



National Audit Office

**REPORT BY THE
COMPTROLLER AND
AUDITOR GENERAL**

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Department for Communities and Local Government

The failure of the FiReControl project

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National Audit Office

Department for Communities and Local Government

The failure of the FiReControl project

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Amyas Morse
Comptroller and
Auditor General

National Audit Office

29 June 2011

FiReControl commenced in 2004 and was expected to be complete by October 2009. However, the project was subject to a number of delays and costs escalated over its lifetime. The Department for Communities and Local Government cancelled the project in December 2010 after concluding that it could not be delivered to an acceptable timeframe.

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This report can be found on the
National Audit Office website at
www.nao.org.uk/firecontrol-2011

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Key facts

£120m

original estimate to complete project

£250m

total project spend to end March 2011

£469m

minimum that will be wasted as a result of the failure to deliver the project

5 years

Anticipated delay to the delivery of the project before its cancellation.

£120 million

The Department's original estimate of project costs in July 2004.

£635 million

The Department's forecast total project cost at the time the decision was taken to cancel.

£469 million

Minimum that will be wasted as a result of the failure to deliver. The Department is taking action to minimise additional costs which, if no action were taken, could be as high as a further £180 million.

NOTES

Except for where stated, all figures in the report are in nominal cash terms.

The figure for the minimum wasted as a result of the failure to deliver the project is based on the total project spend and project future spend on regional control centres. Losses and liabilities are reported in the Department's 2010-11 Resource Account.

Summary

1 FiReControl aimed to improve the resilience, efficiency and technology of the Fire and Rescue Service by replacing 46 local control rooms with a network of nine purpose-built regional control centres using a national computer system to handle calls, mobilise equipment and manage incidents.

2 FiReControl commenced in 2004 and was expected to be complete by October 2009. In 2007, the Department for Communities and Local Government (the Department) contracted European Air and Defence Systems (EADS) (now Cassidian) to design, develop and install the computer system underpinning the project. However, the project was subject to a number of delays and costs escalated over its lifetime.

3 The Department cancelled the project in December 2010 after concluding that it could not be delivered to an acceptable timeframe. At the point the decision was made, the Department estimated it had spent £245 million on the project and calculated that completion would take the total cost of the project to £635 million, more than five times the original estimate of £120 million.

4 This report examines why the Department failed to deliver the project and the extent to which it is minimising waste arising from the decision to terminate.

Key findings

FiReControl was flawed from the outset because it did not have the support of the majority of those essential to its success – its users

5 The approach and regional structure underpinning the project were not generally supported by those that were essential to its success – Fire and Rescue Services. The Department did not make sufficiently clear the case for a centrally-dictated standard model of emergency call handling and mobilisation, operating from new purpose-built regional control centres. From the start many local Fire and Rescue Authorities and their Fire and Rescue Services criticised the lack of clarity on how a regional approach would increase efficiency. Early on, the Department's inconsistent messages about the regionalisation of the Fire and Rescue Service led to mistrust and some antagonism.

6 The Department did not sufficiently incentivise local Fire and Rescue Authorities to partner in FiReControl's delivery. Local Fire and Rescue Authorities were under no obligation to use the regional facilities. The Department did not devise, or communicate a set of sufficient incentives to encourage them to support its delivery. None of those who responded to our survey were satisfied with the way in which the Department communicated operating arrangements for the regional control centres. Accountability for delivery was not placed in the hands of the Fire and Rescue Authorities that had the authority to commit the resources and accept operational responsibility.

The Department underestimated the project's complexity and costs whilst benefits were exaggerated

7 The Department underestimated the complexity of designing a system to meet the needs of Fire and Rescue Services and then failed to provide effective management. The Department assumed that the development of the IT system would be straight-forward, involving the integration of already customised components. However, in order to accommodate the wide variation in operational needs of the Fire and Rescue Services, key components required substantial modification. The Department did not take sufficient ownership of the development of the IT system to achieve the required standardisation, delegating too much responsibility for ensuring the needs of services were met to the contractor. In 2009, an Office of Government Commerce review found that there was no single, authoritative owner of the user requirements and that bringing together 45 sets of rules across the Fire and Rescue Service was inherently complex.¹

8 FiReControl was based on unrealistic estimates of project costs and expected local savings. The Department and Treasury committed to the project in 2004, but did so on the basis of very broad-brush and unrealistic estimates of costs of £120 million and an anticipated overall net saving of £86 million. These estimates did not include the costs of meeting local and regional implementation, or the costs of installing equipment, and overestimated the savings that could be achieved locally. It was not until 2007 that the Department carried out its first comprehensive assessment of costs and savings, which estimated the project would cost £340 million, and in fact involved additional expenditure of £50 million.

The Department failed to provide the necessary leadership and management to make the project successful

9 Governance arrangements in the first five years of the project were complex and ineffective, which led to unclear lines of responsibility and slow decision-making. Additional layers of governance were created in response to emerging issues without clear lines of decision-making, accountability, responsibility, assurance, or internal challenge. In 2008, the Office of Government Commerce concluded that the project board was not operating as an effective decision-making

¹ *Report on FiReControl project, Office of Government Commerce, October 2009.*

forum.² It was similarly concerned in 2009 about a cultural failing to share bad news early “across the breadth of the project” and that too many false starts and promises on resource requirements undermined confidence.³ The Department strengthened its governance arrangements in 2009, but it was too late to rectify earlier problems.

10 The project lacked consistent leadership and direction, and was characterised by a high turnover of staff and over-reliance on poorly managed consultants. During the life of the project there have been five different Senior Responsible Owners, four different Project Directors and five officers supervising the delivery of the technology. Only two senior managers worked on the project for its duration, one of whom, the project manager, was on contract from a consultancy. There was no framework to assess consultants’ performance until late 2008, despite the fact that consultants and temporary contract staff made up almost half the Department’s project team during this period.

11 Until 2009, the Department did not take a sufficient grip to sort out early problems with delivery by the contractor for the IT system. There was little real progress due to problems with the integration of a number of sub-systems, and the Department’s failure to ensure that EADS followed the contracted approach in developing the system, until spring 2009, when the Department started to get a grip on the situation. A lack of openness and an adversarial stance between both parties towards problem solving led to the slow resolution of issues.

12 Poor contract design impeded the resolution of issues and the termination of the project at an earlier stage. A lack of interim milestones undermined the Department’s ability to hold EADS to account for delivery. The payment schedule meant that EADS would be paid only once a key milestone for the building and testing of the system had been passed. The delays to delivery led to cash flow difficulties for EADS, which created further tensions in an already strained relationship.

The Department took decisive action to cut its losses and cancel FiReControl

13 The Department took action from June 2010 and committed to holding EADS to contract, with a view to terminating if it could not deliver, whilst reducing the risks to the Department posed by termination. The Department considered contingency options and termination of the contract in 2008 and 2009, but decided to continue on the basis that, at the time, it had confidence in EADS’ continuing ability to deliver. In June 2010, the Department took legal advice and decided that it would be unable to terminate its contract with EADS without incurring substantial compensation payments provided for under the contract. The Department activated a key milestone for EADS in June 2010 requiring EADS to deliver the IT system by mid-2011, and between July and October it documented a series of outstanding breaches against the project agreement. In November 2010, following further legal advice, the Department placed EADS in material breach of contract.

² *Report on FiReControl project*, Office of Government Commerce, October 2008.

³ *Report on FiReControl project*, Office of Government Commerce, October 2009.

14 The Department was justified in cancelling the project. The Department estimated that continuing with FiReControl would cost £390 million, but that delivery would be delayed by another year to May 2012. In comparison, cancelling the project and upgrading local control rooms would cost between £310 and £400 million. The uncertainty over delivery and associated additional costs of FiReControl were such that the Department decided that the contract should be terminated.

15 On terminating the IT contract, the Department received a settlement of £22.5 million from EADS, but during the project made an overall net payment to EADS. The Department agreed a settlement with the contractor in December 2010. During the contracted period, the Department paid EADS £40.0 million. Alongside the settlement, the Department retained equipment worth £5.7 million. This resulted in an overall net payment of £11.7 million being paid to EADS. Although the compensation from EADS cannot be described as significant in the wider sense of the project's overall expenditure, the Department's position at the time, due to underlying weaknesses in the contract, justifies it in considering the outcome to be better than it might have feared.

16 The Department's failure to manage the project as a whole has resulted in the creation of empty regional control centres. The nine regional control centres were purpose-built to house the new computerised equipment and were designed specifically for that purpose. The Department's decision to prioritise the procurement of the centres over the IT system at an early stage meant that the first centres were completed in June 2007, just three months after the IT contract had been awarded. All nine regional control centres were delivered before the cancellation of the project. The Department incurred costs of £32 million in upkeep of the empty centres to the end of March 2011.

17 The Department is trying to reduce ongoing future waste by incentivising local Fire and Rescue Services to use the empty regional control centres. The Department is responsible for rent, utilities and facilities management costs for each of the nine regional control centres. It is currently offering Fire and Rescue Services subsidies to use the centres, but so far only the London control centre has been re-let. The likely remaining total cost of the centres to the Department is estimated to be a minimum of £247 million, and up to £431 million, until the final lease has expired in 2035.

18 The cancellation of FiReControl means local control room functionality and interoperability continues to be variable. The Department ran a consultation on the future of fire and rescue control services in England between January and April 2011, which asked Fire and Rescue Services whether the original objectives of FiReControl remained important, and how these might be achieved. The Department's preferred approach of increased collaboration – determined locally – with some government funding, was widely supported.

Conclusion on value for money

19 This is an example of bad value for money. FiReControl will have wasted a minimum of £469 million, through its failure to provide any enhancement to the capacity of the control centres of Fire and Rescue Services after seven years. At root, this outcome has been reached because the Department, without sufficient mandatory powers, decided to try to centrally impose a national control system on unwilling locally accountable bodies, which prize their distinctiveness from each other and their freedom to choose their own equipment. At the same time, it tried to rush through key elements of project initiation and ended up with an inadequate IT contract, under-appreciating its complexity and risk, and then mismanaged problems with the IT contractor's performance and delivery.

20 The key aims of delivering a new IT system and introducing business change at the local level were undelivered. The delivery of nine regional control centres took place but they currently remain empty and are costly to maintain. The Department is now trying to minimise the future cost of these buildings, which could be as high as £431 million over the remaining 24 years, by transferring their leases to Fire and Rescue Authorities, but currently it has few other means of substantially reducing its liabilities.

21 We recognise the Department made a bold decision to cut its losses by terminating the contract and limiting the downside as far as possible.

Recommendations

22 The issues leading up to this failed project are by no means unique or isolated. Government IT projects can appear to take on a life of their own, continuing to absorb resources without ever reaching their objectives.

23 This report contains three sets of recommendations to:

- a** address the immediate need for the Department for Communities and Local Government to ensure waste as a result of FiReControl is kept to a minimum;
- b** ensure other Departments learn the lessons from the way FiReControl was terminated; and
- c** help the Department for Communities and Local Government to continue to develop its approach and capacity to tackle large-scale IT enabled change projects in the future.

a On reducing further waste from FiReControl

24 The future cost of regional control centres is likely to be high because of the long-term leases agreed with developers. The Department has yet to establish how the original project objectives of FiReControl of resilience and efficiency can be achieved. The Department should manage this process as a new programme with clear objectives, lines of reporting and governance. In so doing, it should:

- continue to work closely with local Fire and Rescue Services to encourage them to utilise regional control centres and, where this is unlikely, examine ways to maximise utilisation by exploring demand from other public and private sector bodies;
- identify effective levers to encourage Fire and Rescue Services to work together;
- consider how the required level of assurance on sub-national interoperability can be met where the Department is unwilling to use its power to impose solutions on Fire and Rescue Services;
- review whether local arrangements provide sufficient certainty of response and deployment of resources on a local, regional and national level; and
- ensure there is a clear process for measuring outcomes, evaluating performance and demonstrating value for money through local delivery.

b On holding contractors to account and terminating projects

25 The terms and conditions of the FiReControl contract with EADS limited the Department's ability to hold them to account. Departments managing long-term projects should:

In designing a contract;

- ensure contract terms and conditions clearly define accountabilities, responsibilities and the requirements which if not met will constitute material breach; and
- retain Departmental ownership and accountability for the risks critical to the project's success.

Government Departments can nevertheless learn lessons from the Department when terminating a contract;

- sharpen short-term contractor performance management, by using milestones and benchmarks to build up robust evidence on performance shortfalls; and
- put in place a strong negotiating team, combining experience of working with the contractor and wider expertise.

c On tackling large-scale IT-enabled change projects in the future

26 Many of the weaknesses in the management of FiReControl are similar to those identified in previous reports on the Department's projects, such as those on New Dimension and Firebuy.⁴ The Department has put in place changes to its management approach and governance since 2009, but it needs to satisfy itself that these address the lessons learnt from FiReControl and embrace the principles set out in the Government's new ICT strategy which are designed to reduce project failure and waste. The Department needs to check the adequacy of the change it has made to ensure the following:

- treat IT projects as business change projects from the outset, working to align the business purpose, the change needed to be delivered and the IT system(s) to enable project benefits to be maximised;
- develop appropriate IT and project management capacity in-house and reduce over-reliance on consultancy;
- understand and resolve cultural as well as technical obstacles;
- ensure end users are fully part of the programme team from the outset;
- ensure that the business case and approval process apply an appropriate level of optimism bias adjustment and challenge;
- ensure that expected costs and benefits and delivery timetables are based upon robust data and an accurate assessment of the project's complexity;
- establish critical path analysis, sequencing and aligning project elements;
- ensure rewards and incentives reflect the balance of financial risks and exposure throughout the life of the project; and
- ensure more transparent control procedures and criteria for evaluating project viability.

⁴ Comptroller and Auditor General, *New Dimension – Enhancing the Fire and Rescue Services' capability to respond to terrorist and other large-scale incidents*, Session 2007-08, HC 1050, National Audit Office, October 2008. *Reducing the cost of procuring Fire and Rescue Service vehicles and specialist equipment*, Session 2010-11, HC 285, National Audit Office, July 2010.

Part One

Introduction

The FiReControl Project

1.1 The Department for Communities and Local Government (the Department) is responsible for setting national strategic policy and direction for the Fire and Rescue Service in England, and for managing national programmes, such as the Fire and Resilience Programme (**Figure 1**), of which FiReControl is a part.

1.2 The 46 local Fire and Rescue Authorities in England are accountable for the delivery of Fire and Rescue Services in their areas. These bodies respond to fires, road traffic accidents and other incidents, while day-to-day management of each Service is undertaken by the Chief Fire Officer. Each Fire and Rescue Service has access to a local control room which handles emergency calls from members of the public, manages incidents and dispatches fire engines, firefighters and equipment to the incident.

1.3 FiReControl had three main elements:

- Accommodation – to deliver nine purpose-built buildings to house the regional control centres.
- Information Technology – to deliver the computer equipment and systems to handle calls, mobilise fire engines (or other equipment) and manage incidents on a national basis.
- Business change – to support Fire and Rescue Services' business change, including preparing each Service for new operational processes and policies, staffing and ways of working.

1.4 The regional control centres were expected to improve on the then current local arrangements by providing purpose-built, secure and resilient facilities, networked across England so that each could back the other up in times of increased call pressure or failure, with each having access to the same information and the ability to manage and deploy resources on a local, regional or national level.

1.5 The Department centrally funded the development of the national IT system, covered the rental and maintenance payments for regional control centres until their transfer to Fire and Rescue Services, and costs incurred by local Fire and Rescue Services in preparation for their transition to these centres.

Figure 1

The Fire and Resilience Programme

FiReControl was part of the Department's Fire and Resilience Programme, a £1 billion investment to strengthen the national and local resilience of the Fire and Rescue Service. The programme consisted of three projects:

- Firelink – to provide a single, digital-wide area radio system for Fire and Rescue Services across England, Scotland and Wales.
- New Dimension – to provide specialist equipment and training in England and Wales to deal with major incidents, such as terrorist attacks and flooding.
- FiReControl – to improve efficiency by replacing local Fire and Rescue control rooms with nine purpose-built regional control centres, and resilience, using enhanced technology to enable a more effective handling of calls, mobilisation of equipment and management of incidents.

Source: National Audit Office analysis of Departmental documents

1.6 The Department started FiReControl in 2004 and expected it to be rolled out between late 2007 and late 2009. However, the project was subject to a number of delays due to difficulties in the delivery of the computer system (**Figure 2** overleaf) and costs escalated over the lifetime of the project. The Department cancelled FiReControl in December 2010 after concluding that it could not be delivered to an acceptable timeframe. At the point of cancellation, the Department estimated it had spent £245 million on FiReControl and calculated that completion would require at least £390 million more, taking the total project cost to more than five times the original estimate.

1.7 Following the cancellation, the Department held a consultation on the future of fire and rescue control services in England between January and April 2011, including how the objectives of the project could be met in other ways. Its preferred approach is one of increased collaboration, determined locally, with government support.

Scope and Rationale

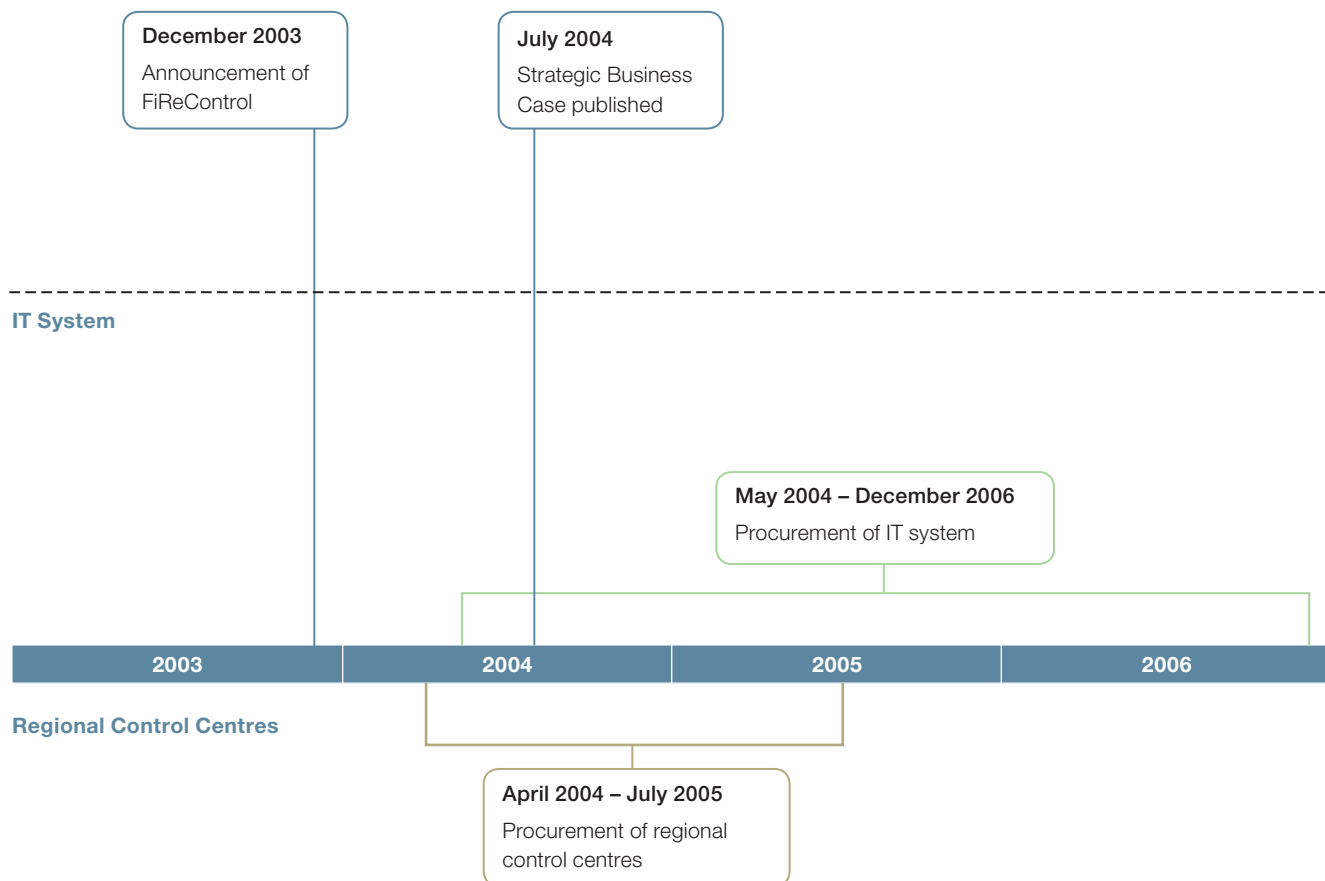
1.8 In February 2010, the Communities and Local Government Select Committee held an enquiry on FiReControl, for which we provided a memorandum. This memorandum set out the key issues that had arisen over the course of the IT project to help inform the Select Committee's enquiry. This report examines the reasons for the Department's failure to deliver the project overall and the consequences of the failure, including:

- Initiation and design (Part Two)
- Delivery (Part Three)
- Project termination (Part Four)

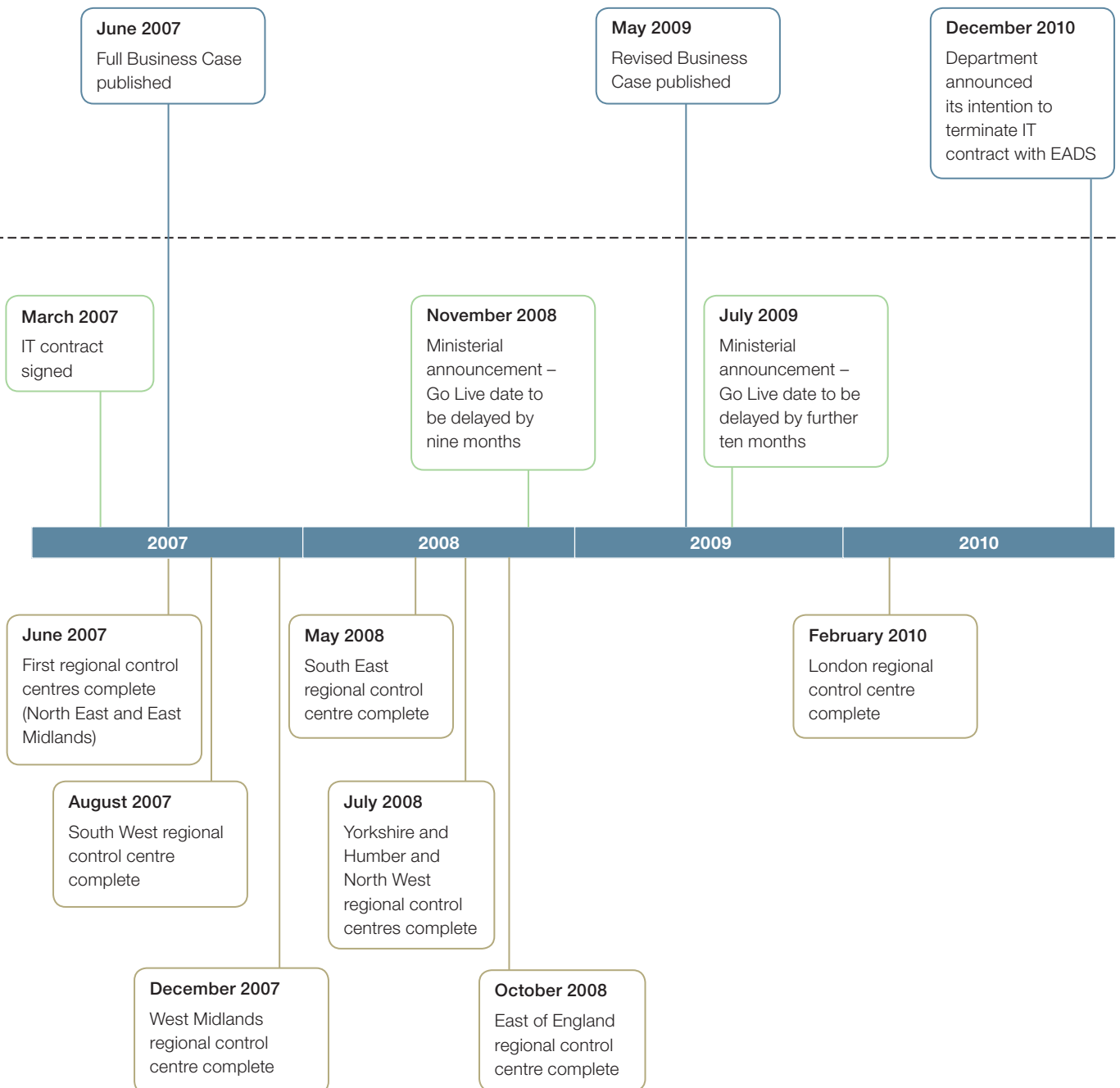
1.9 Our methodology is summarised in Appendix One.

Figure 2
Timeline of key events

FiReControl



Source: National Audit Office review of Departmental documents



Part Two

Initiation and Design of FiReControl

The approach and regional structure underpinning the project were not generally supported by those essential to its success

2.1 FiReControl aimed to replace local control rooms with nine purpose-built regional control centres. The approach was based on a report on the Future of Fire Service Control Rooms and Communication by consultants Mott MacDonald in April 2000.⁵ This concluded that maximum efficiency could be achieved in the Fire and Rescue Service by reducing the number of control rooms from the 46 local controls in England to nine regional controls. The report recognised, however, that this was not an achievable goal in the short- to medium-term, and instead recommended a reduction to 21 sub-regional controls.

2.2 The need to ensure and enhance the resilience of the Fire and Rescue Service to respond to national or large-scale emergencies highlighted by events of 11 September 2001 prompted an update to the Mott MacDonald report in 2003.⁶ This recommended that the Government should adopt a national strategy to reduce the number of local control rooms and form regional control rooms to match the Government Offices within each region. The Government set out its vision for the regionalisation of the Fire Service in June 2003, and the announcement of FiReControl followed in December 2003.⁷

2.3 FiReControl affected the operation of every Fire and Rescue Service in England, but insufficient communication and engagement with stakeholders during the initiation and design of the project led to concerns about its rationale and purpose from the outset. Fire and Rescue Authorities and their Services criticised the lack of clarity on how a regional approach would increase efficiency. The Local Government Association similarly asserted throughout the planning and delivery of FiReControl that a centrally-dictated, one size fits all model was not an appropriate way to optimise resilience. Our survey of Fire and Rescue Services found that twenty-two out of twenty-seven respondents were dissatisfied with the way in which the Department engaged with their service prior to the approval of the project. The Communities and Local Government Select Committee concluded in 2006 that the Department had sent mixed messages about its 'inconsistent' policy for regionalisation, and recommended that further regionalisation should not take place without wide consultation and clear justification of its aims.⁸

⁵ *The Future of Fire and Rescue Service Control Rooms in England and Wales*, Mott MacDonald, April 2000.

⁶ *The Future of Fire and Rescue Service Control Rooms in England and Wales: Update 2003* – Mott MacDonald, December 2003.

⁷ *Our Fire and Rescue Service White Paper*, Office of the Deputy Prime Minister, June 2003.

⁸ *The Fire and Rescue Service*, Communities and Local Government Select Committee, Fourth Report of Session 2005-06, July 2006.

The Department did not sufficiently incentivise Fire and Rescue Services

2.4 Fire and Rescue Authorities or their Services were not legally or contractually obliged to use the regional control centres once complete. Despite this, the Department failed to effectively communicate the benefits of transferring to a regional structure, or the arrangements for this transition. None of those who responded to our survey were satisfied with the way in which the Department communicated operating arrangements after their transfer to the regional control centres.

2.5 The Department's engagement with the Fire and Rescue Service at the start of the project failed to elicit their support for FiReControl. The Department did not provide accurate or timely information on the project's progress, nor did it address specific concerns regarding the delivery of the project, both of which led to a lack of support and raised doubts about the project's ability to meet the Department's objectives. In 2006, the Communities and Local Government Select Committee concluded that the resulting opposition from the Fire and Rescue Service posed the greatest risk to the project's success.⁹ Nineteen (out of twenty-seven) Fire and Rescue Services responding to our survey were dissatisfied with the way in which the Department kept them up to date with the project's progress, stating that communications with the Department were poor, and that they felt they had not been listened to. Consequently, FiReControl lacked support from those who were essential to its success.

2.6 The Department published a revised Stakeholder and Communication Strategy in April 2009, which recognised previous failings and acknowledged that much more needed to be done to build stakeholder trust and confidence, counter misinformation and provide the necessary information to ensure the successful delivery of the project. The Department committed to significantly enhancing its stakeholder engagement and communications to ensure that relationships with stakeholders improved, which was recognised by recipients. In 2010, the Communities and Local Government Select Committee concluded that, whilst this had a positive impact, more still needed to be done to shift the negative perception of the project and to influence Fire and Rescue Authorities to adopt FiReControl once delivered.¹⁰

The Department approved the project on the basis of unrealistic estimates of costs and expected local savings

2.7 The early stages of FiReControl progressed rapidly but key stages of the process got out of sequence, and neither the project plan nor the business case were finalised before the project's approval. A Gateway Review by the Office of Government Commerce in April 2004 after the project had been approved found that the "extraordinarily fast pace" of the project was introducing new risks to the delivery of the project, and escalating those already identified. The review concluded that the project was in poor condition overall and at significant risk of failing to deliver.

⁹ *The Fire and Rescue Service, Communities and Local Government Select Committee, Fourth Report of Session 2005-06, July 2006.*

¹⁰ *FiReControl, Communities and Local Government Select Committee, Fifth Report of Session 2009-10, April 2010.*

2.8 Early assumptions made by the Department on the project costs were not robust and proved over-optimistic. In July 2004, the Department estimated that FiReControl would cost £120 million to deliver, but this figure underestimated the costs of the project. The Department did not, for example, include the costs of meeting local and regional implementation work, or the costs of installing equipment in the regional control centres.

2.9 The Department substantially revised its figures in the light of more accurate information from Fire and Rescue Services and changes to assumptions about staffing, accommodation and infrastructure cost models. The level of development required for the IT system, however, was much greater than expected and, by February 2006, indicative pricing received from suppliers exceeded early forecasts of costs. By 2007, when the Department undertook a comprehensive assessment of the costs, the total cost of the project was estimated at £340 million, almost three times greater than the original figure.

2.10 The Department similarly overestimated the efficiencies which would be realised by local Fire and Rescue Authorities as a result of FiReControl. In 2004, it estimated that the project would deliver savings of £86 million, a 28 per cent reduction in the cost of running the existing control rooms. The Department's fuller assessment in 2007 found that the running costs of local control rooms were lower than the original figures, and consequently, the expected local efficiencies and savings that would be achieved by the project were reduced. Although overall savings of £23 million per year were expected across the Fire and Rescue Service, not every Fire and Rescue Authority was expected to make net annual cost savings, and the project as a whole was expected to cost £50 million more than the savings forecast. A further revision to the Full Business Case, published in May 2009, estimated that the project would cost £218 million more than it saved (**Figure 3**).

The Department did not appreciate the complexity of the project

2.11 The Department underestimated the complexity of providing a system that satisfied the requirements of 46 autonomous Fire and Rescue Services. The procurement of the main contract to supply the IT system took more than two years to complete, in part because of this complexity. The Department made the assumption that the development of the IT system would be straightforward, involving the integration of already customised components. However, in order to accommodate the wide variation in operational needs of Fire and Rescue Services, key components required substantial modification.

2.12 In addition to their relocation to their regional control centre, FiReControl required each Fire and Rescue Service to adapt the ways their service operated. As late as 2009, the Office of Government Commerce recognised the complexity in the need to standardise 45 sets of rules across the Fire and Rescue Service.¹¹ Agreed ways of working were not established during the project's lifetime.

¹¹ Report on FiReControl Project, Office of Government Commerce, October 2009.

Figure 3
Project delivery timetable and estimated costs/benefits

Business Case	Strategic Outline July 2004 ¹ (£m)	Outline January 2005 ¹ (£m)	Full (Version 1.0) June 2007 ² (£m)	Full (Parts one and two) July 2008 ² (£m)	Revised (Version 1.1) May 2009 ² (£m)	At point of termination December 2010 ³ (£m)
Cost to Department	120	120	340	380	380	635
Efficiency savings per annum for Fire and Rescue Authorities	(22)	(23)	(23)	(8)	(6)	n/a
Overall project (savings) costs as Net Present Value ³	(86)	(42)	50	211	218	n/a
IT operational date	n/a	n/a	October 2009	July 2009	May 2010	n/a
Transfer to regional control centres	2007-09	2008-09	2010-11	2010-12	2010 onwards	2012 onwards

NOTES

- 1 2004-05 prices – pre contract estimate to end of project.
- 2 2006-07 prices – business case figures to the end of the expected life of the ICT assets (2021).
- 3 2010-11 prices – expected cost to complete (including cost to date) to the end of the last regional control centre lease (2035).
- 4 Period under consideration for overall project (savings) cost is 2004-05 to 2020-21. The Net Present Value is the discounted net cash flow, where the discount rate is the same as the time cost of money (3.5 per cent).

Source: National Audit Office analysis of Departmental documents

The Department did not adequately plan the project as a whole

2.13 The procurement of the regional control centres and supporting IT system commenced in April and May 2004, respectively, prior to the finalisation of the project's business case. The procurement of the regional control centres took almost a year longer than expected, while procurement of the IT system took almost two years longer, meaning that the two elements were not aligned from an early stage (**Figure 4** overleaf).

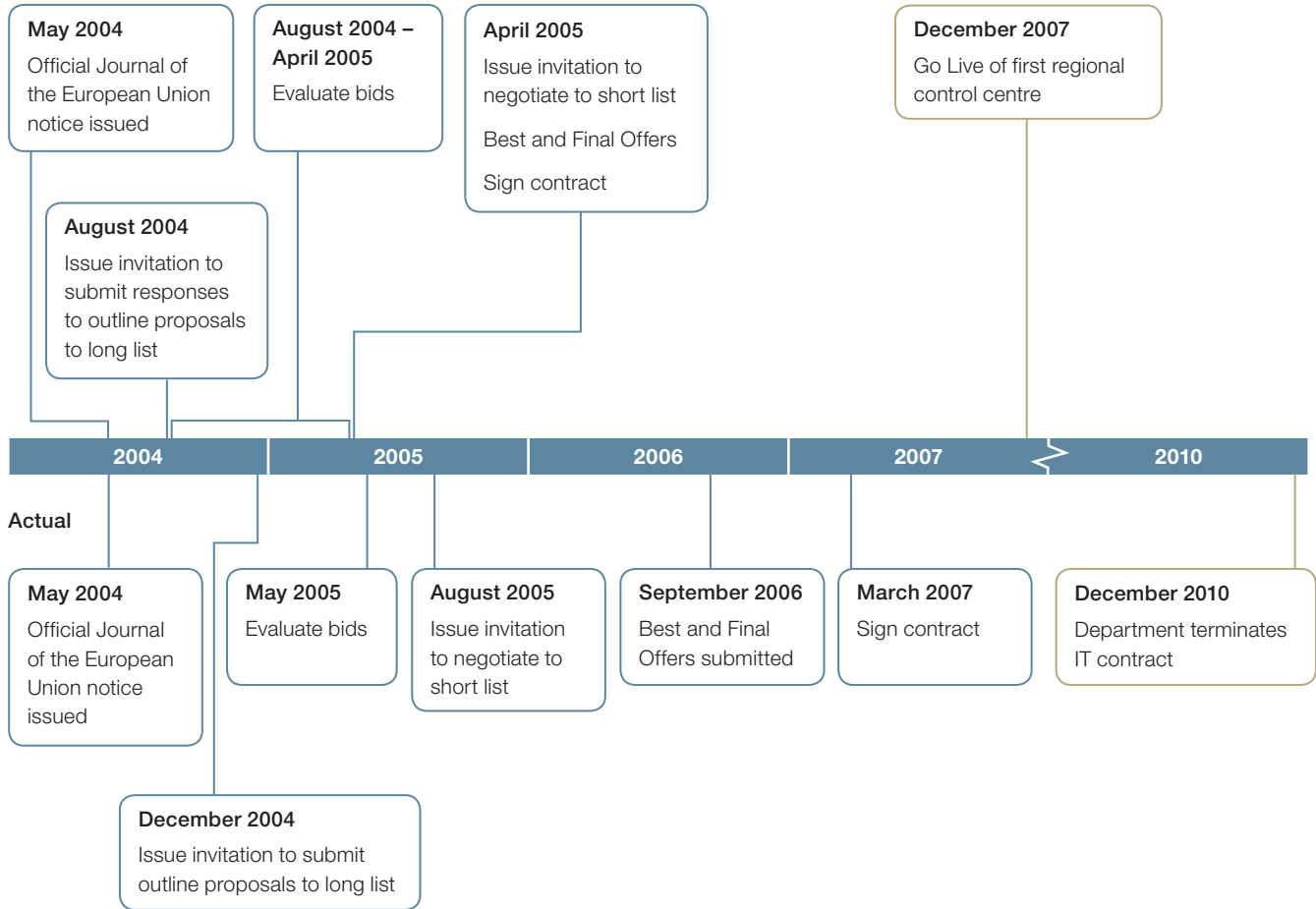
2.14 The Department prioritised the procurement of the regional control centres over that of the IT system at an early stage owing to concerns about the availability of suitable sites, and the requirement to be ready for the roll-out of Firelink in 2007.

2.15 The misalignment in delivery timetables meant that the first two regional control centres, in the North East and East Midlands, were delivered in June 2007, only three months after the IT contract had been awarded, and some eighteen months before the equipment which they would house was expected to be ready.

Figure 4
Procurement Milestones: Planned and Actual

Procurement period for IT system

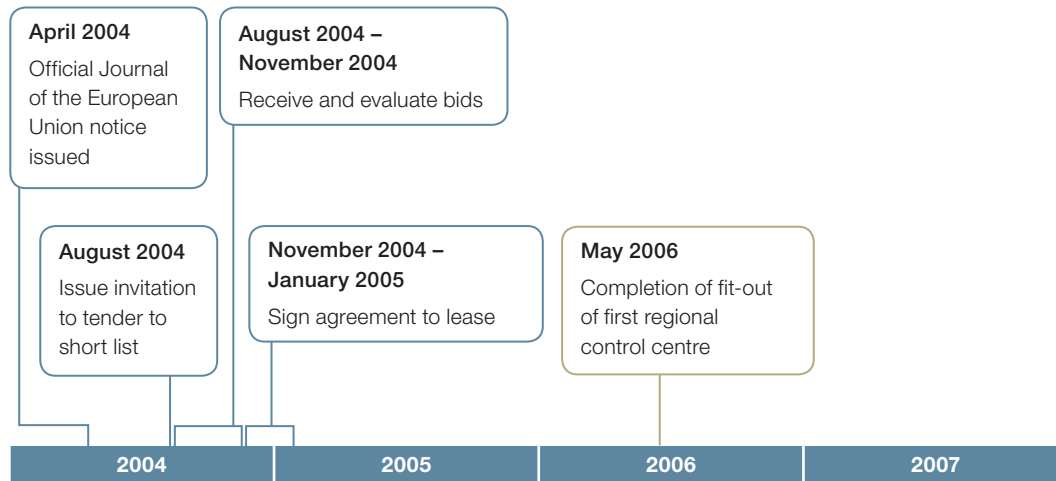
Planned



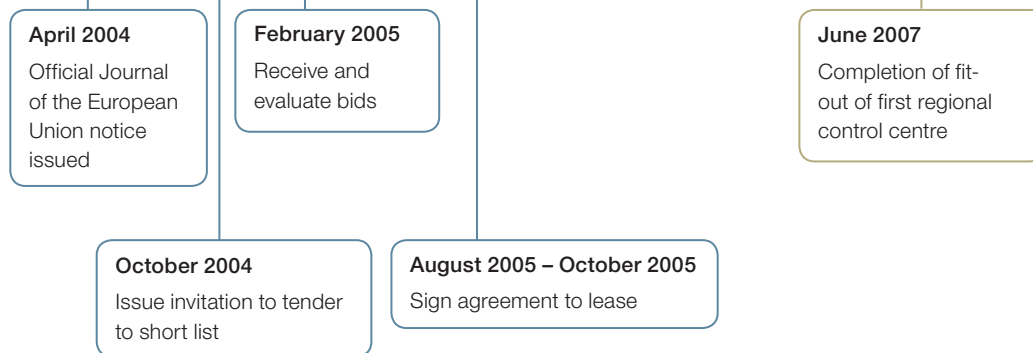
Source: National Audit Office analysis of Departmental documents

Procurement period for regional control centres

Planned



Actual



Part Three

Delivery of FiReControl

Early governance arrangements were complex and ineffective

3.1 Responsibility for delivering FiReControl rested with a Senior Responsible Owner, supported by a project board comprising of stakeholders from the then Office of the Deputy Prime Minister, the Local Government Association, Chief Fire Officers' Association, and the IT contractor. The project's delivery was split between a national team, which had responsibility for the planning and delivery of the buildings, the national IT system and business change, and regional teams, which were responsible for the transition to a regional structure.

3.2 Regional Management Boards, established in 2004, were responsible for delivering national policies within each region and managing the changes needed at a local and regional level. Regional Management Boards did not replace Fire and Rescue Authorities but were an intermediary tier between local Fire and Rescue Authorities and national government. Statutory authority continued to rest with the Fire and Rescue Authorities, which limited the ability of Regional Management Boards to influence delivery. The Communities and Local Government Select Committee considered them a confusing addition to already complex governance and structural arrangements.¹²

3.3 The management of FiReControl was characterised by a lack of clarity and effective decision-making, with layers of governance created in response to emerging issues, rather than being aligned. In 2008, the Office of Government Commerce described the governance structure as cumbersome and found that the project board was not operating as an effective decision-making forum. Work streams were operating independently and communicating autonomously with the regions, and the project lacked clear lines of decision-making, accountability or responsibility, and sufficient assurance and robust internal challenge.¹³ A further review in 2009 was concerned there could be a cultural failing to share bad news early "across the breadth of the project" and that too many false starts and promises on resource requirements undermined confidence.¹⁴ The Department reviewed its governance arrangements in 2009 in order to increase the visibility of the project board and provide greater clarity to the lines of decision-making. Stakeholders reacted positively to the revised arrangements, but many in the Fire and Rescue Service had already lost confidence in the project.

¹² The Fire and Rescue Service, Communities and Local Government Select Committee, Fourth Report of Session 2005-06, July 2006.

¹³ Report on FiReControl project, Office of Government Commerce, October 2008.

¹⁴ Report on FiReControl project, Office of Government Commerce, October 2009.

FiReControl lacked consistent leadership and direction, with a high turnover of staff and over-reliance on poorly managed consultants

3.4 The management of FiReControl was characterised by a high level of turnover of staff, both within the Department and its main IT contractor, EADS. The Department appointed four Senior Responsible Owners and three Project Directors before those in post at the time of termination were appointed in 2008. EADS similarly has had three different Chief Executive Officers and four Project Directors since the IT contract was awarded.

3.5 The Department spent £89.8 million on its national team for FiReControl to the end of March 2011, which consisted of in-house staff costs (£12.8 million), consultancy costs (£68.6 million), and £8.4 million on secondments.

3.6 The implementation of FiReControl was heavily reliant on consultants and interim staff, who contributed around half the Department's project team at a cost of £68.6 million, over three-quarters of the total spend on the national team supporting the project. PA Consulting was contracted to provide consultancy services at a cost of £42 million to the end of March 2011. Its staff held key positions throughout the project, including the Project Manager, one of only two senior members of the team who remained on the project throughout its duration.

3.7 Despite the Department's reliance on consultants, there was no framework to assess their performance until the end of 2008, when the National Audit Office recommended that the Department's contracts with consultants should include mechanisms to enable regular objective monitoring of performance, such as performance indicators and key milestones.¹⁵ Without such mechanisms, the Department was unable to determine whether or not the services provided offered value for money. A review of the FiReControl project by the Office of Government Commerce in 2008 similarly found that some consultants in key management roles did not have a level of authority matching their responsibilities, which led to decisions being referred to others. Other consultants were found to hold a disproportionate (and accountability-free) amount of authority.¹⁶ In response, the Department reviewed its use of consultants and interims within FiReControl and reduced the number employed, leading to a fall of 24 per cent in consultancy costs between 2008-09 and 2009-10, and a further fall of 26 per cent in the following year.

¹⁵ Comptroller and Auditor General, *New Dimension – Enhancing the Fire and Rescue Services' capacity to respond to terrorist and other large-scale incidents*, Session 2007-2008, HC 1050, National Audit Office, October 2008.

¹⁶ *Report on FiReControl project*, Office of Government Commerce, October 2008.

Until 2009, the Department did not take a sufficient grip to resolve early problems with the delivery of the IT system

3.8 The Department contracted EADS to design, develop and install the IT system which underpinned FiReControl in March 2007, with completion expected in October 2009. The IT system consisted of a number of sub-systems, each of which involved a number of components to be supplied by EADS and its subcontractors.

3.9 There was little real progress in delivering the IT system during the first two years of the contract due to problems with the integration of the system's components, which was compounded by the absence of a partnership approach between EADS and the Fire and Rescue Services. The Department failed to ensure that EADS followed the approach that it had been contracted to follow in developing the system, resulting in little end-user engagement for the first two years of the contract. Twenty-three out of the twenty-seven Fire and Rescue Services that responded to our survey were dissatisfied with their involvement in the design and development of the IT system, which led to a fear that the final system would not meet their professional needs. The uncertainty regarding end user requirements, and how these would align to operational needs led to the establishment of workshops with Fire and Rescue Services, but these didn't commence until June 2009, when the Department started to get a grip on the situation.

3.10 The quality of early deliverables from EADS was criticised by the Department, but there was an absence of cooperation to resolve the issues. The emergence of a poor relationship was compounded by a lack of effective sharing or joint ownership of progress information, and by the Department's ineffective governance and performance management of the contracted processes for elaborating the requirements and producing the detailed design for the main system. An independent review in early 2008 found that there were no agreed product descriptions and associated quality assurance criteria for three of the early deliverables, which were separate from the main IT system, including the data migration toolkit and software to be housed in fire engines. This meant it was difficult for EADS to know what it was trying to produce and for the Department to know what criteria to use when quality assuring the products.¹⁷

3.11 An independent technical review in early 2009 found some suspicion and distrust on both sides, with the Department suspecting that technical progress would not be delivered on time and EADS concerned about the project's implementation and change management approach. During the first two years of the contract there was a lack of openness on either side, and an adversarial stance towards problem solving. There was a tendency by both parties to revert to the contract conditions, rather than using a more mature partnering approach.¹⁸ The relationship improved in July 2009, after the Department created a new technical assurance team and moved it to EADS' Newport premises to work alongside them, but relationships soon deteriorated, with EADS being placed in material breach of contract in October 2009 for failing to meet a key milestone.

¹⁷ *Final report of a review of the EADS FiReControl project*, Actita, February 2008.

¹⁸ *FiReControl Project, Technical Review*, Qi Consulting/QinetiQ, August 2009.

3.12 The absence of a good working relationship contributed towards the slow resolution of problems. The Department was concerned about the delivery of the IT system almost immediately after the award of the contract, but little action was taken until July 2008, when EADS announced that they were unable to meet the milestone date for delivering the design documentation for the main system. The Office of Government Commerce concluded that the delay to engage was predicated on a relationship that had, by then, deteriorated to such an extent that failure, and a potential claim for liquidated damages, were uppermost in participants' minds.¹⁹

A lack of interim milestones in the contract meant neither the Department nor EADS could hold each other to account

3.13 The contract contained key milestones, the majority of which were linked to deliverables provided towards the end of the contract. The lack of interim milestones combined with ineffective project management and planning seriously undermined the Department's ability to hold EADS to account or place it into breach of contract.

3.14 The Department was responsible for ensuring the user requirements accurately reflected the business processes which it agreed with the Fire and Rescue Services during the procurement process. EADS was responsible for ensuring that the requirements, defined during the procurement process, were met by the system. To deliver the IT system, the Department and EADS depended on each other to provide timely information, but this was not fully and clearly explained in the contract, resulting in conflicting opinions about respective contractual positions.

The payment schedule for the IT contract meant the financial risk lay with EADS

3.15 The payment schedule meant that EADS were paid for deliverables aligned to key milestones. Most of these milestones were towards the end of the project, and so for most of the project financial risk lay more with EADS than the Department. In December 2007, the Department sought to assist EADS by bringing forward almost £10 million of payments. In May 2009, EADS informed the Department that following delays to delivery and due to the lack of interim payment milestones, it faced significant cash flow difficulties on the project. In response, the Department sought to assist by offering EADS payments contributing to a total of £7 million on condition of the delivery of a revised project plan, which EADS subsequently failed to deliver to the Department's level of acceptance.

¹⁹ *Report on FiReControl project*, Office of Government Commerce, October 2008.

3.16 The principle of using phased payments to provide contractors with a strong incentive to deliver to time and budget is sound. However, if these payments do not adequately reflect the balance of financial risks and exposure throughout the project it can create perverse incentives, or make it more difficult for the contractor to deliver. In the case of FiReControl, the unbalanced payment schedule contributed towards the breakdown in relations between the Department and EADS.

By July 2009, delays to the delivery of the IT system were set to cost the Department £75 million and created uncertainty amongst the Fire and Rescue Services

3.17 The Department announced two delays, agreed with EADS, to the delivery of the IT system during its development, both on account of technical difficulties. The first delay, in November 2008, extended the first 'Go Live' date for the regional control centres by nine months, while the second, announced in July 2009, extended the 'Go Live' date by a further ten months. This meant the first Fire and Rescue Services were expected to transfer to the regional control centres in May 2011 – four years later than originally planned and 19 months later than planned when the IT contract was awarded. The Department estimated that delays to the delivery of the IT system would cost some £75 million, based on the project's running costs of £4 million per month being incurred over a further 19 months (**Figure 5** on page 28).

3.18 The provision of timely and accurate information to Fire and Rescue Services on progress within the project was a key component of the project's objective to ensure a smooth transition from a local to regional structure. The delays, together with concerns over the delivery of the IT system, and a lack of substantive information on project progress resulted in a wariness of the 'believability' of FireControl's scheduling and a request for greater clarity amongst Fire and Rescue Services. Fourteen of the twenty-seven Fire and Rescue Services who responded to our survey were dissatisfied with the level of engagement by the Department. The Chief Fire Officers Association reported that confidence in the project steadily declined "as poor project management, inadequate communications and deteriorating stakeholder relationships eroded patience, goodwill and faith amongst the Fire and Rescue Authorities."

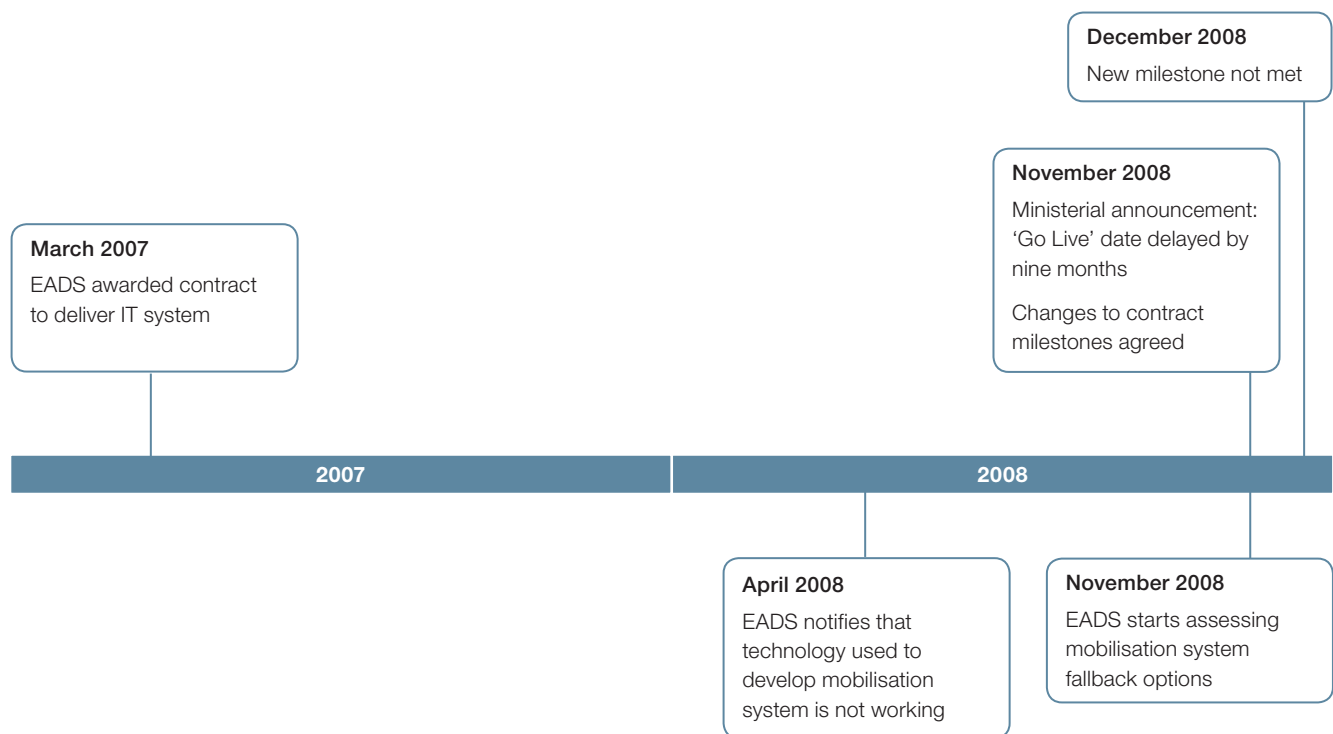
Delays to the delivery of IT meant the Department incurred substantial costs from having high specification and empty regional control centres

3.19 Each regional control centre was delivered by a different developer, with oversight of their delivery contracted to Turner and Townsend. Turner and Townsend supported the Department in assessing bids for the regional control centres and were responsible for designing the layout of the buildings and providing on site supervision. The appointed contractors were responsible for the architectural and detailed design of the buildings. The buildings were delivered to a single pre-defined design and high specification, which would minimise the risks of disruption from natural or man made disaster. This included extensive physical and protective security measures and resilient electrical and environmental systems able to continue operations in the event of power, fuel or water supply failure. All nine regional control centres were delivered before the cancellation of FiReControl. (**Figure 6** on page 30)

3.20 Although the regional control centres could not be used for their intended purpose without the successful delivery of the computer system underpinning the project, the Department began to incur costs six to nine months after each was completed, following a rent-free period during which facilities management and utility costs were still incurred. The Department paid £32 million in upkeep of the empty centres to the end of March 2011, comprising £16 million in rental payments and £16 million on maintenance, support and one-off costs.

3.21 There was little engagement with the intended users of the regional control centres during the planning or design of the buildings, and the Communities and Local Government Select Committee concluded that neither the procurement process, nor the identification of their specification, was properly informed by end users. Twenty of the twenty-seven Fire and Rescue Services that responded to our survey were dissatisfied with the Department's level of engagement with their service during the design and development of the buildings.

Figure 5
Timeline of key events after award of IT contract



Source: National Audit Office Review of Departmental documents

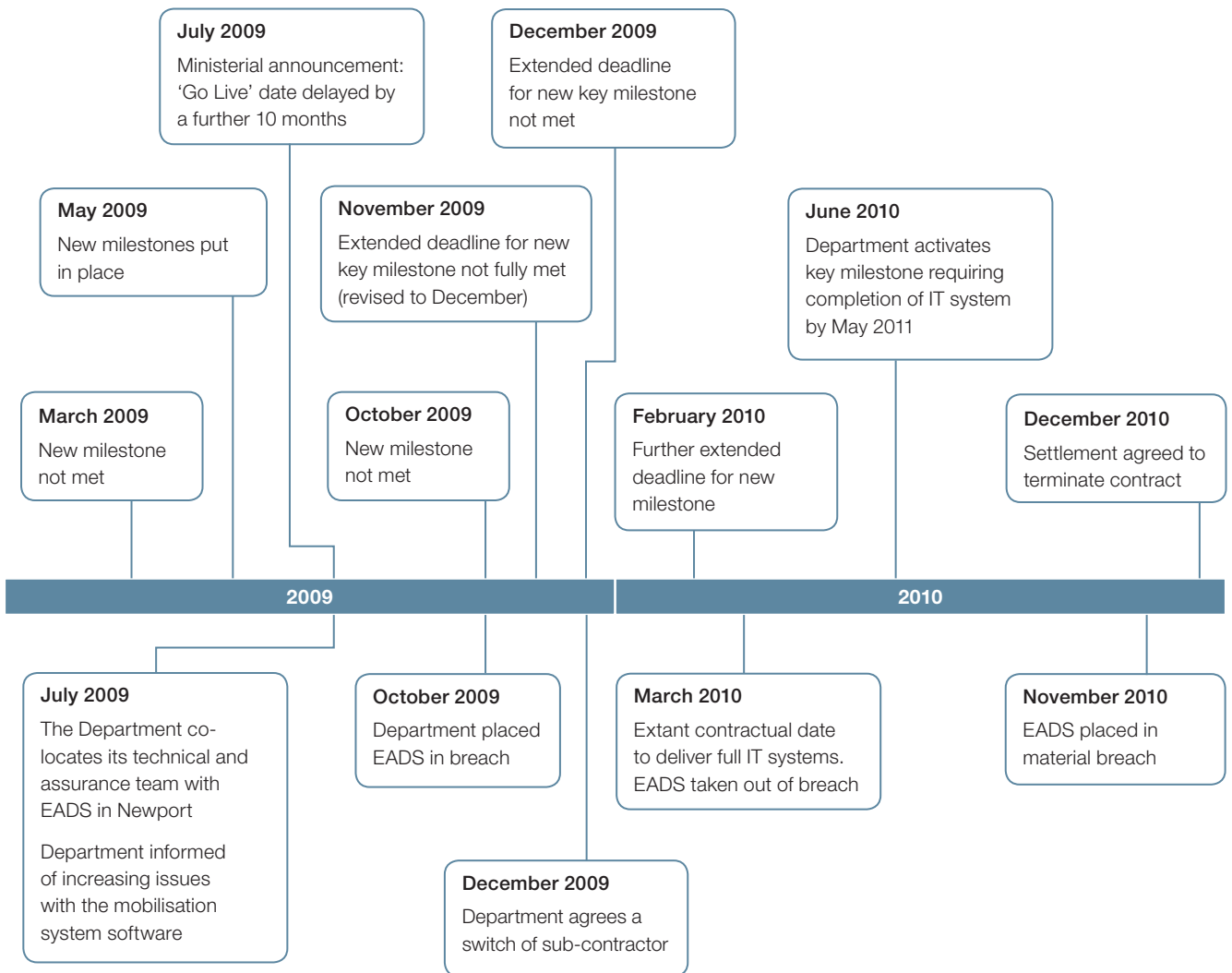
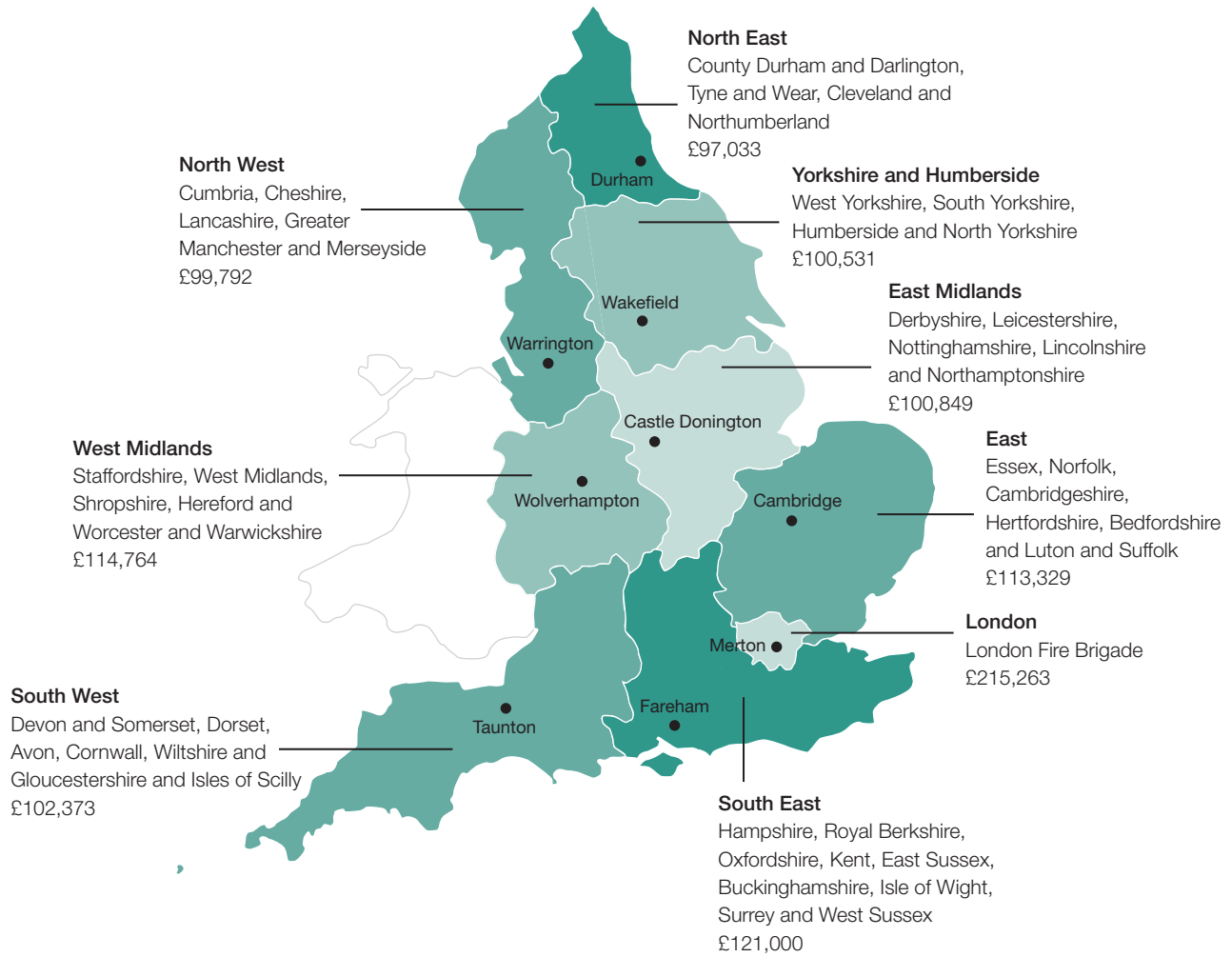


Figure 6

Map of regional control centres showing current monthly rent payments



● Regional Control Centre

Source: National Audit Office review of Departmental documents

Part Four

The Termination of FiReControl

The Department took action in June 2010 which enabled it to terminate the project in December 2010

4.1 The Department assessed the deliverability of FiReControl in June 2010 and concluded that, while EADS remained in a position to deliver the IT system underpinning FiReControl, the Department could not be certain of the adequacy of the system, or the time and cost to which it would be delivered. A review by the Office of Government Commerce and the Major Projects Review Group in July 2010 similarly concluded that the successful delivery of the project to the latest deadline appeared unachievable and that the Department should begin negotiations to end the contract with EADS immediately.

4.2 Weaknesses within the contract agreed with EADS limited the options available to the Department. The Department previously considered terminating its contract with EADS as part of contingency options in both November 2008 and July 2009, but decided to continue given it had confidence in EADS' ability to deliver and had concluded that termination would leave the Department liable for substantial costs. The Department similarly concluded in June 2010 that, should it need to, it would be unable to terminate its contract with EADS without incurring substantial compensation payments provided for under the contract if, as seemed likely, a court decided that a key milestone had not been missed.

4.3 The Department reacted quickly to legal advice and its concerns over EADS' ability to deliver, by committing to hold EADS to contract, with a view to terminating if it was unable to deliver. It did this by activating a key milestone which required EADS to complete the main IT system and install it in three control centres by mid 2011. The Department detailed EADS' performance against the project agreement between July and October 2010, cataloguing outstanding breaches of the project agreement. The Department's actions reduced the risks posed by termination and, following further legal advice, it placed EADS in 'material' breach of contract on 8 November 2010.

4.4 The Department considered a number of options before making its decision. It estimated that continuing with FiReControl would cost £390 million but delivery would be delayed by another year to May 2012. In comparison, the cost of cancelling the project and upgrading local control rooms was estimated to be between £310 and £400 million. The uncertainty over delivery and associated additional costs of FiReControl were such that the Department decided that the contract should be terminated (**Figure 7** overleaf).

Figure 7

Total remaining costs by option, December 2010

Option	Scenario	Remaining cost (£m)
Continue with contract	Delivery in May 2011	340
	Delivery in May 2012 (EADS schedule plus 12 months)	390
	Delivery in November 2012 (Expected schedule plus 18 months)	410
Cancel contract	Upgrade local control rooms and meet regional control centre costs	310-400 ¹

NOTE

¹ Dependent on compensation received from, or paid to, EADS.

Source: National Audit Office analysis of Departmental data

The Department agreed a settlement with the contractor

4.5 The Department and EADS agreed to an amicable termination on 10 December and an agreement was reached on 17 December. They jointly announced the termination of the project on 20 December 2010. The final settlement included a payment of £22.5 million from EADS to the Department. A review of the negotiation by the Office for Government Commerce praised the Department in conducting delicate negotiations from a difficult starting point and under circumstances which could have ended badly. At less than five per cent of the overall likely cost of the project, the compensation received from EADS cannot be described as significant in the wider sense, but in the context of the Department's contractual position at the time, it is justified in considering the outcome to be better than it might have feared.

4.6 Over the duration of the contract, the Department paid EADS £40 million, and retained IT software and hardware equipment worth £5.7 million. Taking the settlement into account, the resulting overall net payment to EADS was £11.7 million.

The failure of FiReControl means the Department now plans to build resilience through local arrangements

4.7 The intended level of efficiency, resilience and technology from FiReControl has not been delivered and the Department now plans to incentivise Fire and Rescue Services to achieve these through other means. Whilst the project's IT system was not delivered, other equipment has been, although the extent to which it will be used is variable. The majority of Fire and Rescue Services intend to use equipment such as laptops and portable geographical positioning navigation and messaging devices, whereas fewer intend to use the project's data capture and migration toolkit.

4.8 The level of control room functionality across England was variable before FireControl and remains so after the project's termination. Seventeen of the twenty-seven Fire and Rescue Services that responded to our survey told us that the cancellation of the project had a significant negative operational impact on their service, and twenty-three stated that it had a significant financial impact. Those who had experienced a negative impact had largely postponed upgrades to their control rooms in anticipation of delivery of a new system, or made interim upgrades to their systems following delays to FiReControl. They now need to upgrade their systems or carry out further refresh exercises. Existing control rooms will also need to be upgraded to secure the benefits of Firelink, which was to rely on the software delivered by FiReControl. Most control rooms were provided with an interim means of accessing the Firelink digital radio network, in anticipation of moving to the new control centres, which will now need to be updated.

4.9 The Department ran a consultation exercise on the future of fire and rescue control services between January and April 2011. The Department made it clear that its preferred approach is one of increased collaboration – determined locally – with some government support. Respondents overwhelmingly supported the Department's preferred approach, and welcomed the decision not to impose a one-size fits all solution. Those responding also confirmed that the original objectives of improved resilience, efficiency and technology were at least as important now as when FiReControl was initiated, and many considered efficiency of greater importance than in 2004, given the current economic climate. The Department is continuing to consult with Fire and Rescue Services over the use of existing equipment and how it will prioritise funding and a budget for this has been agreed by the Department, subject to approval from HM Treasury.

The Department will continue to incur significant costs despite the cancellation

4.10 The Department began to close down all activities relating to FiReControl immediately after the project's cancellation. Up to March 2011, the Department incurred costs of £3.2 million in winding down FiReControl. This includes £2.7 million paid to Fire and Rescue Authorities and Local Authority Controlled Companies to meet the costs of closing down the project's regional and local teams, and £0.5 million on the adaptation of IT hardware to local control rooms.

4.11 The Department agreed leases of between 20 and 25 years for each of the regional control centres and, should Fire and Rescue Services or other bodies fail to move in, the Department will continue to be responsible for rent, utilities and facilities management costs for each building over the lifetime of their lease. The leases are with different companies, while the facilities management is provided by a single contractor, with whom the Department is currently negotiating the adoption of cost reductions following the cancellation of the project.

4.12 Fire and Rescue Authorities and their Services are not legally obliged to use regional control centres, and the Department can only encourage them to do so. In a bid to encourage other Fire and Rescue Authorities to use regional control centres, the Department has offered to meet additional accommodation costs should a Fire and Rescue Service, or group of Services, move to a regional control centre. The London centre has been let to the London Fire Brigade who will move in later this year. The Department is currently offering Fire and Rescue Services subsidises to use the centres. If all the remaining eight centres are let to Fire and Rescue Services, the Department will still face a minimum cost of £247 million in rental, utilities and facilities management payments over the next 24 years. Ongoing payments could be as high as £431 million, however, if no regional control centres apart from London, are re-let. Twenty-one out of the twenty-seven Fire and Rescue Services that responded to our survey stated that they were unlikely or definitely would not relocate, citing financial viability as the main reason. Should regional control centres not be fully let to Fire and Rescue Services, the Department will need to find other organisations to which they can sub-let the buildings.

4.13 The Department spent £250 million on FiReControl to the end of March 2011, meaning that, if all regional control centres are re-let, the minimum waste from the project will be £469 million.

Appendix One

Methodology

The main elements of our fieldwork, which took place between March and May 2011, were:

Method

Survey

We conducted an internet-based survey of all 46 Fire and Rescue Services in England, of which 27 (59 per cent), responded. The sample comprised responses for all regions except for London (for which there is one Service).

Interviews

We conducted semi-structured interviews with the Department, EADS and the Fire and Rescue Service.

Document review

We examined the Department's procurement and planning documents, project evaluations and external reviews, operational and contractual information, performance monitoring information, and project closure documents.

Benchmarking against best practice

We compared the Department's performance against National Audit Office/Office of Government Commerce best practice.

Stakeholder consultation

We invited structured submissions from key stakeholders involved in FiReControl: the Local Government Association, the Office of Government Commerce, Chief Fire Officers Association and the Retained FireFighters Union. We invited, but did not receive a response, from the Fire Brigade Union.

Financial analysis

We examined the financial data used by the Department in planning, managing and cancelling FiReControl.

Purpose

To gather quantitative and qualitative data on the support of Fire and Rescue Services for the project, their involvement in its planning and delivery, and the impact of its termination.

To understand the Department's approach and rationale during the planning, design, delivery and cancellation of FiReControl. To discuss in more detail issues raised from the survey of Fire and Rescue Services.

To assess the impact of the cancellation of the project on the Fire and Rescue Service, and the Department's approach to project planning and management.

To compare the way in which FiReControl was procured and managed against best practice and draw parallels across government from previous studies.

To gather the opinions of stakeholders on the delivery of the project, the reasons and impact of delays, and views on termination and next steps. From the IT contractor we sought its views on relations with the Department and lessons to be learnt.

To establish costs of the project and understand the robustness of assumptions and how data was used to inform project decision-making.



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