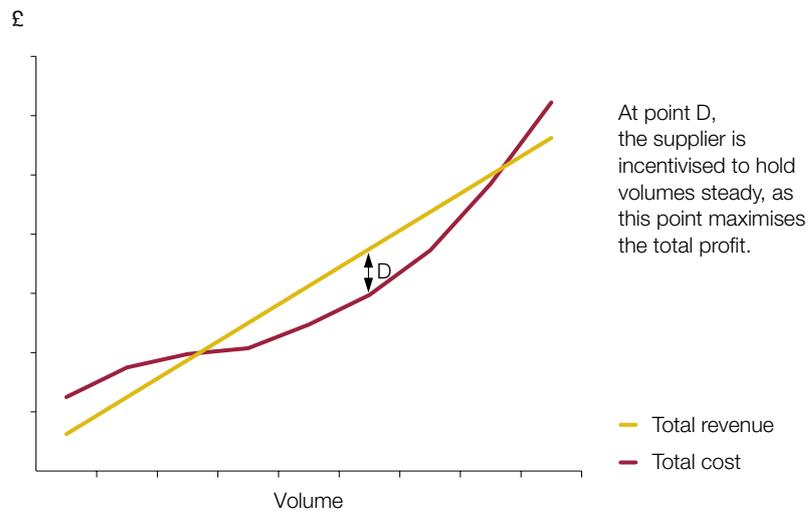
Volume determined by outside events

In some cases, government may have anticipated economies of scale and negotiated a price that does not increase proportionally with volumes. However, beyond a certain point the supplier may actually face rising unit costs, known as dis-economies of scale. This would occur, for instance, when capital facilities are fully utilised and the supplier has to buy-in additional capital at a very high incremental cost. This can cause problems where volume is not in the control of the supplier, as losses can lead to a reduction in the quality of the service.



Example 3**The amount of effort in the control of the supplier**

In payment by results contracts, the supplier controls the 'volume' of effort and is paid for the outcomes. However, each incremental outcome can be harder to achieve and thus cost most. There are situations where the supplier knows, or thinks, that it is at the point where profits are highest, so an increase in volume would lead to declining total profits. In these situations the supplier will self-ration the amount of effort they put in. It is therefore important for the client department to understand where this level is for different levels of pricing, and decide whether to shape revenues to pay more for each incremental unit of higher outcome.



Appendix Three

Other reports on open-book

- 1 The main reports which informed Figure 1 (page 12) on the history of open-book are:
 - Hansard HC, *Ferranti Ltd. (Lang Report)*, 28 July 1964, vol. 699, cols 1231–6. Available at: <http://hansard.millbanksystems.com/commons/1964/jul/28/ferranti-ltd-lang-report>
 - Hansard HC, *Bristol Siddeley Engines Ltd. (Inquiry)*, 5 April 1967, vol. 744, cols 256–68. Available at: <http://hansard.millbanksystems.com/commons/1967/apr/05/bristol-siddeley-engines-ltd-inquiry>
 - Ministry of Defence and Confederation of British Industry, Memorandum of Understanding on Government Profit Formula, 26 February 1968.
 - Comptroller and Auditor General, *Ministry of Defence: Profit Formula for Non-Competitive Government Contracts*, Session 1984-85, HC 243, National Audit Office, February 1985.
 - Comptroller and Auditor General, *Ministry of Defence: Production Costs of Defence Equipment in Non-Competitive Contracts*, Session 1984-85, HC 505, July 1985.
 - Comptroller and Auditor General, *Ministry of Defence – The Profit Formula*, Session 1987-88, HC 480, National Audit Office, May 1988.
 - Comptroller and Auditor General, *Department of Transport: Contracting for Roads*, Session 1992-93, HC 226, National Audit Office, October 1992.
 - Comptroller and Auditor General, *Modernising Procurement*, Session 1998-99, HC 808, National Audit Office, October 1999.
 - Comptroller and Auditor General, *The Refinancing of the Fazakerley PFI Prison Contract*, Session 1999-00, HC 584, National Audit Office, June 2000.
 - Comptroller and Auditor General, *The Radiocommunications Agency's Joint Venture with CMG*, Session 2000-01, HC 21, National Audit Office, December 2000.

- Comptroller and Auditor General, *Modernising Construction*, Session 2000-01, HC 87, National Audit Office, January 2001.
- HC Committee of Public Accounts, *The Refinancing of the Fazakerley PFI Prison Contract*, Thirteenth Report of Session 2000-01, HC 372, July 2001.
- Comptroller and Auditor General, *Non-Competitive Procurement in the Ministry of Defence*, Session 2001-02, HC 290, National Audit Office, November 2001.
- Comptroller and Auditor General, *Managing the relationship to secure a successful partnership in PFI projects*, Session 2001-02, HC 375, National Audit Office, November 2001.
- HC Committee of Public Accounts, *Managing the Relationship to Secure a Successful Partnership in PFI Projects*, Forty-Second Report of Session 2001-02, HC 460, July 2002.
- Comptroller and Auditor General, *PFI refinancing update*, Session 2001-02, HC 1288, National Audit Office, November 2002.
- HC Committee of Public Accounts, *Improving Construction Performance*, Second Report of Session 2001-02, HC 337, December 2001.
- Comptroller and Auditor General, *PFI: Construction Performance*, Session 2002-03, HC 371, National Audit Office, February 2003.
- Comptroller and Auditor General, *Purchasing and Managing Software Licences*, Session 2002-03, HC 579, National Audit Office, May 2003.
- Comptroller and Auditor General, *PPP in practice: National Savings and Investments' deal with Siemens Business Services, four years on*, Session 2002-03, HC 626, National Audit Office, May 2003.
- Comptroller and Auditor General, *Improving IT procurement*, Session 2003-04, HC 877, National Audit Office, November 2004.
- Comptroller and Auditor General, *Improving public services through better construction*, Session 2004-05, HC 364, National Audit Office, March 2005.
- Comptroller and Auditor General, *Ministry of Defence: Using the Contract to maximise the likelihood of successful project outcomes*, Session 2006-06, HC 1047, National Audit Office, June 2006.
- Comptroller and Auditor General, *Central government's management of service contracts*, Session 2008-09, HC 65, National Audit Office, December 2008.
- National Audit Office and Office of Government Commerce, *Good practice contract management framework*, December 2008.
- Comptroller and Auditor General, *The BBC's management of strategic contracts with the private sector: review by the Comptroller & Auditor General presented to the BBC Trust's Finance and Strategy Committee*, National Audit Office, March 2009.

- Comptroller and Auditor General, *Highways Agency: Contracting for Highways Maintenance*, Session 2008-09, HC 959, National Audit Office, October 2009.
- Comptroller and Auditor General, *Ministry of Defence: Delivering multi-role tanker aircraft capability*, Session 2009-10, HC 433, National Audit Office, March 2010.
- Comptroller and Auditor General, *The performance and management of hospital PFI contracts*, Session 2010-11, HC 68, National Audit Office, June 2010.
- HC Committee of Public Accounts, *Delivering Multi-Tanker Aircraft Capability*, Second Report of Session 2010-11, HC 425, September 2010.
- Comptroller and Auditor General, *Lessons from PFI and other projects*, Session 2010–2012, HC 920, National Audit Office, April 2011.
- Comptroller and Auditor General, *The National Programme for IT in the NHS: an update on the delivery of detailed care records systems*, Session 2010–2012, HC 888, National Audit Office, May 2011.
- Lord Currie of Marylebone, *Review of Single Source Pricing Regulations*, October 2011. Available at: www.gov.uk/government/consultations/consultation-on-the-independent-review-of-single-source-pricing-regulations-responses
- Comptroller and Auditor General, *The BBC's approach to managing the cost of its support functions*, National Audit Office, May 2012.
- Comptroller and Auditor General, *HM Revenue & Customs: Customer service performance*, Session 2012-13, HC 795, National Audit Office, December 2012.
- HC Committee of Public Accounts, *HMRC: Customer service*, Thirty-sixth Report of Session 2012-13, HC 869, March 2013.
- Comptroller and Auditor General, *Charges for customer telephone lines*, Session 2013-14, HC 541, National Audit Office, July 2013.
- Comptroller and Auditor General, *The rural broadband programme*, Session 2013-14, HC 535, National Audit Office, July 2013.
- HC Committee of Public Accounts, *Charges for customer telephone lines*, Twenty-seventh Report of Session 2013-14, HC 617, November 2013.
- Comptroller and Auditor General, *Investigation into the Education Funding Agency's oversight of related party transactions at Durand Academy*, Session 2014-15, HC 782, National Audit Office, November 2013.
- Comptroller and Auditor General, *The role of major contractors in the delivery of public services*, Session 2013-14, HC 810, National Audit Office, November 2013.
- HC Committee of Public Accounts, *Contracting out public services to the private sector*, Forty-seventh Report of Session 2013-14, HC 943, February 2014.

- Comptroller and Auditor General, *Managing and replacing the Aspire contract*, Session 2014-15, HC 444, National Audit Office, July 2014.
- Comptroller and Auditor General, *Home Office and Ministry of Justice: Transforming contract management*, Session 2014-15, HC 268, National Audit Office, September 2014.
- Comptroller and Auditor General, *Transforming government's contract management*, Session 2014-15, HC 269, National Audit Office, September 2014.
- HC Committee of Public Accounts, *Transforming contract management*, Twenty-third Report of Session 2014-15, HC 586, December 2014.

Recent reports on issues in government contracting

2 The following reports, while not necessarily covering open-book accounting, illustrate how the role of suppliers rose to prominence in the past few years.

- Comptroller and Auditor General, *The London 2012 Olympic Games and Paralympic Games: post-Games review*, Session 2012-13, HC 794, National Audit Office, December 2012.
- Comptroller and Auditor General, *Memorandum on the provision of the out-of-hours GP service in Cornwall*, Session 2012-13, HC 1016, National Audit Office, March 2013.
- Comptroller and Auditor General, *Universal Credit: early progress*, Session 2013-14, HC 621, National Audit Office, September 2013.
- Comptroller and Auditor General, *The Ministry of Justice's electronic monitoring contracts*, Session 2013-14, HC 737, National Audit Office, November 2013.
- Comptroller and Auditor General, *COMPASS contracts for the provision of accommodation for asylum seekers*, Session 2013-14, HC 880, National Audit Office, January 2014.
- Comptroller and Auditor General, *The Ministry of Justice's language services contract: Progress update*, Session 2013-14, HC 995, National Audit Office, January 2014.
- Comptroller and Auditor General, *Personal Independence Payment: early progress*, Session 2013-14, HC 1070, National Audit Office, February 2014.
- Comptroller and Auditor General, *The Work Programme*, Session 2014-15, HC 266, National Audit Office, July 2014.
- Comptroller and Auditor General, *Out-of-hours GP services in England*, Session 2014-15, HC 439, National Audit Office, September 2014.
- Comptroller and Auditor General, *Universal Credit: progress update*, Session 2014-15, HC 786, National Audit Office, November 2014.

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