



---

## **FIRECONTROL PROJECT**

### **Full Business Case Volume 1.0**

Release: Version 1.0  
Release Date: June 2007  
Document Ref: RPT0605

---

User Division: FRD  
Created by: Business Case and Benefits Management Workstream  
Approved by: Richard How  
Date Approved: 07 June 2007



### Document Purpose

This is the Full Business Case (FBC) for the FiReControl project. This document incorporates the outcome of the accommodation and infrastructure services procurements. It supersedes all previous versions.

The main objectives of this document are:

- To generate commitment for investment in the planned modernisation and change;
- To support engagement with project stakeholders; and
- To provide the framework for planning and managing benefits realisation.

### Summary of Key Points/Messages

The key messages in this document are:

- Regional Control Centres (RCCs) are essential to meet critical resilience needs locally, regionally and nationally;
- Regional Control Centres will provide value for money, and achieve considerable efficiency savings for the fire and rescue service; and
- Doing nothing is not a viable option and the Government is right to take the lead and earmark significant funds for investment in the project.

### Action required on current version

Share with stakeholders and the general public as the basis for discussions which will inform cost assumptions and future versions of this document.

### Document context

The Business Case is a living document and will be updated as and when necessary, in particular as new and better information becomes available. The FBC is the third of a set of three documents, prepared at key stages in the project lifecycle:

Stage of project	Document	Reference	Date
Business justification	Strategic Outline Business Case	RPT0020	Summer 2004
Procurement strategy	Outline Business Case	RPT0040	Winter 2004
Investment decision	Full Business Case	RPT0293	Spring 2005 – Spring 2007

The interim FBC (version 0.3) was produced to support the Office of Government Commerce (OGC) Gateway Review 3b (IS contract award) and subsequently published on the FiReControl website (October 2006).

This version of the full business case has been published in the knowledge that the best estimates of costs (both current and regional controls positions) included in this document will change in the future – our expectation is that some of the changes will be increases and others will be decreases. There are some known anomalies which will be reviewed in parallel with a wider review of assumptions to be carried out with the Fire and Rescue Service over coming months.

The document is being shared now with stakeholders to ensure that they have a common understanding. It is intended to provide the platform for the next phase of work. In particular,

to support policy development, it includes a provisional indicative regional cost breakdown which has been calculated on a basis that will be subject to future consultation. It is not intended that the regional cost breakdown be used for detailed business planning.

This document has been revised to take into account the outcome of the successful infrastructure services procurement and feedback received from stakeholders. The main changes to the interim version are:

- Costs and savings forecasts take into account the new infrastructure services contract prices and roll out schedule;
- Inclusion of provisional indicative regional costs and savings which reflect the contents of a cost apportionment consultation paper (which is still in preparation);
- A revised and updated benefits management section;
- A comparison with the costs presented in the interim version highlighting where our assumptions have changed or our thinking moved on; and
- A glossary.

It is planned to publish an update (v.1.1) to the FBC towards the end of the year which will revisit assumptions associated with a number of known uncertainties, including:

- A comprehensive review of the staffing model;
- The outcome of the London accommodation procurement;
- The outcome of the national facilities management procurement (including security);
- Confirmation of the asset management strategy;
- Project Management costs including from detailed planning, which will take place between the supplier, local users and delivery teams over the next few months; and
- The costs of operating existing controls.

Unless there are significant changes to the project (under the change control process) the next major revision of the business case, after v.1.1, will support OGC Gateway Review 4 (readiness). This will take place prior to cutover to the new control arrangements.

---

## Table of Contents

Executive Summary .....	5
The strategic case.....	9
The economic case.....	15
The commercial case.....	29
The financial case.....	30
The project management case .....	34
Glossary.....	37
Acronyms.....	39
Appendices.....	separate volume
Appendix A – Context	
Appendix B – Success Criteria	
Appendix C – Constraints	
Appendix D – Resilience Controls Proposals	
Appendix E – Concept Definition	
Appendix G – FiReControl Costs and Savings	
Appendix H – Disaggregation of FiReControl Costs	
Appendix I – Comparison with the Interim Full Business Case	
Appendix J – Economic Impact of Commercial Deal Sought	
Appendix K – Active Risk Management	
Appendix L – Optimism Bias	
Appendix M – Project Risks	
Appendix N – Commercial Deal	
Appendix O – Funding Sources and Commitments	
Appendix P – In-Service Costs for the FRS	
Appendix Q – FiReControl Finance Working Group	
Appendix R – Project Scope	
Appendix S – Project Governance	

## EXECUTIVE SUMMARY

1. The Government is committed to working with the fire and rescue service to implement an integrated network of Regional Control Centres (RCCs). This is essential to improve England's resilience and capability to respond to major incidents and enable Fire and Rescue Services (FRS) to deploy resources more efficiently and effectively. This executive summary answers the following questions:
  - What are the benefits expected from a national RCC network?
  - Why can't the Fire and Rescue Service continue with existing control arrangements?
  - Is the project value for money?
  - Who will pay for it?
  - How are the risks inherent in an endeavour of this scale and complexity being handled?
  - What are the main project activities?
  - How is the project working with its important stakeholders?

### Benefits

2. The scale and nature of incidents that the FRS is called upon to respond to has increased over recent years. Climate change, which leads to extreme weather events, and terrorism are already major threats. Planning for the future must reflect this reality: a strategy for replacing current controls is essential and has an important part to play in building resilience; doing nothing is not an option if the public is to be better protected. Accordingly, the government has taken the lead in achieving this through a collaborative project with the FRS - FiReControl.
3. The FiReControl project will deliver the following benefits:
  - **A more resilient service which supports the FRS in responding to major emergencies (including terrorist incidents, natural disasters and industrial accidents).** The nine Regional Control Centres will form a national network; this will create a resource on a national scale which is able to deal with high levels of calls and enable an RCC to fall back and restore services were they to become unavailable for any reason. The common technology and processes will allow an appliance to be mobilised from anywhere in England if required. Appliances can be applied flexibly across boundaries to respond to need, on a regional or cross regional basis. Calls can be automatically transferred between RCCs ensuring the continuity of quick and effective responses, to help save lives. The solution will exceed current Chief Fire Officers Association (CFOA) call handling standards in any individual RCC, and the ability to transfer calls will further enhance service performance. RCC buildings have resilience and security built into their design.
  - **Enhanced capability which will ensure that all FRSs and their staff have access to the best supporting infrastructure.** All FRSs will have the full range of capability only currently enjoyed by some advanced FRSs. The location of a member of the public calling by telephone (whether mobile or land line) for help will be identified automatically. Satellite positioning equipment will tell the control centre computers which fire appliance(s) is closest to the incident in terms of travel time, with the correct equipment on board. The control centre computer systems will enable the RCC staff to locate the nearest available appropriate resources and mobilise them instantly and automatically, using data-transmission not voice messages. Firefighters mobilised to the incident will have data terminals in their vehicles, giving them a wide

range of information in a standard format. This will improve the delivery of safety information to firefighters and help them to plan and respond more effectively. The working environment for many control staff will also be enhanced.

- **Greater operating efficiencies will be achieved through economies of scale.** Capacity will be better matched to demand within the regional centres. By networking these centres together additional capacity is always on tap to deal with unusual surges in demand – further enhancing operational efficiency and effectiveness. The project will achieve significant efficiency savings which will be kept by Fire and Rescue Services. The amount will vary between FRSs according to their current position and on the arrangements decided for distributing costs within the region. The Department for Communities and Local Government is working with the Fire and Rescue Service to reduce uncertainty about the distribution of costs and savings.

## Disadvantages of current control arrangements

4. At present, FRAs in England operate 46 separate control rooms which rely on a wide range of differing technologies and operational procedures. The gap between the most advanced and the least is stark, with many approaching the end of their useful lives. Moreover, the existing control rooms are stand-alone. They cannot readily step-in for each other when systems fail or in times of high demand. They cannot deploy both specialist resilience equipment and core fire fighting resources flexibly and efficiently across boundaries and over larger areas. It is estimated that any initiative aiming to network the existing control rooms would cost twice as much as FiReControl, but without delivering the same levels of efficiency saving.

## Value for Money

5. It is forecast that the significant, net, incremental benefits outlined above will be achieved for a marginal net incremental cost (Net Present Cost £50m). Once steady-state operating conditions are achieved, the cost of providing control services under the new, regional, resilient, networked arrangements will be some 28 percent (£23m) lower per annum nationally than current operating costs. This equates to a predicted improvement in unit cost of about £450 per 1000 head of population served. These savings represent very significant economies.
6. The figures presented above are informed by prudent assumptions. There continue to be some areas of uncertainty, but these are now within narrower parameters than in previous editions of the Business Case. The London accommodation and facilities management contracts are yet to be awarded, and Communities and Local Government is working with its suppliers and FRS partners to develop detailed delivery plans.

## Funding

7. The roll-out and commissioning phase of the project is being funded by Communities and Local Government (alongside its investment in the new digital radio communications system - Firelink). The total investment by the Department in the RCCs (including new burdens support) is currently forecast to be about £340m<sup>1</sup>, and forms part of its commitment to work in partnership with fire and rescue services in the development and improvement of the service.

---

<sup>1</sup> This figure includes adjustments for best estimates of cost in year and contingency

8. Communities and Local Government is funding all the development and implementation costs for the new ICT infrastructure and financially supporting the transition to the new networked control service.
9. Once operational, the new RCCs outside London will be governed, operated and funded by local authority controlled companies which are wholly owned by the local Fire and Rescue Authorities (FRAs) in their region. The London RCC will be governed, operated and funded by the London Fire and Emergency Planning Authority (LFEPA).

## Risk management

10. All projects have a degree of risk which has to be identified and addressed. FiReControl risk arises from three main sources: comprehensive business change; Information and Communication Technology (ICT) infrastructure services; and accommodation. The interfaces between these sources and other projects, such as Firelink, create additional risks. These risks cannot be eliminated but they can be mitigated, managed and controlled. Accordingly, the project management of FiReControl has significant resources focussed on risk management systems and procedures. This will be integral to the implementation of the project.

## Main project activities

11. There are three main strands of project activity:
  - Delivering RCC accommodation and related services;
  - Delivering ICT infrastructure and related services; and
  - Supporting business change.
12. The project has procured eight buildings; all are being constructed; four of which will become available for use this year. Procurement of a building for London is in progress. Communities and Local Government expects to contract with a developer later this year. In addition procurement of Facilities Management services for all nine buildings is underway with the aim of selecting a chosen supplier in the Autumn of 2007.
13. In March 2007, Communities and Local Government signed a contract with the European Aeronautic Defence and Space Company (EADS) for development, delivery, maintenance and support of the new networked control systems. This will include the provision of all necessary hardware - for the new buildings and in fire stations and other FRS buildings. The new systems will be in operational use in October 2009, following an extensive period of testing and evaluation involving the FRS.
14. The new control service represents a major business change for the FRS. The project has established a network of regional business change representatives, seconded from the FRS, to provide a single point of contact in the project for information, feedback and assistance. The provision of high quality communications to support stakeholder engagement is a key strand of project work. In addition, the project actively supports and facilitates each region and FRS to develop and deliver their own individual transition plans.

## Stakeholder engagement

15. Effective stakeholder engagement is central to the successful delivery of FiReControl. The FiReControl project is being delivered in partnership with the wider Fire community: Fire & Rescue Authorities (FRAs), the Local Government Association (LGA) and the Chief Fire Officers' Association (CFOA). The aim is to create the climate for an open and

honest dialogue, ensuring that the project listens to stakeholder views and takes these into account.

16. The Fire and Rescue Service has a unique organisational culture, characterised by the strong commitment of its members, long service and low turnover. Each region is different and the size and working practices of Fire and Rescue Services vary considerably from area to area. These factors are reflected in the project's approach to business change and in the way that it communicates with its stakeholders.
17. The project provides a single point of contact for information, feedback and assistance through the presence of regional business change representatives who are seconded from the Fire and Rescue Service. It also facilitates cross working and sharing of best practice across the regions through regular meeting forums. The project is committed to providing high quality communications which support stakeholder engagement work. Its aim is to ensure that its communications are: relevant and timely; tailored to the audience and delivered through a range of media. The project seeks to constantly evaluate the impact of its communications and engagement work and deliver improvements where needed.

## Structure of the business case

18. In accordance with the Office of Government Commerce (OGC) guidance, the business case is presented in five parts:
  - A **Strategic Case** which sets out the FiReControl vision in terms of the need for modernisation, and assesses the context in which this change will take place;
  - An **Economic Case** which provides assurance that costs, benefits and risks of investing in regional controls have been identified and suitably balanced;
  - A **Commercial Case** which provides an overview of the national exercises to procure accommodation and ICT infrastructure, and how value is being generated;
  - A **Financial Case** which confirms that that project is affordable. It includes an early indication of the beneficial effect on regional budgets; and
  - A **Project Management Case** which outlines the capability of the delivery organisations and the key approaches to be followed.
19. This Full Business Case will be updated and reissued to include the outcomes of the London accommodation and Facilities Management (FM) procurements, the establishment of RCC companies and detailed planning following the ICT infrastructure services contract award.

## Conclusions

20. The key messages from this business case are:
  - The RCCs are essential to meet critical resilience needs locally, regionally and nationally;
  - The RCCs will provide value for money, and achieve considerable efficiency savings for the fire and rescue service;
  - Doing nothing is not a viable option and the government is right to take the lead and earmark significant funds for investment in the project; and
  - Delivery of the project will be through a collaborative approach leading to governance by local authority control companies which will own and operate the new RCCs.



## THE STRATEGIC CASE

### Introduction

21. This part of the business case establishes the strength of business need for regional fire and rescue service control centres, in England. It answers the following specific questions:

- Why is there a need for immediate change?
- What is the vision for regional controls?
- What are the main business objectives?
- How can we work effectively with our stakeholders to deliver change?

### Regional controls are essential

22. The Government's first duty is to protect its citizens. The scale and nature of incidents that the FRS is called upon to respond to has increased over recent years, both as a result of terrorism and climate change.

23. It is important to ensure that the FRS has the capacity to deal with any incident from house fires to national emergencies. Communities and Local Government has put in place a number of programmes to do this. The FiReControl project is a key part of that enhanced capability by providing the ability to effectively control and co-ordinate all FRS and national resources.

24. At present, FRAs in England operate 46 separate control rooms which rely on differing technologies and operational procedures. The gap between the most advanced and the least is stark, with many approaching the end of their useful lives. Moreover, the existing control rooms are stand-alone. They cannot readily step-in for each other when systems fail or in times of high demand, and they cannot deploy specialist resilience equipment or core fire fighting resources flexibly and efficiently across boundaries and over larger areas.

25. Taken together the existing control centres do not meet modern operational requirements and are not purpose-built to respond to large-scale incidents, including natural disasters or terrorist attacks. A strategy for replacing them is essential: doing nothing is not an option.

26. It is right that the Government should take a collaborative lead, working with FRSs to ensure that the replacement programme is comprehensive, coherent and nationally co-ordinated. The FiReControl project meets these objectives very effectively and no viable and credible alternative has been put forward.

27. Appendix A (Context) sets out the policies and initiatives which inform the project and the need for taking immediate action.

### Vision and scope

28. The vision for the FiReControl project is: **An integrated fire control service, which improves England's resilience against major incidents and helps Fire and Rescue Services to save lives.**

29. The vision is presented in terms of the services that are to be delivered by integrated, networked fire and rescue controls at a regional level. It includes:

- How service delivery will be enhanced;
- The scope of the new fire and rescue control service;

- Where the responsibility for delivering the new service will lie.
30. Staff do an excellent job in delivering core services (including call-handling and dispatch functions) within the limitations of the current arrangements. Significant opportunities exist to improve service delivery and outcomes. The degree of improvement achievable will vary by control. Key opportunities include (but are not limited to):
- Small control rooms are easily overwhelmed by calls, especially where they have much larger neighbours. Where a control room has become overwhelmed, calls queue until the Public Telecommunications Operator (PTO) switches them to alternative control rooms; the accepting control room then has to pass the details back to the original control room for mobilisation to take place. This requires the already overwhelmed original control room to handle the call from a neighbouring brigade, undertake resource allocation and perform incident management on top of an already overwhelming workload. Avoidable risks and delays materialise on a regular basis.
  - Large incidents close to FRA or regional boundaries are difficult to co-ordinate because more than one control room will be taking calls. Until incident command and control has been properly established and the ownership of the incident has been confirmed, duplication of effort can take place in control rooms and at the incident.
  - Calls and responses about a single incident can be routed into a number of control rooms, resulting in fragmented information, which could compromise the safety of responding crews and the public, e.g. where a dangerous chemical is involved. There is a likelihood of multi-agency confusion when information is passed from a number of fire and rescue control rooms to other agencies, such as the police and ambulance services.
  - The location, design and security arrangements of control rooms render them vulnerable to external events, which can include flooding, power loss, multiple single points of failure and accidental or malicious damage. This is often compounded by inappropriately located secondary control rooms and otherwise inadequate business continuity and disaster recovery arrangements.
  - Staffing levels at many control rooms are determined by the need to maintain a minimum complement, which provides a level of capacity that is in excess of demand at some times and insufficient at others. This leads to serious inefficiencies, working time directive issues, poor work life balance and often an increase in sickness levels.
  - In some locations, control staff have to deal with antiquated buildings, processes and/or technology. Significant system development is required to address these problems. In addition, patches to older systems still in use can compromise design and support arrangements, increasing the risk of system failure.
  - The coordination of the national resources required to respond to major events, such as Chemical, Biological, Radiological and Nuclear (CBRN) incidents, is located in only one FRA at the present time.
31. These weaknesses will be tackled as follows:
- Control services will be aggregated at regional level. These larger, networked, RCCs will allow the flexing of national capacity to cope with local peaks in demand, which will largely eliminate call queuing. The whole scope of activity and service provision is being developed using a best practice approach and business improvement ethos. This will deliver improvements in standardisation and efficiency that benefit the fire and rescue service and the community.
  - Common call handling and mobilisation processes, technology and training will allow calls to be transferred between regional control centres. Life threatening incidents will be handled by the centre taking the call and the nearest appropriate resources will be

mobilised, regardless of boundaries. This will remove dual-handling and delays, which are unavoidable and inherent in existing arrangements.

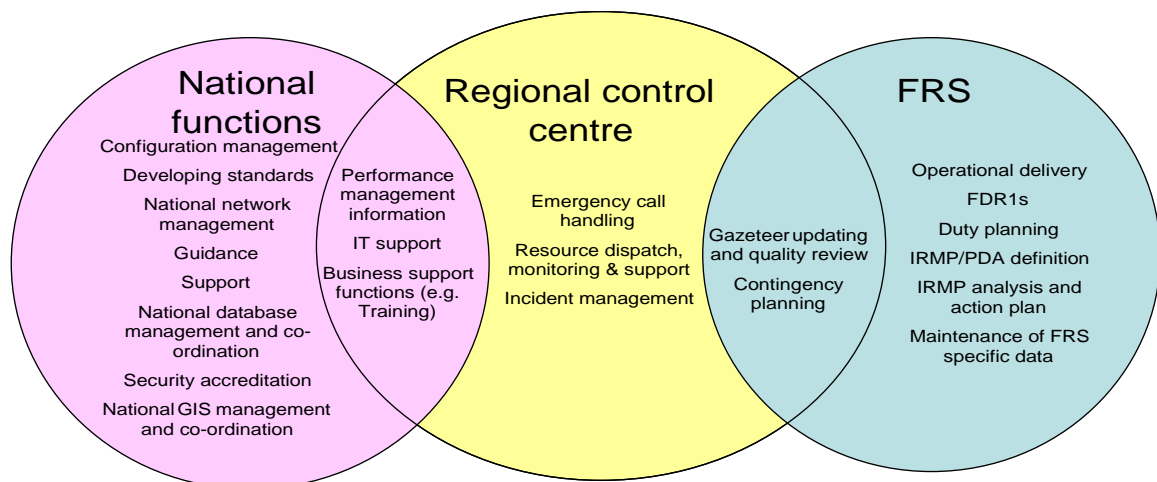
- Better information and its more timely provision will enhance the safety of fire fighters. The new communication system will be based on data rather than voice and this will facilitate quicker, more effective attendance at incidents. Efficiency will be further improved through better status management and routine messaging. Automatic vehicle location information will show the location of the nearest available appropriate resources in real time, saving time and lives.
- Purpose designed and built accommodation will provide a significantly enhanced working environment. The scale and range of activities taking place at regional control centres will lead to career opportunities at the same and other RCCs. Where staff move to another RCC, common processes, technology and training will enable them to be productive immediately.
- There is an opportunity for the new RCC employers to introduce shift systems which are more family friendly than existing arrangements. This may well help to retain valuable staff and their skills within the organisation.
- New risk management tools will be integrated into the control infrastructure, resulting in more accurate and effective mobilisation of resources. Embedded, standard, national tools will lead to better formulation of Integrated Risk Management Plans (IRMPs). This will optimise the use of local resources and reduce risk to property and life.
- The RCC network will house the national coordination functions, including management and deployment of New Dimension assets.

32. The new arrangements will support more effective management at national and FRA level through better gathering and reporting of information and statistics. See paras 58 to 74 in the Economic Case for a more detailed discussion of FiReControl benefits.

33. The following high-level activities are in the working scope for RCCs or FRSs:

- Call handling;
- Resource allocation to incidents;
- Control room incident management (including large-scale incidents);
- Resource management (e.g., balancing of available appliances);
- Maintenance of FRS and national data;
- Planning of major events and contingencies;
- Planning of fallback and recovery; and
- Business support and administration.

34. The diagram below illustrates the proposed division of responsibility:



35. It is the government's objective that FRSs remain locally accountable. Local elected members and officers have a vital role to play in establishing, governing and operating the new RCCs. Hence the governance arrangements have been designed to allow maximum flexibility at local level. Each RCC (except London) will be governed by a local authority controlled company, solely owned by the FRAs within that region. FRAs will decide who the company directors will be, the degree of control each FRA should have and what percentage of the costs each FRA will shoulder, and what the arrangements are for the administration of the company. The London RCC will be governed, operated and controlled by LFEPA. It is also vital that FRAs are fully involved and consulted in the wider delivery of the project.

## Business objectives

36. It is important to define distinct, unambiguous, business objectives for the FiReControl project and understand the factors which will contribute to their successful delivery. These objectives and their related success factors become the basis for evaluating FiReControl supplier bids and the acceptance of the goods, works and services provided by both internal and external suppliers.

37. The aim of the proposed business change is to deliver integrated, networked, standard, fire and rescue controls at a regional level, in England. This can be broken down into four discrete sub-objectives:

- To enhance resilience in the national fire control capability;
- To support enhanced efficiency and effectiveness in fire and rescue service delivery;
- To work effectively with local fire authorities to deliver sustainable business change; and
- To support the wider change agenda within the fire and rescue service.

38. In addition, it must be demonstrated that all public sector investments supply the best value for money which is affordable.

39. The table in Appendix B (Success Criteria) provides further detail. Refer to the Commercial Case for details of the FiReControl procurement strategy.

## Stakeholder Engagement

### Implementing sustainable change

40. The Fire and Rescue Service has a unique organisational culture, characterised by long service and low turnover. These features have contributed to the creation of a workforce with a strong group identity. Each region is different and the size and working practices of FRSs vary considerably. The impact of FiReControl will differ for each group of stakeholders and this needs to be reflected in our approach to business change and communications with stakeholders. Specific challenges include:

- The scale of change, and the wide range of issues to be addressed including accommodation, technology, process, people and security issues;
- The wide range of stakeholders, their varying requirements and the resource intensive nature of stakeholder engagement ;
- The need to deliver the various aspects of change at regional and FRS levels during a time of existing significant change within the Fire and Rescue Service;
- The need to work alongside other projects delivering other aspects of the Fire Service modernisation programme and resilience programme, e.g. Firelink; and

- The degree to which some Representative Bodies have sought to discourage involvement of their members in the change process, to date.
41. Within the national project team there is a dedicated Business Change Team whose role is to facilitate the regional project teams and FRSs to support key stakeholders who will be directly affected by implementation of FiReControl. These include:
- Current control room staff and management: Engagement of control staff during the implementation of the project is essential to effective delivery. Control room staff must provide a high quality control service before, during and after transition to the new control arrangements. It is critical to engage effectively with this stakeholder group: firstly, to encourage them to work in the new control centres; secondly, to ensure that the staff not moving to the new control centres are sufficiently valued, and that they continue to provide the required level of service in existing control rooms up to the point that control services cut over to the new arrangements.
  - The fire fighters and principal officers at FRA level: These groups will work closely with the new regional control centres and the new control arrangements will introduce changes which improve fire fighter safety and effectiveness. It is important that both firefighters and principal officers have access to regular information to understand the project's aims, progress and benefits.
  - Headquarters and support staff: There will be a role for the FRS in ensuring appropriate data is input and received from the RCC. Also certain aspects of non-essential work that have formerly been carried out in some current control rooms may move into the HQ or other FRS buildings. These staff will need to be kept abreast of changes that will affect them and their work.
42. The Business Change Team are helping to support key stakeholders and deliver business change by:
- Providing a single point of contact for information, feedback and assistance through the presence of regional Business Change Representatives;
  - Helping Regional Project Managers (RPMs) plan their workload and that of the FRSs in their region
  - Facilitating cross working and sharing of best practice across the regions through regular meeting forums;
  - Attending key meetings to share information and update on project progress;
  - Raising FRS delivery issues and risks at a national level;
  - Monitoring and reporting on regional and FRS project delivery; and
  - Ad hoc regional activities to support individual workstreams.

## Partnership

43. The FiReControl project is being delivered in partnership with the wider Fire community: FRAs, the Local Government Association (LGA) and the Chief Fire Officers' Association (CFOA):
- The LGA are represented on the project's working groups and Project Board. Their representative chairs the Human Resources (HR) Working Group and FiReControl Sounding Board. The Sounding Board, set up under the aegis of the Practitioners' Forum also includes members of staff representative bodies.
  - CFOA have three full-time representatives to the National Team; they send representatives to all the project's working groups, sit on the Project Board and Chair

the project's Senior Operational Group. This group is made up of all the regional project directors (all either Deputy Chief or Chief Fire Officers).

- Two other working groups exist, chaired by the National team to advise on Legal and Financial matters and are made up of regional Lawyers and Treasurers respectively.

## Communications

44. FiReControl is committed to providing high quality communications which support our stakeholder engagement work. Our aim is to ensure that our communications are:

- Relevant;
- tailored to the audience;
- up to date;
- delivered through a range of media (face to face, written, on-line); and
- subject to continuous evaluation and improvement.

45. A FiReControl Communications Strategy and Ways of Working document have been produced and circulated. These papers outline communications objectives, key messages, communications methods and governance arrangements specifically related to communications and stakeholder management.

46. Current communications channels used by the FiReControl project to deliver the projects key messages and meet the communications objectives include:

- The FiReControl website ([www.firecontrol.communities.gsi.gov.uk](http://www.firecontrol.communities.gsi.gov.uk));
- Question and Answer (Q&A) guide, on the website;
- Media coverage;
- Working groups, project boards and meetings;
- FRS News pull-outs and articles;
- Circulars, Information Notes, letters to FRA Chairs and CFOA;
- Presence at industry events, externally organised seminars and events; and
- FiReControl-run events and seminars.

47. The table in Appendix C (Constraints) provides an overview of the factors which are likely to constrain project delivery and how they are being mitigated.

## THE ECONOMIC CASE

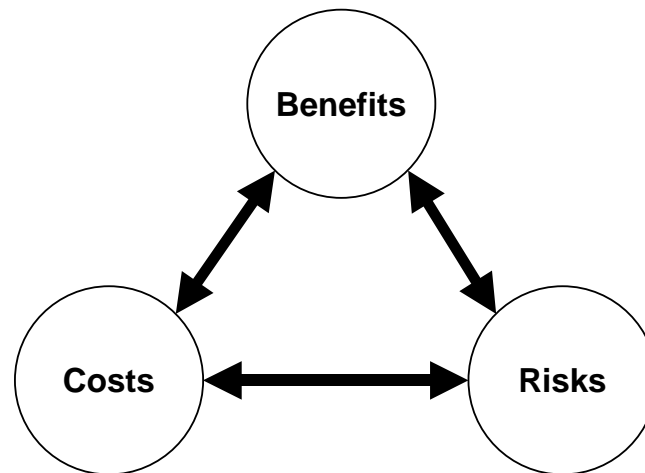
### Introduction

48. This part of the business provides assurance that regional controls will provide value for money.
49. **Previous studies (most recently the Mott MacDonald (MMD) report of 2003) have concluded that control rooms in England and Wales should be vertically integrated and that nine regional control rooms (including London) would be the most effective way to implement a vertically integrated service in England. The Responsible Minister made the decision to proceed on this basis.**
50. In 2006 the Fire Brigades Union (FBU) proposed establishing nine regional centres to support the handling of major incidents, whilst retaining call handling and mobilisation within the existing control rooms ('Resilience Controls' and the related 'Plan B' (RESCON)). These proposals provide minimal improvement in resilience or capability compared to the current position and would result in increased operating costs for local authorities. Moreover significant investment in ICT infrastructure would still be required to maintain operating capability. Appendix D sets out the Department's response to the proposal in more detail.
51. The previous studies, which recommended integration, also looked at the option of tri-service (police, ambulance and fire) controls. Since then tri-service pilots have shown that the three emergency services have very different business needs. This makes it challenging to deliver genuinely integrated tri-service controls in the short to medium term. However, tri-service controls may remain an option for the long term.
52. Consequently, this economic case only considers whether the establishment of regional controls remains Value for Money (VfM) compared to continuing with the control arrangements existing at project outset and their ongoing support and maintenance (including expected refresh and upgrade)<sup>2</sup>. The table below sets out the two positions which are to be assessed:

Positions	Description
Current position	Continuing with the 46 control rooms and fall back facilities in England existing at project outset.
Regional controls position	Amalgamating fire control in England to create regional control arrangements that match the Government Offices for the Regions.

53. Value for Money is defined as the optimum combination of whole-life costs and quality that meets business requirements. A balance must be sought between the competing demands of maximising benefits whilst minimising costs and risks.

<sup>2</sup> It is important to note that the projected costs under the 'current position' in (now) historical years will be different to actual historical figures.



54. This is a national business case judged upon the national requirement to achieve the best Value for Money which is affordable. Satisfying the national requirement includes national procurement exercises (refer to the Commercial Case)<sup>3</sup>.
55. It is important to note that the current “position” is not a viable “option” for the fire and rescue service. It provides a notional base against which value for money can be tested.
56. The economic case is structured around the following questions:
- What business benefits are anticipated from amalgamating regional controls?
  - What is the cost of ownership?
  - How sensitive are the forecast costs and savings to key assumptions and variables, i.e. what is the business risk?
57. Appendix E (Concept definition) provides evidence that sufficient innovation occurred during concept definition.

## Benefits

58. Business benefits are defined as desirable, planned, business outcomes from the FiReControl project. The expected benefits can be grouped into four categories:
- Increased control service resilience;
  - Enhanced service capability;
  - Greater service efficiency; and
  - Support for wider initiatives within Communities and Local Government and the Fire and Rescue Service (strategic enablers).
59. Detailed benefits profiles set out how the benefit will be realised, who will sign it off, who will perform post implementation review, and how the benefit is linked to the key elements of the solution. In addition, a ‘dashboard’<sup>4</sup> of cost and performance indicators has been established to ensure maintenance of service delivery during transition to the

---

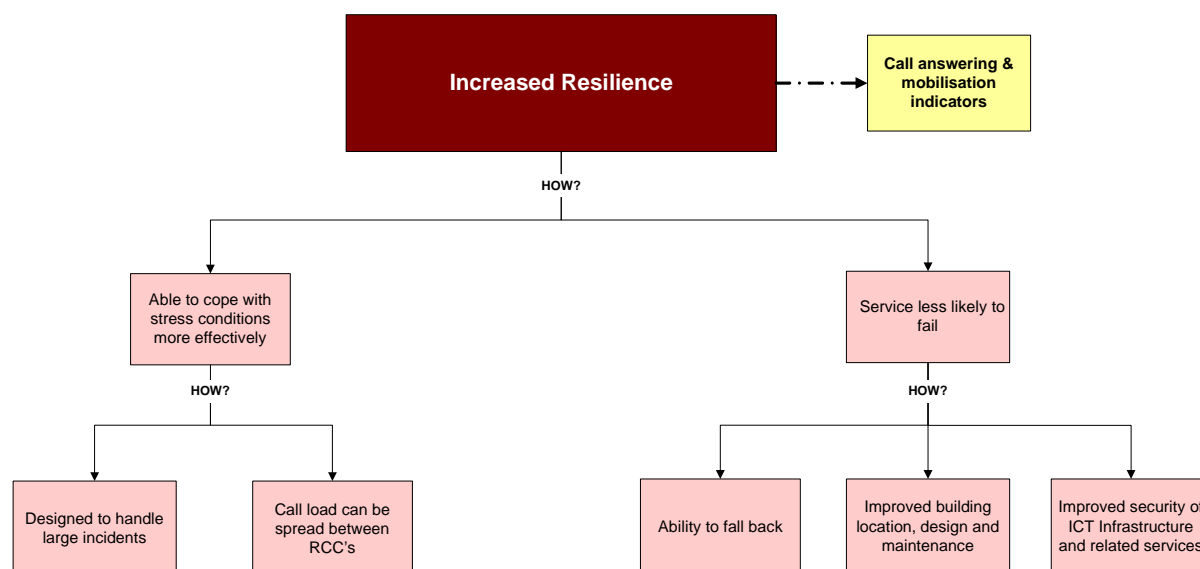
<sup>3</sup> The provisions of Fire and Rescue Service Act (2004) require FRAs to have regard to the requirements of the FRS National Framework (2006-2008) in discharging their Best Value responsibilities. The expectations set out in the Framework do not conflict with the Best Value duties imposed on FRAs by the Local Government Act (1999 amended). Refer to FRS circular 44/2006 and FRS circular 09/2004 for more detail.

<sup>4</sup> The dashboard concept is a similar to a motor car, where a small group of indicators (speed, fuel, etc.) enable the driver to control a complex, fast-moving machine safely and effectively. In much the same way the benefits dashboard is a collection of cost and performance indicators which help delivery managers to achieve progress towards project goals.



new control arrangements, and to provide an accurate information base to support post implementation review. The benefits dashboard indicators have been carefully chosen to support communication with Fire Service staff and the general public, whilst minimising administrative overhead (refer to paras 135 to 138 for more information about the FiReControl benefits management strategy). Appendix F (Assessment of benefits Contribution) provides an assessment of the current and regional controls positions and their contribution to the benefits identified.

## Resilience



60. The diagram above illustrates the benefits profiles for improving resilience (pink boxes) and how they are related to dashboard call answering and mobilisation indicators (yellow box). It can be seen that there are two main elements to increasing the resilience of the fire and rescue control service:

- The service will be less likely to degrade under stress conditions;
- The service will be less likely to fail catastrophically.

61. The primary benefit from establishing networked controls is that they enable control service providers to cope with stress conditions more effectively:

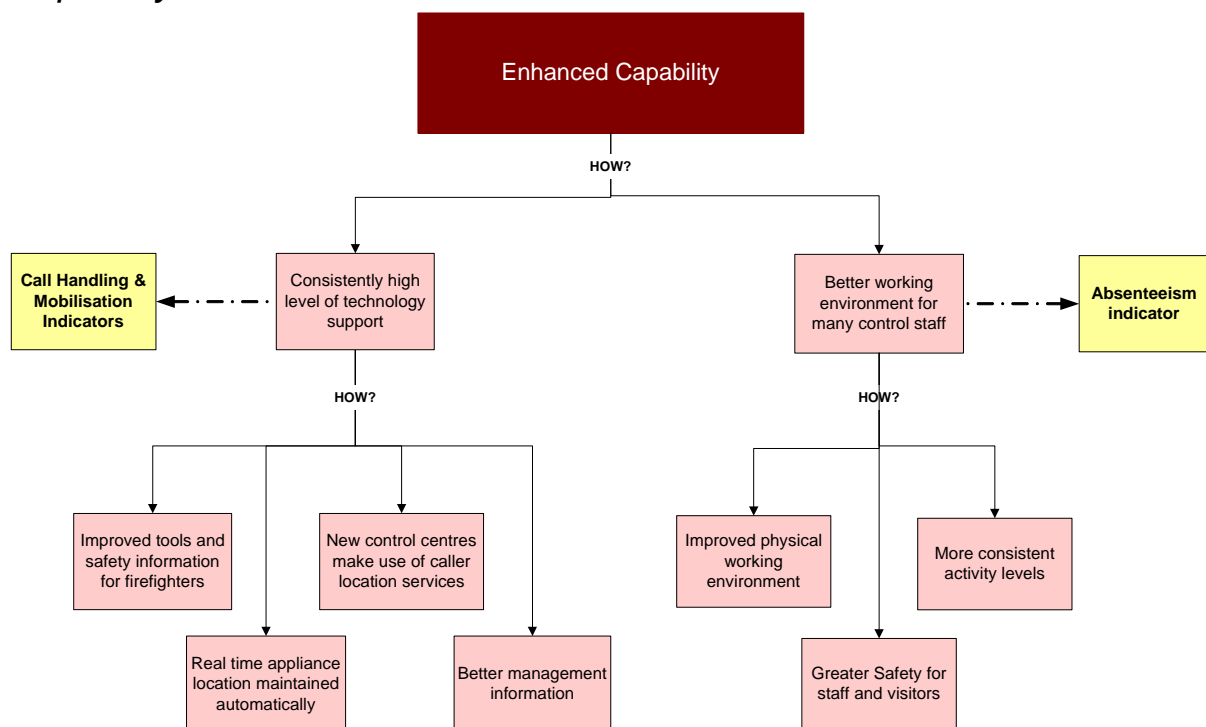
- **Designed to handle large incidents** – the management of large incidents will be enhanced by national call signs and greater consistency of communications. The new control arrangements will make it possible to have visibility of all calls and activity relating to the incident from all or any of the new RCCs and hence support the RCC managing the incident activity to do so more effectively. The new arrangements will provide more comprehensive information to local or national strategic management staff, national New Dimension resource managers and other agencies as appropriate - in real time to support incident related decision making - and post incident to ensure accountability for actions taken. This will result in more effective use of available resources - knowing where they are, who they are and what attributes are available.
- **Call load can be spread between RCCs** - calls will be automatically diverted to alternative RCCs when a centre is busy. This will reduce delays in answering emergency calls during busy periods and allow national call handling capacity to be flexed to meet and support localised peaks in demand more effectively. The service

performance requirements will be significantly tightened, e.g. call handling standards apply to each 15 minute period of activity during a day.

62. In addition, currently there is a small but finite chance that members of the public could experience a control service failure, e.g. due to failure of the power supply or communications infrastructure within a specific area. With networked controls the service will be even less likely to fail, due to:

- **The ability to fall back and restore control services without loss of data or service** – there will be no difference to service levels if a fall back episode occurs. This is because the network is designed to absorb the loss of one or more RCCs. Call taking and resource/incident management are available to all RCCs during fall back episodes, and all RCCs have access to same data and can seamlessly mobilise if required. Moreover, recommended staffing levels are designed to handle the call load in the event of service failure.
- **Improved building location, design and maintenance** - buildings are designed to be more secure and resilient and are located to avoid risk from aircraft or flooding. Each RCC will be capable of surviving 7 days without mains services and will be maintained to standards appropriate for critical national infrastructure.
- **Improved security of ICT infrastructure and related services** - FiReControl systems will incorporate security measures to ensure and maintain confidentiality and integrity of data and the availability of services, consistent with Her Majesty’s Government (HMG) approved standards. These standards ensure that critical national infrastructure is protected from virus attack and other potential causes of total systems failure. They also reduce the number of data records lost due to external incident or human error, and help to reduce uncontrolled access, damage and theft.

Capability



63. The diagram above illustrates the benefits profiles for enhanced capability (pink boxes) and how they are related to dashboard absenteeism, and call answering and mobilisation indicators (yellow boxes).

64. FiReControl will ensure that all FRSs and their staff have access to the best supporting infrastructure. It can be seen that there are two main elements to enhancing the capability of the existing control service:
- Enhanced technology infrastructure;
  - A better working environment for many control staff.
65. The general public, fire fighters and control staff will benefit from supporting technology and related services which are currently implemented in some, but not all authorities. Significant enhancements for many include:
- **Improved delivery of safety information for fire fighters** - on the way to, or at the scene of an incident, fire fighters will be provided with high quality information on the mobile data terminals fitted in appliances<sup>5</sup>. This will enable them to plan and respond more effectively, e.g. extricating road traffic accident victims from vehicles more rapidly, or reducing the spread of fire and hence damage to property. It will also supply essential information about potential risks, such as sites or the location of nearby hazards, operating procedures and other operational information. This will bring important health and safety benefits to front-line staff.
  - **Real-time appliance location being maintained automatically** – the new technology will enable controllers to identify and propose deployment of the nearest appropriate resources to deal with incidents each time an emergency call is received. This will minimise response times and the distances travelled by responding fire crews under blue light conditions<sup>6</sup>.
  - **The new control rooms making use of caller location services<sup>7</sup>** – these enable callers from fixed and mobile phones to be located more easily, reliably and accurately. This technology also improves access for callers coping with a foreign language, incapacity, disability, or injury, and will help to further reduce preventable fire deaths amongst some of the most vulnerable and socially excluded groups in society. In addition, the new system will be better at identifying malicious and false calls.
  - **Better management information** - the new control processes and supporting systems will improve the quality and speed with which management information can be delivered to the desks for many FRS managers. This will directly support the IRMP planning process.
66. Every FRA will benefit from at least one of these improvements at the very minimum.

---

<sup>5</sup> Financial investment which individual FRSs would not necessarily be able, or cannot afford, to make.

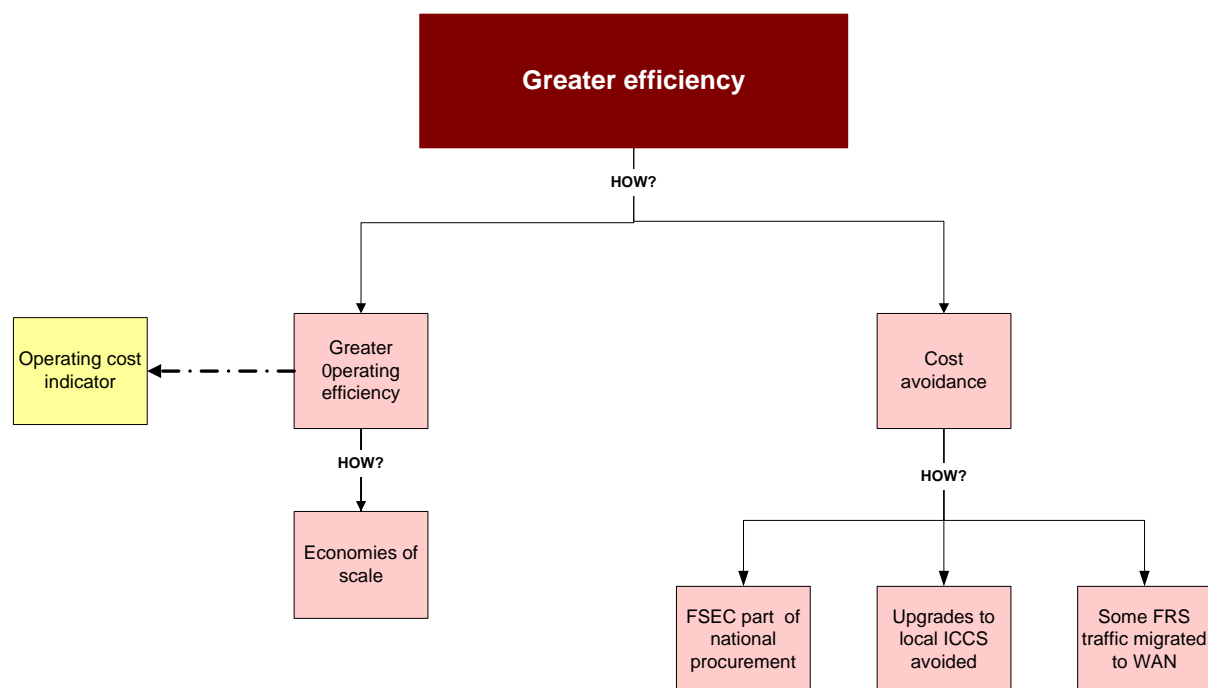
<sup>6</sup> The potential benefits are significant as appliances now spend a greater proportion of their time away from stations performing community fire safety work.

<sup>7</sup> Kingston communications does not provide automatic caller location services in Hull (addresses provided to control over the phone). Cable and Wireless (which handles about 20% of emergency calls) has just started to roll out its Automated Location for Service Emergency Calls (ALSEC) facility. Coverage will be significantly improved by the time FRSs start to cut over to the new control arrangements.

67. The working environment for many control staff will be enhanced through:

- **An improved physical working environment** – the control function will be housed in a new modern building, which control staff have helped to design. The building will have many beneficial features including: a design which maximises natural light, air temperature which is controlled to support diurnal body rhythms, an enhanced control room layout, car-parking, an external patio, improved security, and best of breed supporting technology and furniture<sup>8</sup>.
- **Greater Safety for staff and visitors** - secure sites will increase safety, especially for staff working night shifts. Security features of the new RCC accommodation include: restricted access; a secure perimeter barrier; 24 hour security; and good external lighting. In addition, the building will be segregated to keep service areas separate from the general public. Lastly, the buildings and their fittings have been designed to meet health & safety regulations and limit accidents and illness at work.
- **More consistent activity levels** – under the new networked control arrangements, staff will focus on core activities for which capacity has been matched to demand. There will be more colleagues to interact with and less variation in activity levels, which will help to eliminate the conditions which can lead to boredom and stress at work. There is also opportunity for new employers to introduce shift patterns and other working arrangements which better suit the needs of individuals.

## Efficiency



<sup>8</sup> The buildings have been specified, and are being designed and built, to meet in full the 2006 Part L2 building regulations, which are much more stringent in respect of carbon emissions and to achieve a BREEAM (Building Research Establishment Environmental Assessment Method) rating of "Excellent". The Commissioning for Architecture and the Built Environment (CABE) were consulted and kept informed throughout the specification and procurement phases. The project earned very favourable comments from CABE, including an invitation to give presentations to CABE staff on best practice as exemplified by the RCC procurement.

68. The diagram above illustrates the benefits profiles for greater efficiency (pink boxes) and how they are related to the dashboard operating cost indicator (yellow box). It can be seen that there are two main elements to improving the efficiency of existing services:

- Greater operating efficiency;
- Cost avoidance.

69. Greater operating efficiencies will be achieved through **economies of scale**. Capacity will be matched to demand. This will involve changes to staffing levels, processes and working arrangements, such as shift rotas. Under current arrangements poor matching of capacity to demand has resulted in highly trained control staff regularly undertaking routine administrative and auxiliary tasks. At an FRS level this is rational and supports locally efficient working. However, it is not a good use of control staff, who are a relatively expensive resource. The delivery of these tasks will be for FRAs to determine under the new control arrangements.

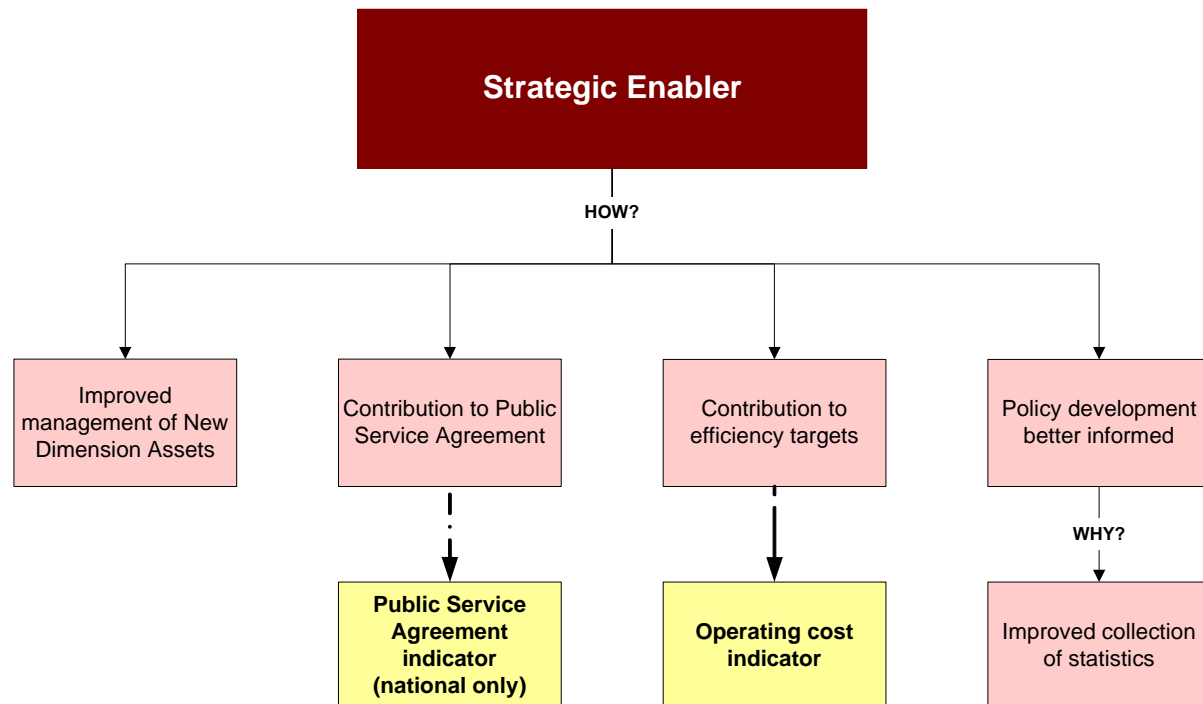
70. Over and above economies of scale it is also expected that the following costs can be avoided through implementation of the networked control solution:

- **Fire Service Emergency Cover (FSEC) part of the national ICT infrastructure procurement** – FRSs have access to a prototype evidence-based toolkit, FSEC, which they can use to carry out risk assessments which inform their IRMPs. A Risk Management Toolkit, which replaces FSEC, is included in the FiReControl technology requirement. Previously it had been assumed that each region would procure a version of FSEC locally, resulting in repeated development of the same functionality. There are additional efficiencies, because the common geographical database used for control and IRMP planning simplifies data management.
- **Firelink interim solution for existing controls** – there is an opportunity to avoid the full cost of integrating the Airwave radio system into existing controls. The scale of the possible saving depends on the delivery schedules for the Firelink and FiReControl projects and the interim solution implemented. A prudent estimate of £20m is included in this business case<sup>9</sup>.
- **Some FRS traffic migrated to the FiReControl Wide Area Network (WAN)** – there may be an opportunity to migrate some existing services to use the communications infrastructure which FiReControl is providing. Achieving efficiency savings will depend on individual circumstances, including the existing levels of network traffic and commercial arrangements.

---

<sup>9</sup> This is a conservative estimate, which assumes that the interim solution proposed by the Firelink supplier would be acceptable to a majority of FRSs.

Strategic



71. The diagram above illustrates the benefits profiles for strategic enablers (pink boxes) and dashboard operating cost indicator (yellow boxes). It can be seen that FiReControl supports the following strategic aims of Communities and Local Government:

- Improved management of New Dimension assets;
- Reducing the number of accidental fire related deaths;
- Contribution to departmental efficiency targets; and
- Better informed policy development.

72. The management of **New Dimensions assets** will be improved by the new networked control centres, which will be better able to cope with large incidents. Integration of New Dimension with FiReControl will allow a coordinated and consistent national response to large scale incidents.

73. The FiReControl project will make a significant contribution to departmental **efficiency targets**. Economies of scale will deliver sharply lower operating costs for providing a control service once FRSs have cut over to the new control arrangements (refer to paras 75 to 84). These savings will help to reduce council tax pressures on local authorities and enable scarce resources to be targeted at areas of importance for the fire and rescue service.

74. **Policy development** will be better informed because policy developers have access to more comprehensive/consistent information and enhanced audit trails of events. Consistent, comprehensive management information will also support operational planning and decision taking at local, regional and national levels. However, the degree to which local authorities can take advantage of this opportunity will depend on their ability to interface legacy systems to the new RCCs.

## Cost of ownership

75. Amalgamation of controls will save money for Fire and Rescue Authorities due to cost avoidance and economies of scale. It is worth restating that cost savings are not the main reason for implementing networked regional controls. Enhanced operating efficiency is expected to significantly reduce the cost of achieving resilience goals and hence directly supports VfM.
76. Headline costs and savings are generated by forecasting the costs of providing a control service under the current and regional controls positions. The difference between the two forecasts is the net cost or saving. Prudent forecasts indicate that the significant net incremental benefits outlined above will be achieved for a marginal net incremental cost (Net Present Cost £50m). This will be funded by Communities and Local Government (alongside its investment in the new digital radio network). It is part of the Department's commitment to work in partnership with fire and rescue services in the modernisation and improvement of the service as part of its responsibility to safeguard the public.
77. The table below sets out indicative annual cash costs and savings for local authorities under the new control arrangements.

	Current position (cost)	Regional controls (cost)	Net saving	Change (%)
Cost per head of population (£/1000)	1650	1200	(450)	28
Annual cost (£m)	83	60	(23)	28

Notes for table:

- i. All figures are based on 2006 prices.
  - ii. Regional controls figures are for a fully-networked resilient solution for the nine regions in England, including London.
  - iii. The annual cost/saving is cash flow under steady state operating conditions. For the current position and regional controls this is FY2015/16, which is the first year in which there is little forecast spend on new ICT infrastructure.
  - iv. The unit cost is the annual cost of providing control services (under steady state operating conditions) divided by the population served (in 1000s). This is consistent with the Fire Formula Spending Share and the recommendations of the FiReControl Finance Working Group.
78. It is important to note that the 'current position' figures are a forecast for FY2015/16, based on information provided by individual authorities in 2004. These figures, along with those for the regional controls position, are being revisited.
79. Once steady-state operating conditions are achieved, the cash cost of providing control services under the new, regional, resilient, networked arrangements will be some 28 percent (£23m) lower than continuing with local controls. This equates to a predicted improvement in unit cost of about £450 per 1000 head of population served. Since control centres generate no revenue, these savings represent very significant economies which could be used to deliver the priorities of the fire and rescue service, notably fire prevention. In addition Communities and Local Government is financially supporting the transition to the new networked service.
80. It is important to note that the London accommodation and facilities management contracts are yet to be awarded. The figures presented above are therefore informed by prudent assumptions.
81. The remainder of this section is structured around the following questions:
- How is the overall cost of ownership made up?
  - What would be the impact of inflation on forecast costs and savings?
  - How do current forecasts compare with the figures from the earlier drafts of this business case?

- How does the commercial deal sought enhance VfM?

## Cost elements

82. The cost of ownership is constructed from the following elements:

Cost category	Cost element	Description
Staffing	Transition	One-off payments for labour retention, redundancy and early recruitment.
	On going	Salaries and other employment costs, including on going training.
Accommodation	Acquisition	The cost of acquiring suitable accommodation for the control centres; this can be in the form of a one-off capital cost or rent.
	On going	Facilities management and rates.
Infrastructure	Acquisition	The cost of acquiring ICT infrastructure and mobilising systems and training the workforce to use it effectively.
	On going	Services, including support and maintenance, security and the provision of the WAN, Local Area Network (LAN) and second generation FSEC.
Management	Project management	The one-off costs of procuring accommodation and infrastructure, and managing change effectively.
	On going	Common functions; this includes the intelligent customer function for national procurements and national network management.
Other	Other	Any other costs or savings from regional contributions.

83. Staffing represents the largest cost element under both the current position and regional controls. Consequently, the largest relative savings will be generated in this area. There are additional contributions from the economies of scale achieved through the national infrastructure services contract, the avoidance of infrastructure replacement costs (including related project management), and the economies of scale achieved in servicing control centre accommodation. These savings are offset against the cost of providing new accommodation and the requirement for a WAN, which is included in the infrastructure costs.

84. The tables in Appendix G (FiReControl Costs and Savings) set out forecast costs and savings in terms of each main cost element identified above.



## Inflation

85. The figures presented in the economic case exclude inflation. Were the true inflation rate to be applied to FiReControl costs it is likely that forecast efficiency savings would be increased. The table below summarises the possible effect of inflation on each major cost category.

Cost category	Effect	Comment
Staffing	Strongly positive	It is expected that wage inflation will increase the forecast savings from regional controls.
Accommodation	Positive	The agreements for lease include fixed price increases every 5 years (2.5% compound inflation). The resulting step increase in rent payable is significantly lower than the discount rate applied (3.5%) and is expected to undershoot increases in underlying retail prices.
Infrastructure	Benign	Experience suggests that downward pressure on hardware (commodity) prices will be roughly balanced by upward pressure on service prices due to wage inflation
Management	Negative	It is expected that wage inflation will increase costs. However, the contribution from staffing costs should significantly outweigh the increase in management costs.
Other	n/a	n/a

## Comparison with previous forecasts

86. The costs forecast in this business case have been updated to take into account the recent infrastructure services contract award, which has yielded firm prices for the acquisition and operation of ICT infrastructure and a revised roll out schedule (refer to new rollout schedule). All other costs assumptions remain the same.

**87. The headline costs presented in this business case have not been significantly changed by contract award, compared with previous forecasts.**

88. Appendixes H (Disaggregation of FiReControl Costs) and I (Comparison with Previous Draft) provide a summary of revisions to the detailed cost model and associated cost assumptions.

## The commercial deal

89. The table below shows that the commercial deals sought have a largely beneficial impact on the cost of ownership compared to estimates for crown build and fit out (for accommodation) or typical price points (for ICT infrastructure and related services).

Benefits	Dis-benefits
Adoption of a Private Developer Scheme (PDS), in which the capital costs of the RCC accommodation are converted into revenue (rent), considerably smoothes cash flow during transition to the new arrangements; this is beneficial for affordability.	The cost of acquiring accommodation over the anticipated lease term is higher than the estimated one-off capital cost of acquiring the site and building and fitting out the accommodation (Net Present Value (NPV) £15m).
Overall, the commercial deals sought for accommodation and ICT infrastructure services improve the discounted cash flow (net present value) by £45m.	Payment of an annual rent accounts for roughly one fifth the running costs for the new RCCs.

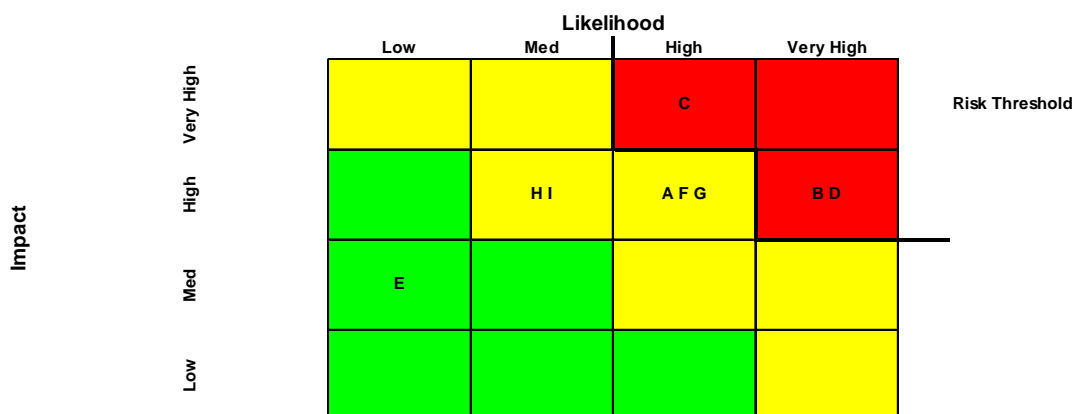
Benefits	Dis-benefits
A significant level of risk is transferred from the public to the private sector. Responsibility for achieving delivery timescales and standards has been passed on to contractors. Responsibility for integrating the national network has been passed on to the ICT infrastructure services prime contractor.	The prime contractor will add a margin to sub-contractor costs

90. The commercial arrangements underpinning the commercial “should-cost” model are outlined in the next part of the business case (the Commercial Case), which presents a detailed analysis of the impact on VFM. Refer to Appendix J for details of the economic impact of the commercial deals sought.

### Economic appraisal of risk

91. FiReControl risk arises from three main sources: comprehensive business change; ICT infrastructure services; and accommodation. The interfaces between these sources and other projects, such as Firelink, create additional risks. These risks cannot be eliminated but they can be mitigated, managed and controlled. Accordingly, the project management of FiReControl has significant resources focussed on risk management systems and procedures. This will be integral to the implementation of the project.
92. Early identification of uncertainties and risks allows mitigating actions and approaches to minimising risk to be put in place and actioned, increasing the accuracy of forecasts and likely success of the project. It thus stands to reason that the depth and breadth of the risk register is one of the key strengths of the FiReControl project.
93. Effective risk management practices have reduced the total number of risks requiring active management, and the proportion of risks in the highest categories has steadily diminished throughout the project, despite new risks being identified during regular project checkpoint reviews. Refer to Appendix K (Active Risk Management) for a comparison of the risks under active management at Outline Business Case (OBC) and FBC stages of the project.
94. Project risks have been grouped in terms of the categories defined for the Communities and Local Government resilience programme. An assessment of the impact and likelihood of each risk being triggered is summarised in the risk profile below, which presents the score for the most significant risk in each category:

Programme Risk Summary



95. Currently the project is focussing its activity on the risk categories which, before mitigation activities, contain risks which are at a level that indicates a need for action:

- **Strategic Change / impacts (B):** the FRS as a whole is experiencing a period of unprecedented change. Changes to control room staffing levels and other modernisation agenda issues might precipitate resistance from staff, which could delay implementation of one or more RCCs or disrupt the overall timetable. These are being addressed through development of employment strategies which maximise buy-in from the workforce and a targeted communication process, both within and external to the FRS.
  - **Critical dependencies (C):** it is important to align the Firelink and FiReControl delivery schedules effectively to avoid delays and increased costs across the resilience programme. Interim arrangements might need to be in place for prolonged periods. A number of mitigating actions have been taken including: establishing programme-level governance arrangements; implementing joint project management arrangements regionally; recruiting a programme integration manager and ensuring flexibility is built in to dependent contracts.
  - **Financial resources (D):** FRS transition activity is being planned to minimise project costs and expedite the realisation of benefits. Significant work is in progress to raise awareness levels of the necessary FRS transition activities (including convergence and data migration).
96. There are three risk categories containing risks close to the threshold:
- **Governance and management capacity (A):** the pace of local decision making, especially about governance arrangements for the new RCCs, may not be rapid enough to establish local authority companies in time to meet the critical path for employer decisions. It is already recognised that the dates in the National Framework are unlikely to be met for the first wave regions. The critical path will be reviewed as soon as the local authority companies have been established.
  - **FRS and brigade resources (F):** the Fire and Resilience Directorate must carefully manage the flow of national framework requirements to FRSs to ensure all the desired outcomes can be achieved.
  - **Procurement and contractual interfaces (G):** it could prove difficult to encourage developers to come forward with suitable sites for the London RCC. If the procurement were to fail or the timescales for alternative procurement were protracted, then this could put at risk the delivery of the RCC in time for the London Olympics. The proven PDS approach will inform the procurement process.
97. For the remaining risk categories (contingency planning (E), approval and accreditation processes (H) and reputational damage (I)) the usual approach of transferring risk to the party best able to manage it has been adopted. Some risk can be transferred to the infrastructure and accommodation suppliers. Specifically, ICT suppliers will be responsible for the integration of control room technology infrastructure within and between regional control centres and the availability of ICT support. Refer to paragraphs 102 to 103 and the Commercial Case for a more detailed discussion of risk transfer. Refer to Appendix M (Project Risks) for a more detailed extract from the risk register.
98. In this business case, the economic assessment of risk is undertaken in two different, but mutually inclusive, ways:
- **Optimism bias:** in which an “expected value” for capital cost and project duration are calculated using historical precedents; and
  - **Scenario analysis:** in which economic outcomes are linked to project risks through an understanding of the ranges of values adopted by key cost assumptions.
99. As the solution develops it becomes possible to supplement the optimism bias analysis (informed by past projects) with an economic risk analysis (informed by the current project). Taking into account the appraisal of risk undertaken, the project remains

affordable within a reasonable level of risk. Refer to Appendix L (Optimism Bias) for details of the optimism bias analysis undertaken.

## THE COMMERCIAL CASE

100. The FRS is acquiring suitable accommodation and infrastructure through two, distinct, national procurement exercises, which are driven by the need to manage significant delivery risks. This part of the business case provides a brief overview of both procurements and how value is being generated. Appendix N (Commercial Deal) sets out the commercial deal sought in more depth.

### Accommodation

101. Suitable accommodation for the eight regions excluding London has been acquired through a PDS. The procurement route was designed to enable any problems in acquiring suitable sites to be identified, and corrected, at an early stage in the project. The procurement delivered a healthy competition. Agreements for lease were signed in 2005 and planning consent has been obtained in all eight regions. Forecasts based on the contract prices suggest that the overall cost of providing accommodation during the period under consideration will be very similar to that presented in the OBC (NPV improved by £0.9m). This increases confidence in the accuracy of forecasts for the remaining elements of the accommodation procurement

102. The same procurement route is being applied to acquire accommodation for the London RCC. The responses to the pre qualification questionnaire are currently being evaluated. The strategy for procuring facilities management (including security) is still being developed with the regions.

### ICT Infrastructure

103. The ICT Infrastructure and related services have been acquired as a managed service from a single prime contractor. The successful integration of technology infrastructure and related services is critical to the success of the FiReControl project. Communities and Local Government has looked to the market to suggest appropriate integration solutions, but with a clear picture of its requirements and the constraints. It has procured a national prime contractor to deliver all of the regional control infrastructure and related services. The procurement route was designed to allow different levels of risk transfer, and hence pricing arrangements, to be explored with suppliers. The supplier payment and reward scheme is a powerful mechanism for reducing delivery risk.

### Value considerations

104. The commercial deal sought has a positive influence on costs and savings during the period under consideration (FY2004-05 to FY2020-21). The cost profile is smoothed during transition, which has a beneficial effect on the total cash cost and discounted cash flows, and hence affordability. Coupled with the substantial transfer of risk to the providers outlined above, this significantly enhances FiReControl's value for money.

105. The creation of an intelligent customer function, a requirement for third party cost and performance benchmarking and a mandatory demonstration of reasonableness will help ensure that value is sustained. Value will be protected from delays caused by third parties.

## THE FINANCIAL CASE

106. This part of the business case demonstrates that that project is affordable. It is structured around the following questions:

- Has Communities and Local Government secured adequate funding for the change?
- What are the forecast efficiency savings at a regional level?
- How have FiReControl stakeholders been involved in developing financial governance and funding arrangements?

### Adequate funding has been secured

107. Communities and Local Government has committed to fund the one-off (transitional) costs of delivering the new efficient regional controls as part of its wider commitment to modernise and improve the resilience of the Fire and Rescue Service and protect the people of England. This includes development and implementation of the new ICT infrastructure and grants for any agreed net additional costs incurred by local authorities in implementing the change.

108. The mechanism for funding the transitional costs is a grant, since this is the quickest and simplest way of funding authorities for costs which they need to incur. Communities and Local Government has agreed grants for FY2005-06 and FY2006-07 (refer to FRS circulars 59/2004 and 63/2005).

109. There should be no need for additional funding once the new RCCs are fully operational. Whilst the proportion of expenditure on staff, accommodation and ICT infrastructure will change, the overall operating cost is expected to reduce (refer to paragraphs 111 and 116). The New Burdens calculation takes into account the net additional costs incurred within a specific financial year. Communities and Local Government will assess in advance all the costs necessary to implement RCCs and maintain a control service, and subtract any savings which are expected to occur from the transition to the new control arrangements. Any positive difference will receive New Burdens support. This calculation is made separately for each financial year in advance of any expenditure.

110. Communities and Local Government has recognised the importance of FiReControl and will prioritise the project and its bid for resources in the Comprehensive Spending Review 2007. The total investment by the Department in regional controls is forecast to be about £340m. Appendix O (Funding Sources and Commitments) provides a summary of FiReControl funding sources and commitments.

111. It is important to note that different accounting treatments apply to central and local government. As Communities and Local Government is funding investment in new technology, the budget must include notional costs, including depreciation and cost of capital. This increases the net cost to the Department relative to the current position, where the investment by local authorities is subject to a different accounting treatment.

### Efficiency Savings

112. Under the new control arrangements Local Authority controlled companies will supply services at a regional level. The operating costs of the companies and supporting group services will be borne by local authorities. It is forecast that the steady state operating costs for the national network will be about 28 per cent lower than the current position.

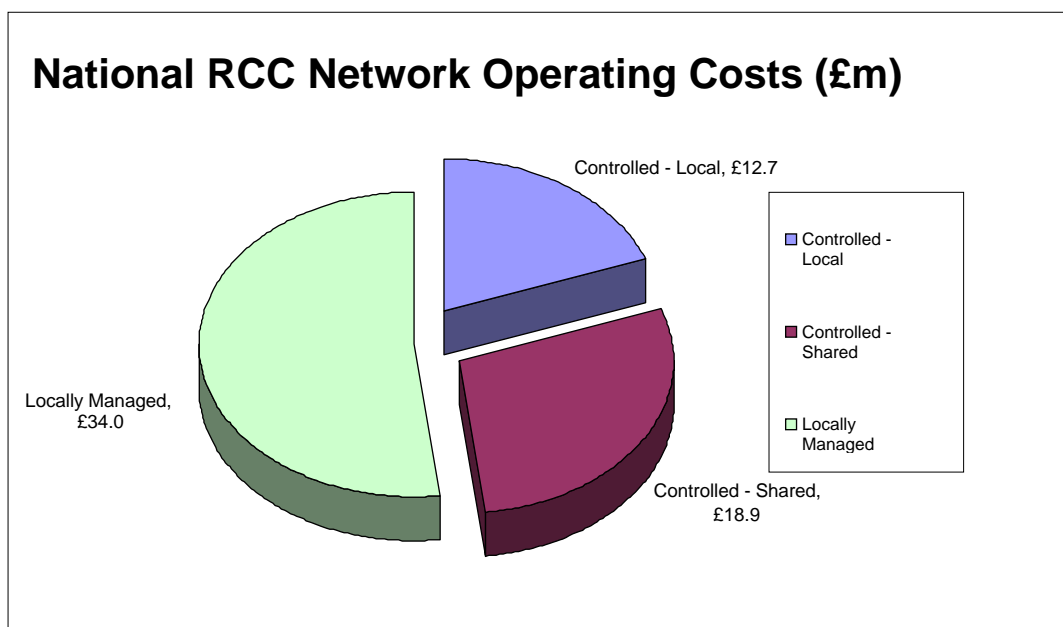
113. At this time it is not possible to make a firm prediction on costs for individual regions for the following reasons:

- Firstly, London RCC accommodation and facilities management services for the RCCs are yet to be procured.

- Secondly, there are structural differences between regions which mean that some of the costs of operating the national network (including fall back facilities) need to be distributed fairly. A straightforward mechanism for apportioning shared costs, such as ICT infrastructure services, has been proposed subject to consultation with stakeholders. Nevertheless, additional measures may need to be taken to deal with residual differences.
- Thirdly, different authorities are starting the change from different positions. Some FRAs have invested more heavily than others in technology. Some, typically larger, authorities have been more effective than others at matching capacity to demand. It is simply not practical to ensure that every FRA in every region has the same expected efficiency saving. Within certain regulatory constraints it is possible, however, to allocate costs in a way that can be seen as fair. It is up to FRAs to agree cost apportionment within their region.
- Finally, the forecast savings are based upon very prudent assumptions. There is scope to do better. This is the responsibility of the local authorities and companies.

114. It is possible to calculate a provisional indicative cost breakdown at a regional level to support policy development. However, care must be taken when interpreting the results; estimates of current and future costs will change as the underlying assumptions are reviewed and tested.

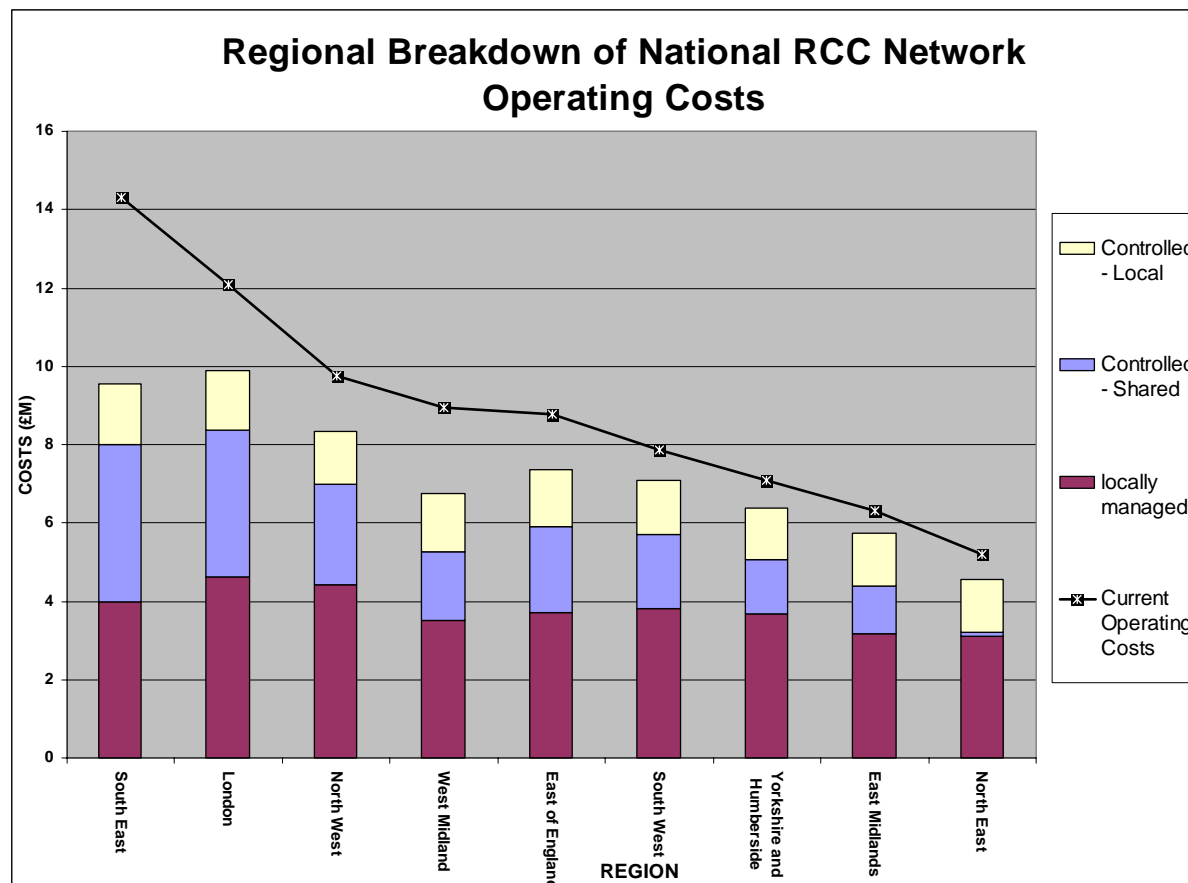
115. The pie chart below sets out the forecast annual cash cost of operating networked regional controls in today's prices. It identifies the proportion of these costs which are 'controlled' due to contracts awarded at a national level (ICT infrastructure, accommodation and group services) or 'locally managed' to be managed by the RCC company (staffing, recruitment and training). Within the 'controlled' costs category it further identifies the proportion of "shared" costs which are to be allocated to RCCs (ICT and group services) and 'local' costs which are met where they fall (accommodation and related services).



Notes for chart:

- All figures are in FY2006/07 prices
- Forecast RCC operating costs exclude cost avoidance benefits (refer to Efficiency paragraph 70)
- Forecast RCC operating costs exclude ICT asset refresh and activities taking place within FRs
- All figures are cash costs which exclude accounting treatment and notional costs (for example depreciation and cost of capital)

116. Taking into account the forecast costs for operating networked controls (above), the proposed mechanism for apportioning national costs, and forecasts based on the current position it is possible to calculate a provisional indicative breakdown of the expected savings at a regional level. The chart below illustrates the range of possible regional savings:



Notes for chart:

- i. The annual saving is a provisional indicative cash flow under steady state operating conditions
- ii. Forecast RCC operating costs exclude cost avoidance benefits (refer to Efficiency paragraph 61)
- iii. Forecast RCC operating costs exclude ICT asset refresh and activities taking pace within FRSs
- iv. Current operating costs for existing controls are based on the CIPFA 2006/07 staffing forecast and 2004/05 returns from FRAs
- v. Shared costs are apportioned according to tax base; this includes a “network resilience adjustment”
- vi. All figures are in FY2006/07 prices
- vii. All figures are cash costs which exclude accounting treatment and notional costs (for example depreciation and cost of capital)

117. All regions (and hence all FRAs) are expected to realise efficiency savings, which can be pumped into front line services. Depending on the way that operating costs are allocated, the net annual saving is expected to vary between regions and between the FRAs within each region. Refer to Appendix P (In-Service Costs for the FRS) for details of the proposed mechanism for apportioning national costs.

## Working together to solve governance and funding challenges

118. The FiReControl finance working group was established to inform the implementation of governance and funding arrangements for the project. The group is chaired by Communities and Local Government and includes representatives from the Department,



the LGA, treasurer representatives from each region and the CFOA. The group has wide ranging knowledge and experience. It has considered several complex issues, such as the arrangements for establishing local authority controlled companies to deliver the new efficient control services. Appendix Q (FiReControl Finance Working Group) provides a summary of group's main conclusions and recommendations.

## THE PROJECT MANAGEMENT CASE

119. Project management case provides assurance that FiReControl aims are achievable. It is structured around the following questions:

- What are the objectives and scope of the FiReControl project?
- How is the project governed?
- How is the project managed and controlled?
- How will sustainable business change be achieved?
- How will benefits be realised?

### Objectives and scope

120. The FiReControl project objectives are outlined below:

- To develop and deliver processes and ways of working for the regional fire and rescue controls;
- To develop and deliver the people to operate and manage the regional fire and rescue controls;
- To develop and deliver the technology infrastructure and establish on-going support and maintenance services for the regional fire and rescue controls;
- To provide suitable accommodation from which the regional fire and rescue controls will operate;
- To migrate existing fire and rescue controls (and other stakeholders interfacing with the fire and rescue service) to the new control centres enabling the specified benefits to be realised in accordance with the overall solution;
- To develop and implement group services to provide the ongoing services which are required to sustain the regional fire and rescue controls; and
- To ensure that all aspects of the solution are fully integrated and comply with Critical National Infrastructure (CNI) requirements.

121. The project objectives establish the context for satisfying the critical success factors set out in Appendix B (Success Criteria)

122. The table in Appendix R (Project Scope) provides a summary of the activities which lie inside and outside the working scope for the project.

### Governance

123. The governance structure for the FiReControl project reflects the nature of the organisation involved in delivering the change. The Government has taken a collaborative lead to ensure that the replacement programme for existing control centres is comprehensive, coherent and nationally co-ordinated.

124. The new RCCs will be established, governed, and operated under local democratic control. The project aims to provide collective regional ownership for the control service coupled with local responsibility for the delivery of the operational regional control centre.

125. Regional teams co-ordinate FRS delivery of the business change necessary to realise the benefits set out in this business case and to migrate successfully to the new operational environment. Certain functions will be carried out at a national level to ensure continued operation as a national network.

126. The project governance structure is designed to achieve a balance between providing sufficient authority to get the task done and recognition that regional and local teams need to take ownership and have flexibility regarding implementation where appropriate. It is, however, recognised that aspects of the project governance will need

to develop as the project proceeds. Appendix S (Project Governance) provides more details about the governance arrangements for the FiReControl project.

127. The Communities and Local Government Resilience Programme was formed in July 2004 from the existing Firelink, New Dimension and FiReControl projects. The Fire & Resilience Programme Executive is the senior governing body. All the projects within the resilience programme will continue to have their own Project Boards, which will meet periodically. The function of the Programme Executive is to coordinate the implementation of all the Department's FRS projects having regard to:

- Scope, timetables and phasing;
- Interfaces and critical dependencies;
- Communications strategy;
- Contacts with FRSs, FRAs, Regional Management Boards, etc.; and
- Communities and Local Government's wider policies on Fire, Resilience and Regional Development.

128. The programme governance structure is evolving. Future developments may affect the project governance arrangements outlined above.

## Project management and control

129. The FiReControl is a massive change initiative. It requires delivery to the exacting quality management standards appropriate to the nature of Fire and Rescue Service. The project management approach adopted melds best practice from a number of contemporary sources including OGC's successfully delivery toolkit, Managing Successful Programmes and PRINCE 2. It ensures:

- Effective project support;
- Effective risk management; and
- Effective quality management.

130. The project is supported by a resilience Programme Management Office (PMO), which assists with the production of appropriate project management procedures and their application across the project. The PMO provides Project Management support to the Project Manager and the project management team at Communities and Local Government. It also assists with the establishment and management of all project documentation and procedures, including monitoring and reporting progress. The Project Initiation Document (PID) sets out the general project structure. Details of the overall project plan will be refined as the project evolves and will be supported by more detailed stage plans.

131. The FiReControl project is deemed to be mission critical and has been assessed as High Risk using the OGC risk profile. Risk management is defined in the Risk Management Plan, which outlines the necessary processes for identifying, assessing, managing and reporting the risks. The essential elements of the plan are:

- Responsibility for the risk management process lies with the PMO;
- All risks are logged in a centrally managed risk register;
- Each risk is assessed and monitored in a consistent manner; and
- Each risk has an owner, responsible for actioning mitigation or contingency plans.

132. Each regional team maintains its own risk register and manages these risks locally. Regional processes have been established to enable risks to be escalated to Communities and Local Government for national management.

133. Risk management processes are linked to the business case through scenarios (refer to the Economic case). These enable the economic and financial impact of key project risks to be assessed and communicated.
134. The PMO assists the Project Manager, Regional Project Managers (RPMs) and work stream leads to operate the quality management approach. The Senior Responsible Owner (SRO) determines acceptable tolerances for time, scope and cost within the change control process. Details of the FiReControl quality management approach are presented in the Quality Plan.

## Business change

135. The Business Change Team includes six secondees from the Fire and Rescue Service who actively champion the delivery of FiReControl and provide support for its implementation in the regions. Following the Communities and Local Government Select Committee report on modernisation within the FRS (June 2006), it was recognised that more effort was needed to improve FiReControl's communications and build relationships with our stakeholders. Steps have been taken to increase resources and improve systems and processes within the Policy, Business Change and Communications teams. Greater integration of work across these areas will ensure that we are better able to listen to, and respond, to our stakeholders.

## Benefits management strategy

136. Benefits management is a key part of the portfolio management activity which takes place at a programme level in any organisation. An approach has been developed within the FiReControl project which complements portfolio management within the Modernisation and Resilience programmes. The FiReControl benefits management strategy sets out how the integrity of the business case will be managed over time. The strategy is supported by a detailed benefits management process and templates for delivering and reporting against benefits profiles. FiReControl benefits profiles are presented in the economic case (refer to paras 58 to 74).
137. Communities and Local Government is working with local change teams to establish benefits monitoring and reporting through a dashboard of indicators. This will generate a cost and performance baseline for all 46 FRSs in England, which will inform post implementation review and support the management of change to the new control arrangements. Accurate historical baselines will also assist local authorities to establish appropriate service level targets for RCCs prior to service cut over.
138. The benefits dashboard will be one of the primary method of reporting progress to project and programme boards, and wider audiences. Additional governance arrangements include:
- A benefits working group established to inform and guide development and implementation of the benefits strategy
  - A forum for local and regional benefits leads to share best practice and support efficient operation of the strategy.
139. The Firelink and FiReControl project teams are working together to identify and communicate benefits links and dependencies, and share processes and templates.

## GLOSSARY

Automated Location for Service Emergency Calls	Cable and Wireless equivalent to the BT Enhanced Information Service for Emergency Calls (EISEC) service. (see below)
Benchmarking	Comparing performance with external organisations.
Benefits dashboard	A set of indicators which is used to support benefits realisation.
Best and Final Offer	Binding offer from bidders which is evaluated at the end of the procurement process.
Best Value	A statutory obligation on local authorities to achieve Value for Money.
Cost of ownership	The combined up-front and ongoing cost of acquiring an asset throughout its planned life.
Current position	Continuing with the current arrangement of 46 control rooms in England.
Enhanced Information Service for Emergency Calls	A service provided by BT for emergency calls identifying the location of a mobile or landline call.
Firebuy	An organisation established to support the national procurement of major items, such as vehicles, clothing and equipment for the Fire and Rescue Services.
FiReControl	The project organisation provided by Communities and Local Government that is responsible for managing the procurement and implantation of networked regional controls for the Fire and Rescue Service.
Firelink	The project organisation provided by Communities and Local Government that is responsible for managing the procurement and operation of a new digital radio network for the Fire and Rescue Services.
Gazeteer	A geographic dictionary or index which may contain data at various levels of detail, e.g. area, town, district, street or premises.
Group services	Activities essential to the effective management and operation of the networked controls which are best located and carried out at an England-wide level of organisation a national level of the organisation, e.g. ICT contract management.
Intelligent Customer Function	Fashionable name for supplier management function
National Framework	Framework for delivering the Fire and Rescue Services Bill (2004). Updated annually.
Net Present Cost	Future costs discounted by the time value of money (3.5% each year).
Net Present Value	Future costs or savings discounted by the time value of money (3.5% each year).
New Burden	Additional financial liability for a local authority as a result of government policy making.
New Dimension	The Communities and Local Government led programme which will ensure the Fire and Rescue Service is sufficiently trained and equipped to deal safely and effectively with CBRN incidents on a national scale.
Optimism bias	Risk analysis in which an 'expected value' for capital cost and project duration are calculated using historical

	precedents. Attempts to quantify the natural tendency for decision makers to be overly-optimistic at the outset of a project.
Period under consideration	The time period covered by this business case. Defined as from project start (FY2004/05) to the end of the expected life of the ICT assets which are being procured (FY2019/20).
PRINCE 2	A project management methodology.
Private Developer Scheme	Innovative way to acquire accommodation in which a developer builds to a requirement supplied by the customer and then charges a rent for a fixed period (similar to sale and lease back of existing property owned by the customer).
Regional Control Centre	The new facility within which networked control services will be housed at a regional level which will provide control functions for all the FRSs within a region and during fallback periods for other FRSs throughout England.
Regional controls position	Amalgamating fire control in England to create regional control arrangements that match the Government Offices for the Regions.
Resilience Controls (RESCON)	An alternative to networked controls which has been proposed by the FBU.
Resilience Programme	The Communities and Local Government led programme which includes the FiReControl and Firelink projects, and New Dimension programme.
Risk register	A database used to manage project risks.
Scenario analysis	A risk analysis in which economic outcomes are linked to project risks through an understanding of the ranges of values adopted by key cost assumptions.
Steady state operating conditions	For the purposes of this business case, steady state operating conditions occur when costs related to transition activities and gaining of operational experience have ceased to be incurred (roughly 18 to 24 months after cutover of the last FRS to the new control arrangements).
Transition costs	One-off payments related to the planned business change, e.g. supporting regional project teams
Tri Service Controls	Controls which support all three main emergency services (police, ambulance and fire)
Unit Cost	The cost per unit of delivery, e.g. cost per head of population
Value for Money	The optimum combination of whole-life costs and quality that meets business requirements

## ACRONYMS

ALSEC	Automated Location for Service Emergency Calls
BAFO	Best and Final Offer
C3I	Command, Control, Communication and Information
CABE	Commission for Architecture and the Built Environment
CBRN	Chemical, Biological, Radiological and Nuclear
CFOA	Chief Fire Officers Association
CNI	Critical National Infrastructure
CSR04	Comprehensive Spending Review carried in 2004
CSR07	Comprehensive Spending Review being carried out in 2007
EISEC	Enhanced Information Service for Emergency calls
FBC	Full business Case
FBU	Fire Brigades Union
FDR1s	Fire Damage Reports (for insurance purposes)
FFWG	FiReControl Finance Working Group
FM	Facilities Management
FRA	Fire and Rescue Authority
FRS	Fire and Rescue Service
FSEC	Fire Service Emergency Cover
FTE	Full Time Equivalent
GIS	Graphical Information System
HMG	Her Majesty's Government
HMT	Her Majesty's Treasury
HRWG	Human Resources Working Group
ICCS	Integrated Communication Control System
ICF	Intelligent Customer Function
ICT	Information and Communications Technology
IPDS	Integrated Personal Development System
IRMP	Integrated Risk Management Plan
ISOP	Invitation To Submit an Outline Proposal
ITT	Invitation To Tender
LA	Local Authority
LAN	Local Area Network
LFEPA	London Fire and Emergency Planning Authority
LGA	Local Government Association
MDT	Mobile Data Terminal
MMD	Mott Mac Donald
MRMS	Mobilisation and Resource Management System
NB	New Burden
ND	New Dimension
NPV	Net Present Value
OAT	Operational Assurance Testing
OBC	Outline Business Case
OGC	Office of Government Commerce
PDA	Pre-Determined Attendance
PDS	Private Developer Scheme
PFI	Private Finance Initiative
PID	Project Initiation Document (PRINCE 2 terminology)
PSA	Public Service Agreement
PMO	Programme Management Office

---

RCC	Regional Control Centre
RESCON	RESilience CONtrols
RMB	Regional Management Board
RPM	Regional Project Manager
SOBC	Strategic Outline Business Case
SRO	Senior Responsible Owner
TRN	Transition workstream on the National Team
TULCRA	Trade Union and Labour Relations (Consolidation) Act 1992
TUPE	Transfer of Undertakings (Protection of Employment) Regulations 2006
VAT	Value Added Tax
VFM	Value For Money
WAN	Wide Area Network