Home Office

# Future Control Room Improvement

## Government update on fire and rescue authority scheme

November 2016

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# Document purpose

1. Following the closure of the failed FiReControl project in December 2010, the Department for Communities and Local Government provided Fire and Rescue Authorities with £81m to deliver improvements to the efficiency and resilience of their fire control rooms.

2. This document provides a six monthly update on the improvements being delivered by the 22 local Future Control Room projects, setting out delivery dates, resilience benefits, projected savings, and additional benefits the project partnerships have identified:

    - Six further projects have completed since the December 2015 update, bringing the total number of projects now completed to 18. Four projects remain to be delivered.
    - Overall, projected savings stand at £141.5 million.
    - 87% of the resilience benefits expected to be delivered by the Scheme, and funded by the grant, are now in place.

## FiReControl

3. FiReControl aimed to replace England's 46 standalone fire and rescue control rooms with a national network of nine regional control centres. It sought to improve operations by introducing state of the art technology and similar ways of working across nine Regional Control Centres.

4. If FiReControl had been successful it would have provided a single, resilient, national control system, underpinned by common ways of working and operating procedures. It proved to be an overly ambitious and undeliverable project, and was closed down in December 2010.

## The Future Control Room Services Scheme

5. The Department for Communities and Local Government consulted on the future of fire and rescue control services in January 2011. The overwhelming response to the consultation was that improvements to control rooms remained important, and that locally determined solutions, with central Government support, were the preferred way forward.

6. To deliver these, Government made £81 million available for local improvements. The purpose of the grant was to help fire and rescue authorities improve the efficiency and strengthen the resilience of their local control services, and their

ability to interoperate with each other and with other emergency services, thereby strengthening resilience at all levels.

7. 23 bids were received from 44 of the 46 Fire and Rescue Authorities in England, including 15 bids from partnerships of more than one Fire and Rescue Authority. The bids were assessed against clear criteria for technical functionality, interoperability and resilience, efficiency and value for money (tables showing how the £81.187 million has been allocated are at Annex A). The benefits that will be secured by the planned improvements can be found at Annex B.

# Summary Assessment

## Project completion and progress

8. Six further projects have completed since the December 2015 update, they are:

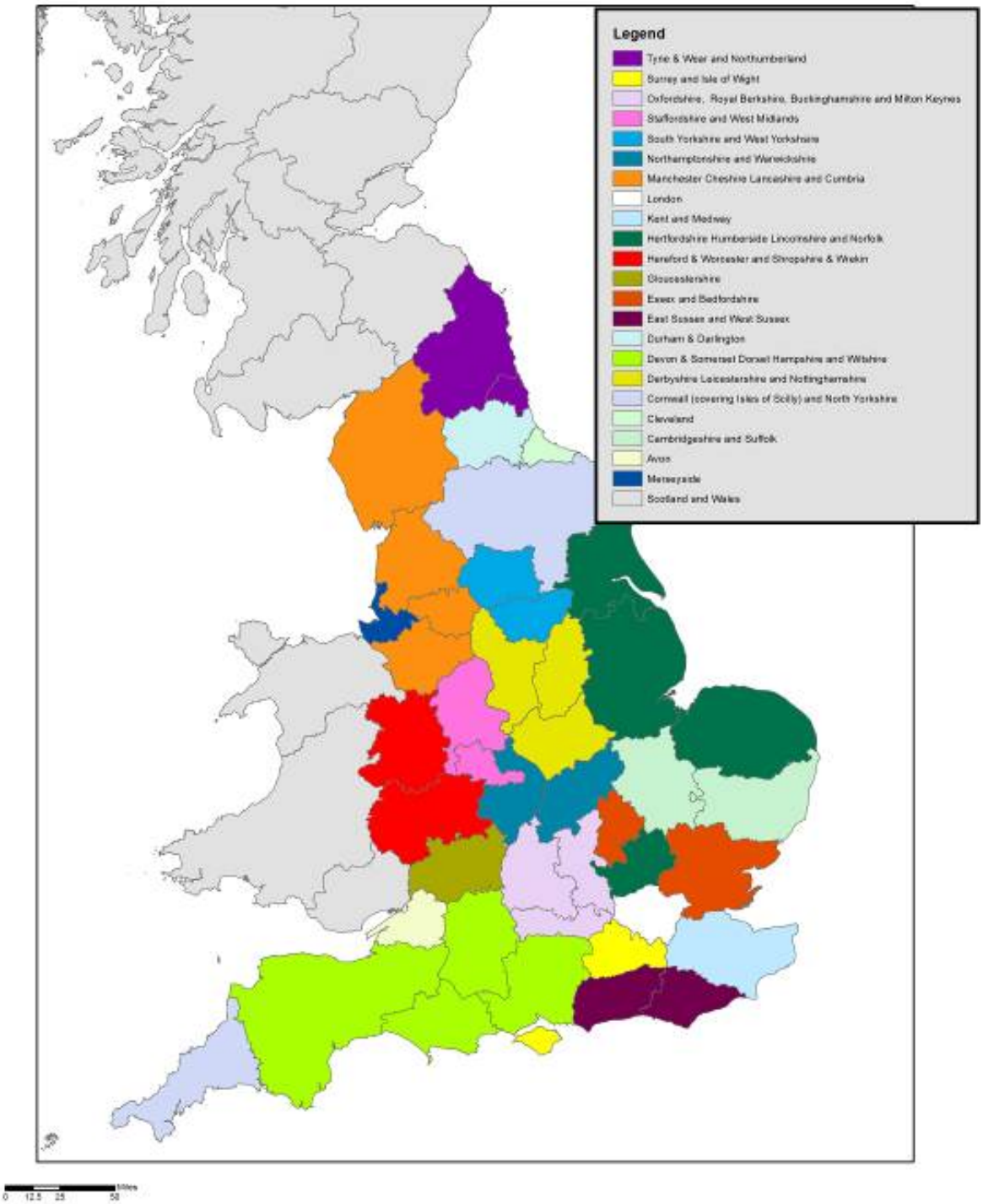
    - Surrey and Isle of Wight
    - Staffordshire and West Midlands
    - Devon and Somerset, Dorset, Hampshire and Wiltshire
    - Cornwall and North Yorkshire
    - Gloucestershire
    - Avon

9. This brings the total number of projects who have now completed to18, out of the Scheme's 22 projects, which represents 82% completion.

10. The maps on the following pages show:

    i. the project partnerships that have been formed between the fire and rescue authorities; and
    ii. the coverage provided by the completed projects in England, and the coverage that will be provided as the remaining projects complete.

# The project partnerships

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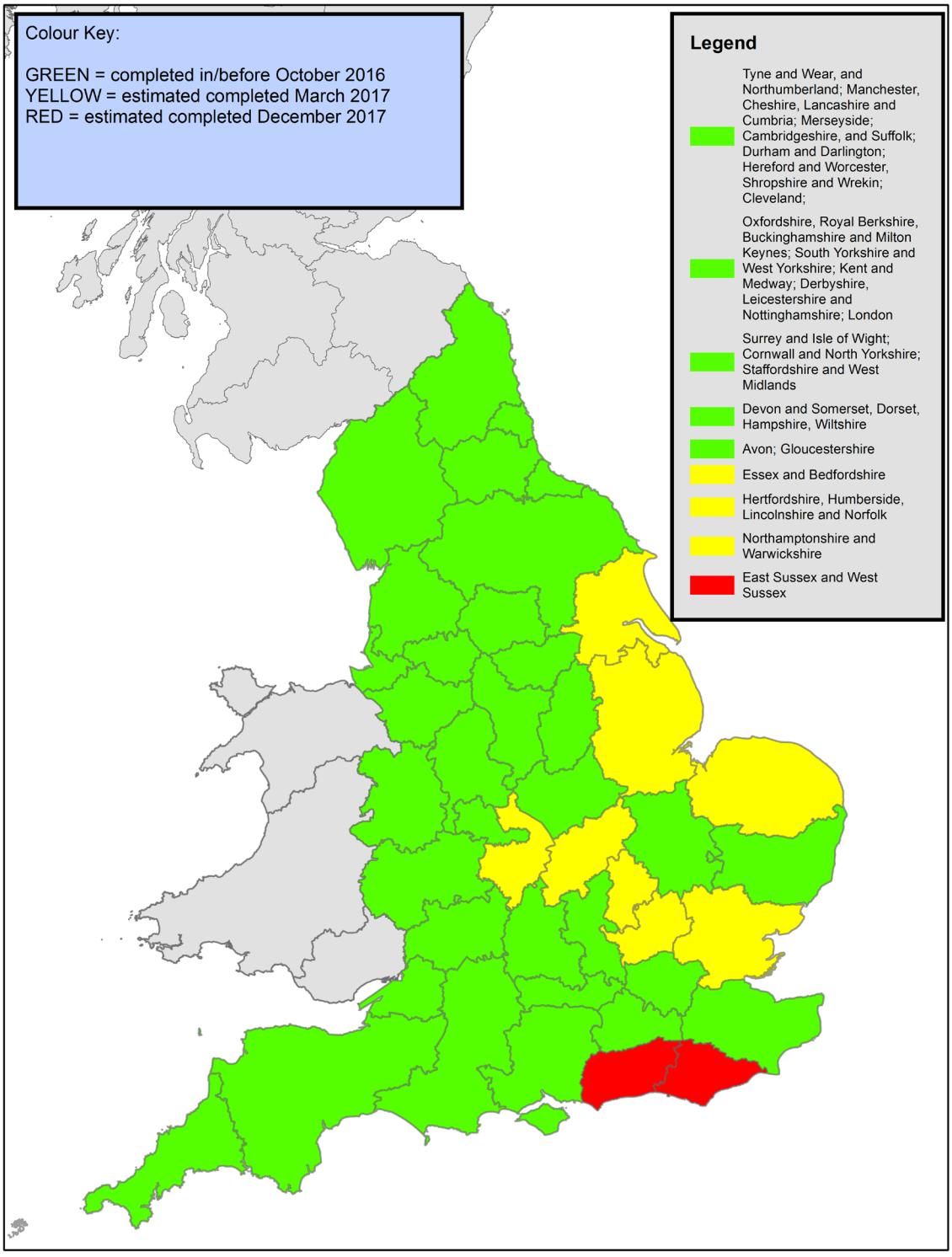
# Coverage that will be provided as the Control Room Projects complete

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13. Several authorities are taking advantage of the partnership and project management arrangements that were set up to deliver their control projects to manage the delivery of other related projects that they are running separately, e.g. incident management/command support, and officer mobilising. As well as delivering efficiencies, this is also expected to improve operational effectiveness and interoperability. Additionally there are:

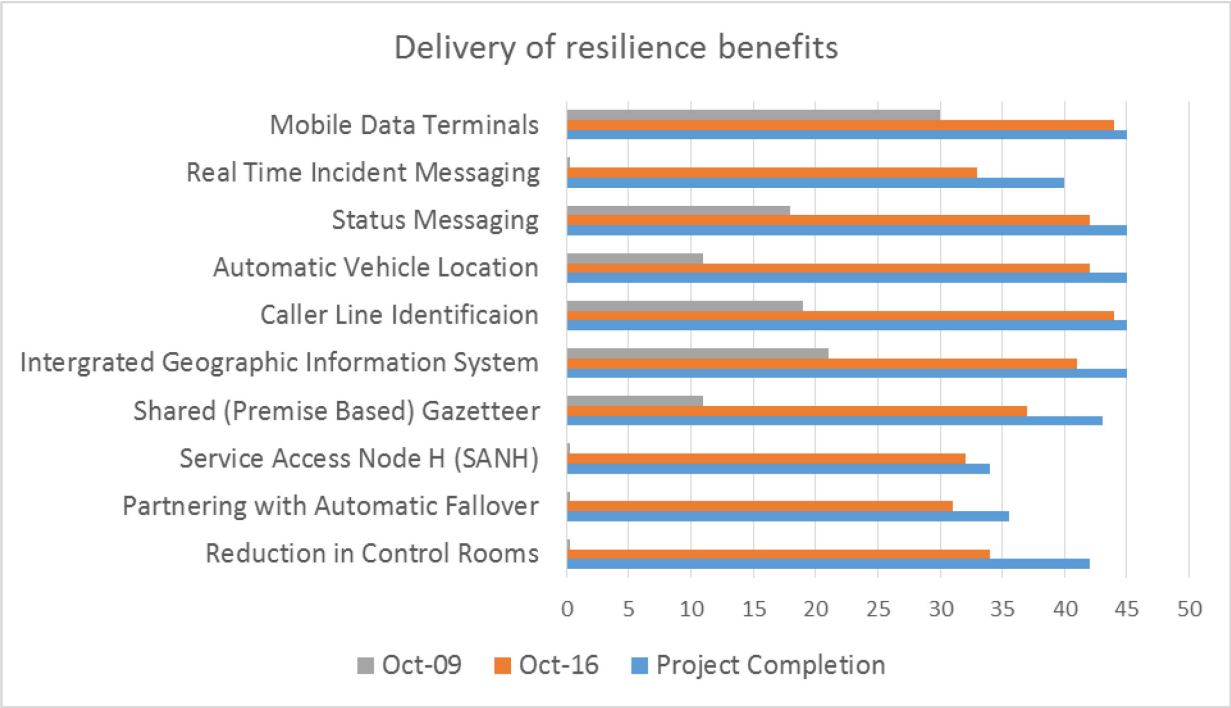
- Adoption of Shared Services – One project is providing a shared IT Service Desk function for all of the partners in the collaboration.
- Projects who have designed and relocated to new control rooms providing added resilience for their critical communications equipment and an improved working environment for Control.
- Projects that are beginning to harmonise common ways of working, sharing terminology and resources to maximise efficiencies and improve interoperability.
- Many projects now entering into resilient arrangements with other projects that will assist during adverse or spate conditions.

14. On completion, these projects will provide state-of-the-art equipment, communications systems and mobilising infrastructure which will enable the Fire and Rescue Service to provide an effective, resilient capability to respond seamlessly to major national incidents, including acts of terrorism, industrial accidents and natural disasters.

## Delivery of the resilience benefits

15. 420 resilience benefits[1] are expected to be in place when all of the projects have completed. 110 benefits were in place at the baseline of October 2009, leaving 310 resilience benefits to be delivered through the Control Rooms Scheme. The chart below demonstrates the progress being made.

[1] For definitions of resilience benefits see Annex B




19. 90%, of the resilience benefits estimated to be in place by the end of the Control Rooms Scheme are now in place. This equates to 270 resilience benefits delivered through the Control Rooms Scheme, or 87% of the benefits expected to be delivered by the Scheme, and funded by the grant. To provide further clarity, we would not expect the resilience benefits 'Partnering with Automatic Failover' and 'Reduction in Control Rooms' to be fully delivered by the projects until they near completion.

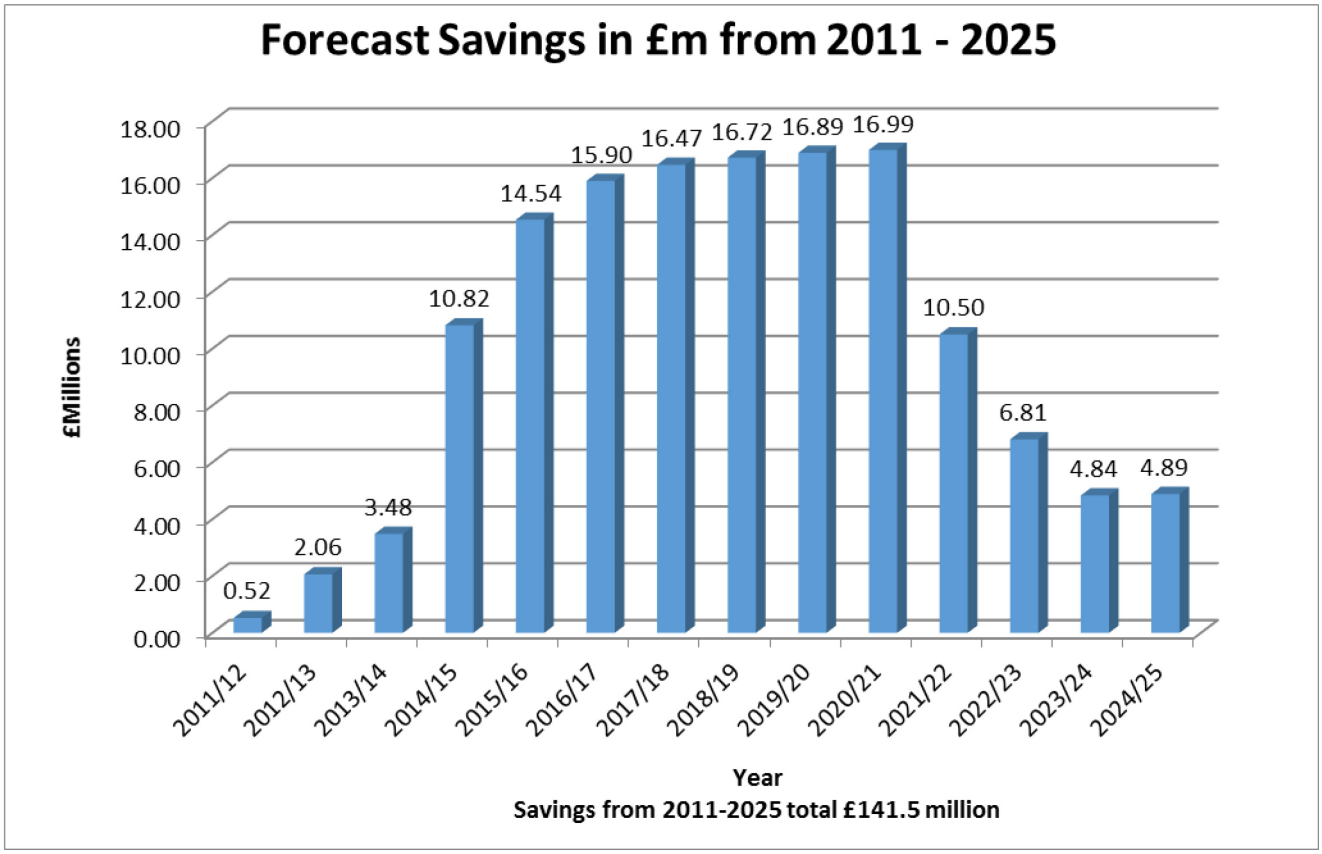
21. Since the previous update there have been increases in the delivery of seven of the ten resilience benefits identified, with significant increases of 6% or more in five of those.

22. Many of the proposed improvements have grown in design since the original bids were made, and many will continue to develop and improve beyond 2016, expanding into wider sub-national improvements. Several authorities are taking advantage of the partnership and project management arrangements that were set up to deliver their control projects to manage the delivery of other related projects that they were running separately, e.g. incident management/command support, and officer mobilising. As well as delivering efficiencies, this is also expected to improve operational effectiveness and interoperability.

## Financial Benefits

23. We expect the financial benefits to change from the original early estimates as the projects progress and reach completion. The total forecasted savings for the Control Rooms Scheme now stands at £141.5million. This is £1.5 million less than estimated in December 2015. However, the savings remain £13.5 million more

than the original 2012 baseline. The table below sets out the savings which fire and rescue authorities have forecast to result from the planned improvements.




## Comparing the benefits to FiReControl - Resilience of the system now

24. It is difficult to compare the benefits to be delivered by the current projects with those planned under FiReControl. Projects will deliver many technological improvements of the original project, along with efficiency savings and increased resilience. In terms of the 'availability of control room services,' and the 'speed and accuracy of call handling and mobilisation' dimensions of resilience, the vast majority of fire and rescue authorities are procuring systems and functionality that are likely to equal the resilience that would have been provided by FiReControl. The updated summaries show that the projects will significantly:

**Improve the efficiency of fire and rescue control rooms, e.g. through:**

- Merging existing control rooms and establishing partnership arrangements between fire authorities or control room back-up in emergencies, providing cost savings without increasing risk.

- A range of technical operational improvements that will allow quicker and more effective deployment of resources. These include improvements to the time taken to confirm the location of callers, determine the exact type and locations of incidents, and identify and then mobilise the most appropriate resources.

**Improve the ability of fire and rescue authorities to interoperate with each other and with other emergency services and agencies, e.g. by:**

- Standardising ways of working and operating procedures.
- Implementing common systems and technology to keep each other informed automatically with real time intelligence, enabling fire and rescue authorities and other emergency services and agencies to co-ordinate their response to incidents more efficiently and effectively.

**Improve local and national resilience, e.g. through:**

- The introduction of partnership arrangements and new technology to enable fallback to a partner control room at times of spate conditions, ensuring no delays in dealing with emergency calls.
- New technology that provides the ability to communicate using data over the Airwave resilient communication system (previously fire and rescue authorities used voice only).

25. The diversity of mobilising systems now in use across England means that the risk of Common Mode Failure (when two or more elements of a system fail due to a specific event or cause, e.g. a malicious act) is greatly reduced. Such a failure could have devastating consequences for a single national system, whereas under the new arrangements the impact would be confined to a limited number of control rooms. The control room collaborations, remote buddy and call filtering arrangements now provide a robust and flexible response to spikes in demand caused by extreme weather events and spate conditions.

## Locally delivered projects helping to secure national resilience

26. The Fire and Rescue National Framework for England ('the Framework'), published in July 2012, set out for the first time the respective roles and responsibilities of Government and fire and rescue authorities in national resilience: Government retains strategic responsibility for national resilience, while relying on the leadership role of fire authorities, their local professional expertise and understanding of risk.

27. The Framework is a key milestone in resetting the relationship between fire and rescue authorities and Government. It moves away from central prescription, enabling fire and rescue authorities to deliver their services in a way that makes sense locally while continuing to meet the wider needs of national resilience. This approach is intended to emphasise that national resilience can only be built on the basis of good local risk planning and response, and professional advice and input by the fire services. The control room projects are a fundamental part of this approach to national resilience through locally determined and led solutions, which ensure an efficient response which is both effective and resilient.

28. The benefits brought about by the Future Control Room Services Scheme are enabling fire and rescue authorities to be better able to meet the national response through:

- The ability to communicate using voice and data over the resilient Airwave communication system – previously most fire and rescue authorities used voice only;
- Standardising ways of working and operating procedures within the collaborative groups;
- Introducing partnership arrangements and new technology to enable automatic fallback to a partner control room at times of spate conditions or system failure, ensuring no delays in dealing with emergency calls.

29. The Framework also sets out strategic governance arrangements for national resilience. The Fire and Rescue Strategic Resilience Board takes a leadership role in ensuring that fire and rescue capability is fit for purpose, which includes assessing capability against the annually updated National Resilience Planning Assumptions[2]. The Board is regularly updated on progress of the Future Control Room Services Scheme.

30. The following paragraphs discuss how the new Control Room arrangements are providing more robust local resilience since the baseline of 2009 and the building blocks for improved national resilience.

31. **Responding to major regional incidents:** The main rationale for the Control Room Scheme has been to strengthen resilience locally, and to facilitate the delivery of national resilience. New systems will mean that these projects all have access to state-of-the-art communication tools and in many cases, a networked mobilising infrastructure, which enables them to provide an effective response to large scale incidents (including acts of terrorism, natural disasters and industrial accidents).

[2] The National Resilience Planning Assumptions describe the common consequences of identified national risks, setting out the possible maximum scale, duration and impact that could reasonably be expected to result from emergencies, to assist with local and national planning.

32. **Fire and Rescue Service as first responders:** As most emergencies in the UK will be handled at the local level, with the initial response being provided by the statutory emergency services, it is critical that first responders such as the Fire and Rescue Service have a comprehensive and efficient control facility available. Due to the technological and operational improvements delivered through the Future Control Room Services Scheme, completed projects have access to systems and improved ways of working to provide fast and effective responses to events that pose an immediate threat to life, health, property, or the built environment.

33. **Use of FiReControl Regional Control buildings and other legacy assets:** Three projects, which are now live, have made use of the FiReControl Project's legacy Regional Control Centre buildings. 28 Fire and Rescue Authorities are now using highly resilient connections to the Airwave network (SAN H). To facilitate national resilience, one of these projects also acts as the Fire and Rescue Service National Co-ordination Centre, which manages the availability of national resilience assets and assists in their mobilisation in conjunction with the National Resilience Team. The deployment of equipment to deal with recent wide spread flooding was effectively managed from this centre.

34. **Better services to the public:** The public is the main beneficiary from increased resilience and enhanced capability. 98% of fire and rescue authorities, more than double the number at the outset of the Control Rooms Scheme, have Caller Line Identification. When a member of the public makes a call, Caller Line Identification will enable their location (whether from a landline or mobile telephone) to be identified automatically. The control centre computer systems will help the control room staff to rapidly locate the incident and mobilise appropriate resources. Increased use of networking and modern integrated communications and control systems combined with revised national guidance for dealing with spate conditions means that fire and rescue services are now better equipped to deal with the surges in demand caused by extreme weather events and large scale incidents.

35. **Benefits for firefighters:** Firefighters on the way to, or at the scene of an incident, will be provided with high quality information on the mobile data terminals fitted in appliances. Standard Operating Procedures can be accessed through these terminals allowing Firefighters to retrieve the most up to date information to enable them to plan and respond more effectively, such as extricating road traffic accident victims from vehicles more rapidly, or reducing the spread of fire and hence damage to property. The system will also supply essential risk information relating to specific sites and to generic location hazards. This will bring important health and safety benefits to all front-line staff.

36. **Looking to the future:** Several projects have procured and installed wide area networks or network links that enable them to access the Public Services Network and others are in the process of doing so. Not only does this enhance

interoperability and resilience, it also paves the way for access to the Emergency Services Network being delivered by the Emergency Services Mobile Communications Programme.

## Delivery arrangements

37. Responsibility for delivering the improvements rests at the local level. However, from the outset clear accountabilities and effective programme and project management processes were put in place: we worked with the Chief Fire Officers Association and the Local Government Association to establish oversight arrangements. These included a support team, which provided peer support and assistance to fire and rescue authorities in delivering their improvement plans (further information about the work of the support team can be found at **Annex C**). A strategic board, chaired by the Chief Fire Officers Association, with membership from the Local Government Association and the Department, oversaw the support and challenge arrangements, and reviewed the progress of projects and savings.

38. With eight of the 22 projects outstanding at 1 April 2016 the Strategic Board was stood down, and the Home Office increased its direct engagement with the remaining projects, providing support by meeting with them and their suppliers to discuss the issues that have arisen and to ensure that they are both working to the same estimated completion dates. This approach has already proved successful in addressing the delays – a further four projects have completed since this approach was implemented.

## The remaining projects

39. We were clear when the first national summary of the Future Control Room Services Scheme was published that the proposed projects were at varying stages of development, with some projects at a very early stage, while others were already underway. At that time we expected that a number of the projects would change as partnership arrangements firmed up and the projects progressed. At the outset it was anticipated that some of the projects would complete earlier than originally expected in 2014, while some would complete later. However, four projects remain - over 18 months after the Future Control Rooms Scheme was due to complete.

40. The **East Sussex and West Sussex** project has been subject to repeated failed system factory acceptance tests and the upgrade to a single mobilising system remains outstanding. The project has reduced the scope of its deliverables in an attempt to achieve a successful outcome and aims to have a partially functional system in place in June 2017. The current plan for delivery of full functionality is December 2017.

41. The **Essex and Bedfordshire** project has experienced considerable issues with the proposed mobilising system, which in early 2015 resulted in the solution being implemented in one of the partner control rooms only to be removed due to performance and functionality failures. A basic replacement system will be installed this year but will fall short of delivering any of the funded resilience benefits. Essex and Bedfordshire have informed us that full integration of the system to deliver the forecast improvements is expected to complete by the end of March 2017.

42. The **Hertfordshire, Humberside, Lincolnshire and Norfolk** project has experienced issues at factory acceptance testing and is working with the supplier to resolve these in readiness for site and user acceptance tests. The fire and rescue authorities have informed us that successful site and user acceptance test exercises will lead to a cutover programme for the four partner control rooms which will see them complete by the end of March 2017.

43. The **Northamptonshire and Warwickshire** project recently completed a programme of site acceptance tests which resulted in a pass rate below expectation. A further round of site acceptance tests has therefore been scheduled to address the issues identified. A revised project plan has been provided and meetings have been held between Home Office, both fire and rescue services and their supplier. Project completion is now agreed as March 2017.

## Next steps

44. We consider that in both East Sussex and West Sussex, and Essex and Bedfordshire, the sector-led approach has not been successful. Given the number of delays to the East Sussex and West Sussex project, and the repeated failed factory acceptance tests, it presents a risk to overall delivery of the Future Control Rooms Scheme. We have therefore provided further support to East Sussex and West Sussex by implementing an independent technical review of the project. This will advise on the current position, highlight the issues and risks to be addressed, and advise on the options going forward.

45. Given the new information provided by Essex and Bedfordshire to inform this update, we consider that this presents a similar risk to full delivery of the Control Rooms Scheme. We shall liaise with both fire and rescue authorities with a view to implementing a similar review of their project.

46. In the case of Hertfordshire, Humberside, Lincolnshire and Norfolk, they have been able to clearly demonstrate the progress that has been made and set out the steps they intend to take towards completion. In the circumstances, we consider that this project presents less risk to overall delivery of the Future Control Rooms Scheme.

47. Following a meeting facilitated by the Home Office between the Northamptonshire and Warwickshire project leads and their suppliers, it has been

agreed that regular updates on the new milestones within the revised plan will be provided and progress meetings between the project and their suppliers will continue to be facilitated by the Home Office.

48. We shall maintain the momentum of the more direct engagement being taken by the Home Office through regular meetings with the remaining projects and their suppliers. This will enable us to ensure that the projects and their suppliers communicate effectively, are both aware of the issues that have arisen, and continue to work jointly towards completion.

49. We will publish a further, separate report on the remaining projects by spring 2017, which will include a summary of the independent technical review of the East Sussex and West Sussex project, and any review of the Essex and Bedfordshire project.

# Analysis

## Timescales for completing the improvements

50. The tables below set out the dates fire and rescue authorities completed and delivered the improvements outlined in their plans and, for those projects still to complete, their current estimated completion dates.

### Completed projects

| | Project | Date completed |
|---|---|---|
| **Project name** | Tyne and Wear, and Northumberland | 25 November 2013 |
| | Manchester, Cheshire, Lancashire and Cumbria | 28 May 2014 |
| | Merseyside | 15 July 2014 |
| | Cambridgeshire, and Suffolk | 5 August 2014 |
| | Durham and Darlington | 3 December 2014 |
| | Hereford and Worcester, Shropshire and Wrekin | 31 December 2014 |
| | Cleveland | 31 March 2015 |
| | Oxfordshire, Royal Berkshire, Buckinghamshire and Milton Keynes | 23 April 2015 |
| | South Yorkshire and West Yorkshire | 31 May 2015 |
| | Kent and Medway | 31 July 2015 |
| | Derbyshire, Leicestershire and Nott'hamshire | 9 September 2015 |
| | London | 17 November 2015 |

| | | |
|---|---|---|
| | Surrey and Isle of Wight<br><br>Staffordshire and West Midlands<br><br>Devon and Somerset, Dorset, Hampshire, and Wiltshire<br><br>Cornwall and North Yorkshire<br><br>Gloucestershire<br><br>Avon | 31 December 2015<br><br>31 March 2016<br><br>27 April 2016<br><br>6 July 2016<br><br>15 September 2016<br><br>15 September 2016 |
| **Number of projects complete** | **18** (of the 22 projects) | |
| **% of projects complete** | 82% (of the 22 projects) | |

## Estimated completion dates of remaining projects

| **By March 2017** | **December 2017** |
|---|---|
| Essex and Bedfordshire<br>(31 March 2017)<br><br>Hertfordshire, Humberside, Lincolnshire and Norfolk<br>(31 March 2017)<br><br>Northamptonshire and Warwickshire<br>(31 March 2017) | East Sussex and West Sussex<br>(31 December 2017) |
| **3 Projects** | **1 Project** |
| 14% (of the 22 projects) | 5% (of the 22 projects) |

## How the timescales for completing the improvements compare with the summary of March 2012

51. Six further projects have now completed as shown in the table above. This brings the total number of projects which have completed to 18, or 82%. Of the remaining four projects not yet complete, three expect to complete by the end of March 2017, with the final project due to complete by the end of December 2017.

## Planned resilience improvements

52. The table below sets out in further detail the key areas of planned improvements, and progress for each area across the period 31 October 2009 to 31 December 2017.[3] [4]

| Total and % of Fire and Rescue Authority areas with planned improvements | | | | | | |
|---|---|---|---|---|---|---|
| | October 2009 | | October 2016 | | Completion (December 2017) | |
| **Improvement planned** | **Total number of fire and rescue authorities** | **% of all fire and rescue authorities** | **Total number of fire and rescue authorities** | **% of all fire and rescue authorities** | **Total number of fire and rescue authorities** | **% of all fire and rescue authorities** |
| **Mobile Data Terminals** | 30 | 65% | 44 | 98% | 45 | 100% |
| **Real Time Incident Messaging** | 0 | 0% | 33 | 73% | 40 | 89% |
| **Status Messaging** | 18 | 39% | 42 | 93% | 45 | 100% |

[3] Where the projects have reported full delivery of a resilience benefit it has been recorded as 1.0 in the figures above. 'Partial delivery' or 'equivalent' have been recorded as 0.5.

[4] The figures in the table include London Fire Brigade, which did not submit a bid for the grant for future control room services as alternative arrangements had been agreed previously. The figures for the 2009 baseline count Devon and Somerset as separate fire and rescue authorities. For July 2016 and January 2017 Devon and Somerset are counted as a joint fire and rescue authority. Cornwall and the Isles of Scilly are counted as one fire and rescue authority throughout as the Isle of Scilly's control arrangements were already provided by Cornwall. There are therefore 46 fire and rescue authorities in England forming the 2009 baseline, and 45 fire and rescue authorities for July 2016 and January 2017.

| | | | | | | |
|---|---|---|---|---|---|---|
| **Automatic Vehicle Location** | 11 | 24% | 42 | 93% | 45 | 100% |
| **Caller Line Identification** | 19 | 41% | 44 | 98% | 45 | 100% |
| **Integrated Geographic information system** | 21 | 46% | 41 | 91% | 45 | 100% |
| **Shared (Premise Based) Gazetteer** | 11 | 24% | 37 | 82% | 43 | 96% |
| **Service Access Node H (SAN H)** | 0 | 0% | 32 | 71% | 34 | 76% |
| **Partnering with Automatic Failover** | 0 | 0% | 30.5 | 68% | 35.5 | 79% |
| **Reduction in Control Rooms and/or Secondary Control Rooms** | 0 | 0% | 34 | 76% | 42 | 93% |

## Progress against the October 2009 baseline towards completion

53. **Mobile data terminals.** 44 of the fire and rescue authorities now have mobile data terminals configured for data-based mobilising. This is an increase of 33% since the October 2009 baseline.

54. **Real time incident messaging.** 40 fire and rescue authorities are planning to have the facility to fully use real time incident messaging by project completion. 33 fire and rescue authorities have now fully secured this benefit, which equates to 73% delivery. This is an increase of 73% since October 2009.

55. **Status messaging.** All 45 fire and rescue authorities are planning to use status messaging by project completion. 42 fire and rescue authorities have secured this benefit. This equates to 93% delivery, which is an increase of 54% since the October 2009 baseline.

56. **Automatic vehicle location system.** All 45 fire and rescue authorities are planning to use an automatic vehicle location system by project completion. 42 have now secured this benefit. Delivery has therefore increased to 93%; 69% more than October 2009.

57. **Caller line identification.** All 45 fire and rescue authorities are planning to use caller line identification by project completion. 44, or 98%, have already fully secured this benefit. This is an increase of 57% since the October 2009 baseline.

58. **Integrated geographic information system.** All 45 fire and rescue authorities are planning to use an integrated geographic information system by project completion. 41 fire and rescue authorities have now secured this benefit. This equates to 91% delivery. This is an increase of 45% since October 2009.

59. **Shared (premise based) gazetteer.** 43 fire and rescue authorities are planning to use a shared (premise based) gazetteer by project end. 37 have already secured this benefit. This equates to 82% completion, which is an increase of 58% since the October 2009 baseline.

60. **Service Access Node H (SAN H).** 34 fire and rescue authorities are planning to implement a full voice and data capability on the Airwave secure communications network by project completion. 32 fire and rescue authorities have already fully secured this benefit. Delivery has increased to 71%, an increase of 71% since October 2009.

61. **Partnering with automatic systems failover.** 35.5 fire and rescue authorities plan to fully secure this benefit by project completion. 30.5 fire and rescue authorities have now secured this benefit, equating to 68% delivery. This is an increase of 68% since the October 2009 baseline.

62. **Reduction in control rooms and secondary control rooms.** 42 of the 45 fire and rescue authorities are planning reductions in the number of control rooms on project completion. 34, or 76%, have done so. This is an increase of 76% since October 2009.

63. The benefits being secured by the improvements are described at **Annex B**.

## Additional benefits

64. In addition to the resilience benefits and forecasted savings set out at the start of the programme, the project partnerships are now identifying additional benefits:

- One project identified further savings to be made by changing the scope of their original programme and rationalising the number of Control rooms within their collaboration. They have increased their forecast savings as a result.

- One Fire and Rescue Service has not only combined their control location with that of the local Police force but has also taken the unique step of introducing a shared mobilising platform with the Police Service. One of the project partnerships is delivering a number of additional benefits as a direct result of the scheme. These include a Joint Control Maintenance of Competency Scheme, Standardised Operational Training and Guidance Notes for Mobile Data, a standardised call handling audit system and standardised recruitment procedures for Control staff.

- One project has installed fallback servers in a remote location which, along with the main servers, can be accessed remotely enabling a fallback control to be established in any of its buildings, removing the requirement for a dedicated secondary control facility.

- One collaborative group has introduced an enhanced level of technical resilience into their system architecture for remote mobilising so that should the servers at the primary and secondary sites experience issues, then the local Fire Control staff will be able to access the server located with their remote partner and be able to maintain operations.

## How the financial benefits compare with the summary of March 2012

65. Overall, total forecasted savings for the Control Rooms Scheme now stand at £141.5 million. This is £1.5 million less than reported in the December 2015 update, but remains £13.5 million more than the 2012 baseline. The revised figures have been due to updated analysis by some projects, changes to project plans and later completion dates, which have affected the projected savings.

# Avon

## *High Level Summary*

## Grant: £1,600,000

**This project has completed and has gone live.**

Avon Fire and Rescue Authority operates its own control room call handling and mobilising system. The integrated communications control system was outdated and no longer supported. It has now been replaced as part of Avon's improvement project. Avon has implemented a number of upgrades to improve the resilience and efficiency of its control room functions, and has introduced automated system failover with Gloucestershire Fire and Rescue Authority. These improvements are further enabled through Avon's new integrated communications control system, providing a full voice and data communications capability, using the Airwave and General Packet Radio Service networks, and upgrading various items of equipment (servers, networking equipment etc) in its control room and replacing its incident ground radios.

Mobile Data Terminals operating over a 3G Service connect to Avon's mobilising system and forms part of the mobilising system. Avon uses TomTom devices for Officer status updates and mobilising which are also integrated into the mobilising system. Avon has completed procurement of new digital Incident ground radios Motorola DP4601, DP4801 and DP 4801ex. Combined with one fixed repeater, two mobile repeaters on Command units and one mobile deployable repeater they have full service coverage as resilience to the Airwave provision.

All circuits have been commissioned by British Telecom and have been tested.

Configuration work by Capita to connect to Avon systems with Gloucestershire Fire and Rescue Authority to enable 'Buddy' working has completed.

### Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Avon October 2009 baseline | × | × | × | × | ✓ | × | ✓ | × | × | × |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Avon position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Projected savings

Avon Fire and Rescue Authority project savings totaling £1.75 million by the end of 2020-21 (no change from previous report).

Predicted 2016/17 savings will be achieved in this financial year.

## Project completion date

This project completed on 15 September 2016

# Cambridgeshire and Suffolk

## *High Level Summary*

## Grant: £3,600,000

**This project has completed and has gone live.**

Cambridgeshire and Suffolk Fire and Rescue Authorities operated separate fire control services prior to 25 October 2011, when Suffolk Fire and Rescue Authority decommissioned its fire control and transferred the function to Cambridgeshire Fire and Rescue Authority under a Section 16 agreement. Subsequently, the handling of 999 calls and associated mobilising arrangements has been carried out by a fully integrated combined fire control, located at Cambridgeshire Fire and Rescue Authority Headquarters in Huntingdon. Both Fire and Rescue Authorities work in close partnership to deliver control services from the combined fire control.

The Fire and Rescue Authorities used DCLG grant funding to support improvements to the combined fire control call handling and mobilising infrastructure. This work utilising the grant funding has been completed, although work continues to improve the Combined Fire Control.

The Airwave network is being used to provide voice and data communication capability. Automatic vehicle location and dynamic mobilising is being used to ensure that the nearest resources are mobilised to incidents. Joint standard operating procedures and ways of working have been developed. This work continues as part of the ongoing project work.

Cambridgeshire's primary and secondary controls have been upgraded to provide the functionality and capacity required by both Fire and Rescue Authorities. Discussions continue with East Sussex and West Sussex Fire and Rescue Authorities to provide a resilient fallback system, which is capable of taking 999 calls and mobilising resources in Suffolk and Cambridgeshire, where spate conditions require this. The intention of reciprocal arrangements for mobilising resources remains in development pending infrastructure being available to support this element.

The project's final phase was infrastructure refresh. This included work to implement a fully utilized SAN H, upgraded mobilising system, and implementation of a new integrated communications control system. Upon full implementation of all these systems, achievement of all the benefits listed will be accomplished, including real time incident messaging. The system upgrade is being funded locally, outside the DCLG grant.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Cambr'shire October 2009 baseline | × | × | × | × | × | ✓ | Partial | × | × | × |
| Suffolk October 2009 baseline | ✓ | × | × | × | ✓ | ✓ | ✓ | × | × | × |
| Cambr'shire and Suffolk position on completion | ✓ | × | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Partial | ✓ |

## Projected savings

Cambridgeshire and Suffolk Fire and Rescue Authorities projected savings totaling £7.424 million by the end of 2020-21 (no change from previous report).

## Project completion date

The project completed on 5 August 2014, following implementation of the integrated communication and control system.

# Cleveland

## *High Level Summary*

## Grant: £1,800,000

**This project has completed and has gone live.**

Cleveland Fire and Rescue Authority operates its own control room and call handling and mobilisation system. The Fire and Rescue Authority has implemented a state of the art technology to replace its legacy 17 year old mobilising system. The Fire and Rescue Authority has enhanced the functionality provided by its new mobilising system and peripheral equipment (e.g. station alerters, mobile data terminals) and strengthened the security and resilience of those systems and the networks they use. Work has been completed to improve the protective security arrangements for the control room.

A tri-service memorandum of understanding has been agreed with Shropshire and Wrekin Fire and Rescue Authority, and Hereford and Worcester Fire and Rescue Authority (who operate the same mobilising system) in relation to fallback arrangements to provide enhanced resilience and efficiency. Work has been undertaken to implement the technical solution to address remote fallback, overflow and spate conditions including the implementation of remote workstations for fallback and implementation of common integrated communications control systems and telephony systems.

Work has been undertaken to integrate the Operational Risk Information as detailed in the Chief Fire and Rescue Advisor's guidance and align that to the National Address Gazetteer Database.

Cleveland has changed its plans in relation to the control room connection to the Airwave network. An internal options report was produced that discussed the financial and resilience case for a number of options for connection to the Airwave network. It has been concluded that any benefit to Cleveland Fire Authority by implementing a SAN H is limited and steadily reducing with time. The Senior Management Team at Cleveland considered the options report and decided to retain the current SAN I installation until such time as the Emergency Services Mobile Communications solution has been delivered.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Cleveland October 2009 baseline | ✓ | × | ✓ | ✓ | Partial | × | Partial | × | × | × |
| Cleveland position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × | ✓ | ✓ |

## Projected savings

Cleveland Fire and Rescue Authority projects savings totaling £5.903 million by the end of 2024-25. This is an increase of £1.779 million on the previous projection of £4.124 million by the end of 2020 - 21. There have been changes to forecast savings in 2015/16 and 2016/17. Projected efficiencies are the outcome of a Control Room services review, further options around collaboration have emerged which have warranted careful assessment, and consequently the review of Control Room services has been delayed. However, some interim efficiencies have been secured for financial years 2015/16 and 2016/17.

## Project completed

The project completed 31 March 2015

# Cornwall (covering Isles of Scilly), and North Yorkshire

## *High Level Summary*

## Grant: £3,600,000

**This project has completed and has gone live.**

The collaborative programme involved upgrading Cornwall's Vision 3 Command and Control platform to the Vision 4 platform version used by North Yorkshire. The two Vision 4 platforms were then configured to provide a single system solution using a bridging architecture supported by a resilient network point to point connection.

There were a number of challenges linked to the contractual arrangements, supplier resource availability, resource deployment and technical interface developments which resulted in a significant delay in delivering the single system solution.

In the previous update the Fire and Rescue Authorities stated that they were continuing to work with the supplier to achieve a November 2015 go live date. However, this was caveated with the understanding that achieving that milestone was dependant on the supplier having the critical resources available to support that ambition.

Further delay in product development and the release of a number of technical interfaces, intrinsic to the single systems operating model resulted in the go live expected timeline being moved to end of May 2016.

Technical issues were encountered with the telephone interface, which were resolved for pre testing during May 2016. North Yorkshire completed on 2 June and Cornwall completed on 15 June. The single system solution is now available to both services and all Fire Control staff who have completed training on the system.

Both Fire and Rescue Services took the decision to provide future resilience via a SAN I solution with secondary and tertiary bearers rather than the SAN H previously considered. In addition, since the installation of the Vision 4 system, North Yorkshire Fire and Rescue Service have de-activated their secondary control room. This has been possible due to the 'portable' nature of the Vision 4 system and existing resilience arrangements with Cleveland, Humberside and Oxfordshire Fire and Rescue Services. Cornwall Fire and Rescue Service retained their secondary control function until the single system solution was tested and operational.

The resilient arrangement between North Yorkshire and the Thames Valley partnership is now in place and working well.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Cornwall October 2009 baseline | × | × | × | × | ✓ | × | ✓ | × | × | × |
| North Yorkshire October 2009 baseline | ✓ | × | × | × | ✓ | × | × | × | × | × |
| Cornwall (covers Isle of Scilly) and N. Yorkshire position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × | ✓ | ✓ |

## Projected savings

Cornwall Fire and Rescue Authority and North Yorkshire Fire and Rescue Authority project savings totaling £5.76 million by the end of 2020-21 (no change from previous report, but from £6.34 million reported in September 2013).

## Project completion date

This project completed on 6 July 2016 (North Yorkshire completed on 2 June, and Cornwall on 6 July).

# Derbyshire, Leicestershire, and Nottinghamshire

## *High Level Summary*

## Grant: £5,400,000

**This project has completed and has gone live.**

Derbyshire, Leicestershire and Nottinghamshire Fire and Rescue Authorities used old mobilising systems which had limited functionality and were becoming increasingly difficult to support. All three Fire and Rescue Authorities maintained secondary fallback sites. Call overflow and fallback arrangements were manually operated. The three Fire and Rescue Authorities have worked in partnership to procure and implement a common, fully integrated command and control solution which is operated by each Fire and Rescue Authority from separate sites. The system at the heart of the solution is located in two separate data centres and features full data replication and automatic failover. Failover from one fire and rescue authority to another is automatic, immediate and fully functional. A full voice and data communications capability using the Airwave network is provided, along with an automatic vehicle location system, which ensures the nearest appropriate resource is mobilised to an incident. Common procedures and operating practices are in place.

### Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Derbyshire October 2009 baseline | ✓ | × | ✓ | × | × | × | × | × | × | × |
| Leics October 2009 baseline | ✓ | × | × | × | × | × | × | × | × | × |
| Notts October 2009 baseline | ✓ | × | ✓ | ✓ | × | ✓ | ✓ | × | × | × |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Derbyshire Leics and Notts position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Projected savings

Derbyshire, Leicestershire and Nottinghamshire Fire and Rescue Authorities project savings totaling £10.660 million by the end of 2024/25. This is an increase of £1.024 million from the previous report.

With the contract for the mobilising system being for a period of seven years from go-live, with options for extension up to a further three years, the projected savings have now been predicted to 2024/25 from 2020/21. The figure provided reflects this position and demonstrates the savings from the mobilising system over its anticipated whole lifetime, especially as any decision to extend would include a value for money assessment of the existing system with comparison to the market.

## Project completed

This project completed on 9 September 2015.

# Devon and Somerset, Dorset, Hampshire, and Wiltshire

## *High Level Summary*
## Grant: £7,200,000

**This project has completed and has gone live.**

Devon and Somerset, Dorset, Hampshire, and Wiltshire Fire and Rescue Authorities previously operated their own control rooms and call handling and mobilising systems. Each Fire and Rescue Authority also maintained a secondary control facility and had fallback arrangements with other Fire and Rescue Authorities. The four Fire and Rescue Authorities have now implemented a new resilient call handling and mobilising system, which is a single system networked to serve all existing control rooms. The new system enables each Fire and Rescue Authority to fallback to any of the others in the event of spate conditions or non-availability of their fire control. It provides a full voice and data communications capability, using the Airwave network, enhanced information service and an automatic location service for emergency calls, which reduces emergency call handling times. It has an automatic vehicle location system which ensures the nearest appropriate resource is mobilised to an incident. The procurement for a replacement command and control system, integrated communications control system and automatic call distribution was completed on 15 July 2013 and the contract was awarded to Capita. The replacement system extended to mobile data terminals and provides for incident messages and risk information to be sent to crews, contributing to safety improvements. Common operating procedures and ways of working are also being developed and implemented.

Details were provided regarding Dorset and Wiltshire working together to find ways to achieve efficiencies and increase resilience through greater collaboration. In December 2013, both fire authorities agreed to work towards a full authority and service combination with a business case decision in late 2014. The combination order was signed and the two services came together as Dorset and Wiltshire Fire and Rescue Service on 1 April 2016 with a single command and control centre at Potterne, near Devizes, Wiltshire. The control centre is already built and operational, and the transition from a four control room system model to a three system model has been completed. As well as embracing the themes from the ‘Facing the Future’ review by Sir Ken Knight, by working together collaboratively to develop a single, sustainable fire and rescue service which will provide greater resilience and savings, this initiative illustrates the benefits of the wider partnership approach, and the level of confidence in the system being supplied to the partnership.

The re-design of the network architecture to support the three control model from the previous four control model and software changes resulted in some delay. Several other

tasks also took longer than the supplier and fire and rescue services anticipated, including agreement of the critical design documents, writing and agreeing test scripts, preparing data for the new system, and completing the first major test of the system in Factory Acceptance Testing. These are now complete and installation of equipment was completed in 2013.

Final installation and testing was completed in March 2015 and the first Fire and Rescue Service, Hampshire, went live on 31 March 2015. At go-live full mobile data and status update to appliances and officers was implemented. Dynamic Group Number Assignment and talk-group per incident (via SAN H) with 'request to speak' was implemented. Attribute mobilising was implemented (for equipment, personnel to follow). Automatic Vehicle Location System is provided from Airwave radios and TomTom units allowing the nearest most appropriate resource to be mobilised. Officers are mobilised via message pagers, Airwave radios, TomTom and BOSS Mobile (an app for Android and Apple smartphones). The BOSS Mobile app also allows officers to view and update the narrative for current incidents and send status updates.

Wiltshire Fire and Rescue Service went live on 1 July 2015, Dorset Fire and Rescue Service went live on 26 August 2015 and Devon and Somerset went live on 27 April 2016.

As the Fire and Rescue Services have gone live, full partnership working has also commenced and resilience for each Service has been delivered with each decommissioning their Secondary Control.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Devon baseline October 2009 | ✓ | × | × | × | ✓ | Partial | × | × | × | × |
| Somerset baseline October 2009 | ✓ | × | × | × | × | × | × | × | × | × |
| Dorset baseline October 2009 | ✓ | × | × | × | ✓ | ✓ | × | × | × | × |
| Hampshire baseline October 2009 | ✓ | × | × | × | ✓ | ✓ | × | × | × | × |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Wiltshire baseline October 2009 | ✓ | × | × | × | × | × | × | × | × | × |
| Devon and Somerset, Dorset, Hampshire and Wiltshire position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Projected savings

The four Fire and Rescue Authorities project savings totaling £16.91 million by the end of 2023-24 (no change from the previous report).

## Project completion date

27 April 2016

## Additional benefits

The following additional benefits have been realised:

- Joint Control Maintenance of Competency Scheme.
- Standardised Operational Training and Guidance Notes for Mobile Data.
- Common Incident Types and Attribute Lists.
- Standardised Call Handling Audit.
- Standardised Control Recruitment.
- Working together to provide incident ground technology.
- Operational Alignment and Efficiency.
- Borderless mobilising within the partnership.

# Durham and Darlington

## *High Level Summary*

## Grant: £1,800,000

**This project has completed and gone live**

Durham and Darlington Fire and Rescue Authority operates its own control room and call handling and mobilising system. The previous mobilising and communications systems were procured almost 20 years ago and had approached their end of life. Durham and Darlington have co-located their control room within their new headquarters building in Belmont (formerly the regional control centre building).

This allows the Authority to take advantage of the resilient infrastructure within the building. The Fire and Rescue Authority has invested in modern command and control technology such as:

- call line identification;
- automatic vehicle location systems;
- replacement station-end equipment; and
- fully integrated mobile data

All of which will improve call handling and response times. Co-locating headquarters and control room functions within the new building has allowed efficiencies to be achieved through a reduction in estate costs, and in annual maintenance and information communication technology infrastructure costs which were associated with the ageing systems. The move has enabled the Authority to offer resilient shared or fallback facilities to other fire and rescue authorities and public/private sector partners. In addition, remote buddy/partnership arrangements have already been implemented with Leicestershire Fire and Rescue Authority to reduce the impact of regional spate call handling conditions. Secondary control room facilities have been significantly reduced as the likelihood of failure is considerably mitigated due to the inbuilt resilience in the new headquarters building. The Authority went ‘live’ with the end-to-end mobilising and communications systems on 3 December 2014.

The project has confirmed that they will not be partnering with automatic failover. They have explored a number of options to try to achieve this but due to challenges around different mobilising systems and prohibitive costs for networking etc. it has not been possible to put this in place. However, they have fallback arrangements with Leicestershire for call handling and their secondary control facility and mobilising capabilities. This means that their fallback is similar to how it was before the control rooms project but with an enhancement to remote system access. They will explore a further enhancement in

passing back of emergency calls once Multi Agency Incident Transfer is ready to be used, which is an improvement, but short of automatic failover.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Durham and Darlington projected October 2009 baseline | ✓ | × | × | × | × | × | × | × | × | × |
| Durham and Darlington position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × | ✓ |

## Projected savings

Durham and Darlington Fire and Rescue Authority project savings totalling £1.846 million by the end of 2020-21. No change from previous report. This is a reduction of £426,000 on original predictions as the Service were unable to move its command and control function from its existing standalone building into its new Head Quarters until October 2014 due to technical issues with the implementation of the system. The savings in subsequent years relating to staffing costs, reduction in infrastructure, and maintenance costs associated with the old system and the stand alone control building are expected to be realised as planned.

## Project completion date

Project completed on 3 December 2014.

# East Sussex and West Sussex

## *High Level Summary*

## Grant: £3,600,000

The Sussex Control Centre, which is responsible for the command and mobilising functions of both East Sussex and West Sussex Fire and Rescue Services, relocated from its previous locations (Chichester and Eastbourne) to Haywards Heath on 21 May 2014, with all staff being employed by East Sussex Fire Authority from this date. The upgrade to a single mobilising system (Remsdaq R4i) remains outstanding, as a successful Factory Acceptance Test has yet to be achieved. Project staff are continuing to work with Remsdaq on a regular basis to provide assurance that progress is being made towards a solution that can be deployed on the Sussex Control Centre network, and a revised time line indicating a Factory Acceptance Test in February 2017 has been proposed by Remsdaq.

When implemented, the single mobilising system will harmonise ways of working within the control room with regard to the mobilising of officers and appliances across the two Services. Further to this, the integration of administrative and management functions (such as incident reporting, crewing and availability) will ensure that processes and data inputting can be automated.

As set out in the bid, East Sussex and Cambridgeshire have agreed to provide full buddying for fall back or spate conditions. Effective arrangements are in place for the current interim situation, these have been tested through a series of Control Room exercises. Final details of the buddying arrangements following 4i implementation in both Controls will be agreed once 4i development is complete.

Previous agreements between the Authorities (East Sussex Fire Authority & West Sussex County Council) paved the way for this amalgamation including:

- A Section 16 agreement whereby the relevant functions under the Fire and Rescue Services Act were discharged to East Sussex Fire Authority and appropriate governance arrangements through an Operational and Executive Governance arrangement is in place and working well between the two Services for the running of the Control.
- Transfer of Undertaking Protection of Employment transfer of the staff employed by West Sussex County Council to East Sussex Fire Authority.
- New establishment structure resulting in 20 fewer control posts.
- Refurbishment of facilities at Haywards Heath Fire Station to accommodate a modern, resilient and sustainable Control Centre.
- Procurement of new integrated mobilising and integrated communications control system through Official Journal of the European Union process (noting that the

integrated communications control system is fully in operation from 'go live') with mobilising system and mobile data terminals to go live later in the year.

- Buddying arrangements exist with Cambridgeshire Fire and Rescue Service, and when alignment with systems is completed, a fuller service will be provided. Ports on the new SAN H are being shared.
- Audits of the project have been undertaken and regular reporting to ensure good governance.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| East Sussex October 2009 baseline | ✓ | × | ✓ | ✓ | × | ✓ | Partial | × | × | × |
| West Sussex October 2009 baseline | ✓ | × | ✓ | ✓ | × | × | × | × | × | × |
| East Sussex current position 31 Oct 2016 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × | ✓ | × | × |
| West Sussex current position 31 Oct 2016 | ✓ | × | ✓ | ✓ | ✓ | × | × | ✓ | × | × |
| East and West Sussex future position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Projected savings

East Sussex Fire Authority and West Sussex County Council project savings totalling £5.3 million by the end of 2020/21. This is a reduction of £0.2 million from the previous report, and £1.5 million overall, due to the requirement to extend the support of the legacy systems.

Following the move to the new premises and the partial adoption of the new staffing model as well as a minor reorganisation there have been staff related savings. However, additional costs due to delays with development and installation of the mobilising system have offset them. As a result a reduced level of savings has been achieved during 2015/16 and 2016/17, whilst some further savings may be made post 4i go live in the later part of 2017/18 the full savings will not be realised until 2018/19.

The delay in completion is placing legacy system budgets under pressure in both Services and these are being managed internally by the respective parties.

### Project completion date

21 December 2017 (From previous report of 31January 2017, and original projection of 31 December 2013).

East Sussex Fire Authority has agreed in principal to some, largely system management as opposed to operational, functionality not being delivered before 4i goes live in the Control Room.

The project will not be complete until full functionality is delivered by the end of December 2017.
However, the current plan will deliver a Factory Acceptance Test by the end of February 2017.

Successful completion of Factory Acceptance Test allows Remsdaq to install and site test the equipment/software associated with 4i. That in turn allows East Sussex Fire and Rescue Service to undertake staff training, systems integration and accept the commissioned 4i system with a view to go live in June 2017.

### Additional benefits

The Sussex Control Centre is now using the ‘Request to Speak’ facility on the Airwave radio. This is only possible due to the SAN H equipment – this is reducing Airwave usage by removing the need for appliances to send an initial ‘hailing’ radio message.

There are greater opportunities for buddying and further collaboration with Cambridgeshire and Suffolk as both control rooms will be using the same make of mobilising system, integrated communications control system and SAN H.

Separating the control room from the existing East Sussex Fire and Rescue Service Headquarters has given the Service the scope to implement changes to headquarters provision and working practices, without having the major issue of control room relocation. The old control room in West Sussex is a separate building on the headquarters and station site, which will allow the county council flexibility in its use for the future.

Harmonising ways of working between previous control rooms and mobilising the quickest asset will deliver tangible improvements to the communities of East and West Sussex, this being especially pertinent to those communities on the borders of East and West Sussex. Many of which are already being realised through the interim working arrangements in the Sussex Control Centre.

A number of changes to the provision of the two legacy mobilising systems within the Sussex Control Centre have been made to provide additional operator terminals for both systems. Staff have been trained to work both legacy systems and therefore effective dual working has been established. This allows the duty control room staff to move between systems, without having to physically move desk, in response to increasing demand in either East or West Sussex Fire and Rescue Service areas, which provides a significantly improved service to the public.

# Essex and Bedfordshire

## *High Level Summary*
## Grant: £3,200,000

Essex County Fire and Rescue Service operates its own Control Room, call handling and mobilising system. It has recently relocated its Headquarters and upgraded to a new 'virtual' information and communication technology infrastructure. The new infrastructure provides for full integration with the Fire and Rescue Service's back office systems and for users to access the systems from anywhere. Bedfordshire has its own modern Control Room and manages its own call handling. However, its mobilising system is at the end of its useable life. Bedfordshire is also developing a new 'virtual' information and communication technology infrastructure which will provide a similar enhanced functionality to that of Essex.

The two Fire and Rescue Services are working in partnership to develop a new shared call handing and mobilising system which maximises use of Essex's upgraded information and communication technology infrastructure. The new system will provide a full voice and data communications capability using the Airwave network, data centric mobilising which will be capable of supplying safety critical information to crews, automatic vehicle location system, an attribute interface and function which will ensure the nearest appropriate resource is mobilised to an incident, and full fire ground messaging. The system will be hosted on Essex's infrastructure, and Bedfordshire will be able to access it from its own Control Room. The system will enable the Fire and Rescue Services to take each other's calls and mobilise their resources in spate or exceptional circumstances given the appropriate governance. New operating procedures and ways of working will be developed.

### Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in Control Rooms/ Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Essex October 2009 baseline | × | × | × | × | ✓ | ✓ | Partial | × | × | × |
| Beds October 2009 baseline | ✓ | × | × | × | × | ✓ | Partial | × | × | × |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Essex current position 31 Oct 2016 | × | × | × | × | ✓ | ✓ | Partial | × | × | × |
| Beds current position 31 Oct 2016 | ✓ | × | × | × | × | ✓ | Partial | × | × | × |
| Essex and Beds future position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Projected savings

Essex and Bedfordshire Fire and Rescue Authorities project savings totaling £3.34 million by the end of 2021-22 (no change from previous report).

## Project completion date

The system for both Services is due to go live by 31 March 2017 (from previous projection of 31 March 2016. Original projection was 31 December 2013).

Essex County Fire and Rescue Service went live with the new Remsdaq Resque 4i and Frequentis mobilising solution on 14 January 2015. At 'Go Live' the Essex FRS relocated its Control staff from its existing facility to a purpose built Control environment in its new Headquarters. A shift pattern change and also a reduction of 20% in staff numbers occurred at the point of cut-over.

As part of the 'soft launch' planned for the entire project, Bedfordshire Fire and Rescue Service 'go live' was originally scheduled for April 2015, with full dynamic mobilising being available to both Services between May and August 2015 (including mobile data terminals, status messaging and global positioning system officer devices - these support person or vehicle location).

Service infrastructure and supplier architecture was put in place to provide a highly resilient system, with the ability to take and manage operational incidents from either Fire Service as well as secondary/tertiary sites if required.

However, there was a significant number of functional, performance and availability issues with the new Resque 4i mobilising system during the first two months of the Essex operation, which could not be resolved, resulting in the decision for Essex to revert back to the old Resque NX system at the end of March 2015 and postpone the Bedfordshire implementation. It should be noted that although Essex reverted back to the Resque NX

mobilising system, they were able to continue using the new Frequentis integrated communications control system without any issues, although neither system has yet been implemented for Bedfordshire.

A number of meetings and workshops were held with Remsdaq during April and early May 2015, from which a revised project plan was drawn up to deliver a fully functional, and integrated system for both Essex and Bedfordshire by October 2015. At that point, it was agreed that both Essex and Bedfordshire would remain on their respective Remsdaq legacy systems until the full Resque 4i solution was delivered for both Services.

However, despite ongoing infrastructure remediation work since mid-May 2015 and subsequent testing on the Essex ICT infrastructure, a resilient system had not been provided and the infrastructure plan was not completed. The most recent performance test on 3 March 2016 was successful, but the system continued to exhibit issues with resiliency. As such, a 'without prejudice' meeting was held on 5 May 2016, the outcome of which was an agreed approach to resolve the resilience issues and implement the Resque 4i system for both Services.

Throughout the summer months a fully functional version of Resque 4i was delivered which has since been subject to Data Configuration / Quality Assurance and functional testing. Once the resilience issues had been addressed, both Services carried out full User Acceptance Testing, leading to the revised implementation target date of September 2016 for Essex with Bedfordshire on track to go live with their 'Full Transition to Resque 4i' two weeks after Essex.

Mobile Data Terminal Data Mobilisation and Automatic Vehicle Location 'integration' with Resque 4i is programmed to take place during Q1 2017, leading to a planned project completion date of 31 March 2017.

# Gloucestershire

## *High Level Summary*

## Grant: £1,800,000

**This project has completed and gone live**

Gloucestershire Fire and Rescue Authority shares a control room facility with Gloucestershire Police and South West Ambulance Service Foundation Trust (Out of Hours Doctors Service).

Gloucestershire Fire and Rescue Service has successfully introduced a new mobilising system and completed refurbishment of both the primary and secondary control rooms. A procurement process for an upgrade to the mobilising system to include integrated communication control systems functionality was undertaken with the implementation phase to reach 'Go Live' completed in April 2016. The potential impact of the Emergency Services Mobile Communications Programme has been given due consideration throughout this process.

A new resilient and dedicated mobilising network has been installed along with power protection at all critical sites to include remote fallback arrangements with Avon Fire and Rescue Authority. This enables Gloucestershire to remotely access their own integrated communications control system via Avon Fire Control providing a completely resilient integrated communications control system platform for both Fire and Rescue Services.

With this resilience in place, both Gloucestershire and Avon will remain fully functional at all times and can support each other during 'spike' and 'spate' conditions. This has been achieved through the creation of a new dedicated network link between the two Service's Fire Controls.

Gloucestershire's Fire Control system is 'system ready' for multi-agency incident transfer once it becomes available. Beyond delivery of this project, Gloucestershire Fire and Rescue Authority will continue to explore options in relation to Fire Control provision to ensure that an effective and efficient Fire Control function is maintained and that efficiencies are maximised wherever possible.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazettee r | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Gloucest'shire October 2009 baseline | × | × | × | × | × | × | × | × | × | × |
| Gloucest'shire position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × |

## Projected savings

Gloucestershire Fire and Rescue Authority projects savings totaling £3.152 million by the end of 2020-21 (no change from previous reports).

## Project completion date

This project completed on 15 September 2016

Final completion of the project took place on 19 October 2016 in line with Avon Fire and Rescue Service when all technology between the two Services was in place to deliver the one outstanding resilience benefit of partnering with automatic failover.

The complexities of a single supplier situation initially caused unavoidable delays in the procurement process for the system up-grades and led to final delivery of the technical solution for Gloucestershire's Fire Control Room (to include the integrated communications control system) being achieved in April 2016; delivery was based on and maintained in line with the long stop dates included in the contract agreed between the Service and the supplier.

Delivery of the dedicated network link between the two Services' was achieved June 2016.

Having completed the technological aspect of the project, Gloucestershire's Fire and Rescue Service will continue to move forwards considering the impact of fall backs, joint working across other agencies and continuing to provide a safe effective Fire and Rescue Service. It is important to note that whilst the reduction in secondary control functions was not put forwards in the original bid, consideration will be given to that during future planning.

# Hereford and Worcester, and Shropshire and Wrekin

## *High Level Summary*

## Grant: £3,600,000

**This project has completed and gone live**

Hereford and Worcester, and Shropshire and Wrekin Fire and Rescue Authorities have procured and implemented command and control systems from the same supplier, originally using the same external contractor as a systems integrator. The Fire and Rescue Authorities are well advanced with plans to align the two command and control systems, and have the functionality to mobilise both authorities' assets from either of the control rooms located in Worcester and Shrewsbury.

By sharing the use of legacy communications control interface ports already owned by Shropshire and Wrekin Fire and Rescue Authority, the system will provide the capability (equivalent to SAN H) for both Fire and Rescue Authorities to communicate by voice and data using the Airwave network. Common operating procedures and ways of working continue to be further refined to ensure each Fire and Rescue Authority has the ability to take calls and mobilise the other's resources seamlessly at any time. As a result of this work the Fire and Rescue Authorities will have immediate and fully operational fallback arrangements.

Work has also progressed with Cleveland Fire Brigade to establish an agreed technical solution to provide additional remote fallback, overflow and spate.

For the three Fire and Rescue Authorities involved, the deployment of an integrated solution with common operating procedures offers improved resilience and broader operational benefits. This will support enhanced interoperability with partner agencies within the West Mercia local resilience forum and wider afield. For Shropshire, and Hereford and Worcester the approach will also allow for the deployment of the nearest incident commander/specialist officers (irrespective of their host fire and rescue authority) for improved fire-fighter safety and greater resilience at large or multiple incidents.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms secondary controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Hereford and Worcester October 2009 baseline | ✓ | × | × | × | × | ✓ | × | × | × | × |
| Shropshire and Wrekin October 2009 baseline | ✓ | × | ✓ | ✓ | × | ✓ | × | × | × | × |
| Hereford and Worcester, Shropshire and Wrekin position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × | equiv | ✓ | ✓ |

## Projected savings

£3.121 million by the end of 2020-21 (this is a decrease of £451,000 from the previous report). There has been a decrease in savings from 2015/16 onwards as a result of increased costs for maintenance at Hereford and Worcester Fire and Rescue Service of £40,000 in 15/16 and £80,000 for each year thereafter.

## Project completion date

This project completed on 31 December 2014.

## Additional benefits

Closer links with system designers through an established user group, allowing a joint approach to prioritising, specifying and communicating future development requirements. Opportunity to carry out technical 'critical friend' peer assessments across the three services to identify potential areas for improvement and share knowledge/best practice.

# Hertfordshire, Humberside, Lincolnshire, and Norfolk

## *High Level Summary*
## Grant: £7,200,000

Hertfordshire, Humberside, Lincolnshire and Norfolk Fire and Rescue Authorities currently operate similar mobilisation systems. Norfolk and Hertfordshire Fire and Rescue Authorities have full joint fallback arrangements in place, and Humberside and Lincolnshire Fire and Rescue Authorities provide emergency call handling capabilities for spate conditions.

The four Fire and Rescue Authorities are working in partnership to implement a shared integrated and resilient mobilising infrastructure, which will improve each of their fallback remote buddying and resilience arrangements. The new infrastructure comprises two data centres, instead of the current four, and the changes will improve mobilising effectiveness and resilience extending to mobile data terminals and station-end equipment. The infrastructure will be data centric and provide a full voice and data communications capability using the existing Airwave network. Voice communications will be through a Service Access Node I arrangement and Service Access Node B radios. Data communications will be through General Packet Radio Service with Airwave Short Data Router for resilience. New common ways of working and operating procedures are being developed to support the partnership.

The core elements of the proposed new infrastructure and procedures are being delivered across six stages. Following successful implementation, a further stage to develop back office systems will begin. The first two stages of the programme are complete, i.e. the upgrade of Lincolnshire Fire and Rescue onto the Vision3 Mobilising system and the implementation of the Data Centres. The rollout of the Wide Area Network is also complete and Lincolnshire has been migrated onto the network for resilience. Both Data Centres have been commissioned for the second stage. The relevant Airwave codes of connection have been submitted to the Airwave Accreditor for assurance approval. Planning of Telephony services has been undertaken.

Training has been conducted for both Herts and Humberside and Norfolk have commenced their training. Migration planning is ongoing in preparation for Stages three to six, the migration of the four fire and rescue services onto the Vision 4 mobilising platform.

Significant work has been conducted around agreed ways of working; several changes have already been implemented in preparation for cutover. Progress continues with the build of Vision 4 data and considerable work has been done to ensure that the working

relationship between the supplier and the Consortium is positive given the challenges faced so far.

Testing with the supplier is ongoing, a plan of action has been agreed with them to resolve the issues highlighted within Factory Acceptance Testing. The project and the supplier continue to work together closely to resolve any further outstanding issues in preparation for Site Acceptance Tests. Once Site Acceptance Test is successful, cutover dates will be confirmed. It is expected that the new versions of software will address some of the issues identified during the original Factory Acceptance Tests, this is still yet to be proven in Site Acceptance Test. The dry run events to ensure the system is thoroughly tested prior to entering the customer witnessed tests is nearing conclusion. Dependent upon a successful Site Acceptance Test event, the supplier suggests the system can then immediately commence User Acceptance Tests.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Herts October 2009 baseline | ✓ | × | × | ✓ | ✓ | × | ✓ | × | × | × |
| Humber October 2009 baseline | ✓ | × | ✓ | × | × | × | ✓ | × | × | × |
| Lincs October 2009 baseline | × | × | ✓ | × | × | × | × | × | × | × |
| Norfolk October 2009 baseline | ✓ | × | ✓ | ✓ | ✓ | × | ✓ | × | × | × |
| Herts current position 31 Oct 2016 | ✓ | × | ✓ | ✓ | ✓ | ✓ | ✓ | × | ✓ | × |
| Humber current position 31 Oct 2016 | ✓ | × | ✓ | ✓ | ✓ | × | ✓ | × | × | × |
| Lincs | ✓ | × | ✓ | ✓ | ✓ | ✓ | × | × | ✓ | × |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| current position 31 Oct 2016 | | | | | | | | | | |
| Norfolk current position 31 Oct 2016 | ✓ | × | ✓ | ✓ | ✓ | ✓ | ✓ | × | ✓ | × |
| Herts, Humber, Lincs and Norfolk future position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × | ✓ | ✓ |

## Projected savings

The four Fire and Rescue Authorities project savings totaling £5.446 million by the end of 2020-21 (no change from previous report).

The major cost savings anticipated were predicted to be realised later on in the programme of work. Initial predictions showed that savings would be achieved in late 2014 and beyond. It is anticipated that the programme of work over a ten year period will still deliver a return on investment, although some refresh elements will incur costs that will need to be met by efficiencies. This will be reviewed again when the role of Lead Authority is transferred to Hertfordshire.

Cost reduction has been attained by the utilisation of the existing Airwave solution which provided a resilient communications solution without the use/procurement of the proposed full SAN H solution which is expensive. A reduction in cost has been achieved by the upgrade of the Lincs mobilising system, as opposed to full procurement, £600,000-£650,000.

Shared procurement of station end equipment (essentially a communications system that alerts crews to a fire call by operating lights, bells and alerters, prints out the turnout instructions and operates peripheral equipment such as automatic doors), mobile data terminals, wide area network, and shared development for communications gateways has taken place.

The procurement of the wide area network is a new burden to fire and rescue services, but will facilitate the joint working upon which the concept of the East Coast and Hertfordshire Control Room Consortium is predicated.

The two data centres have been established and full operation will occur in readiness for the first cutover to Vision4. The establishment of these two data centres will realise significant savings across the four Fire and Rescue Services.

### Project completion date

31 March 2017 (original projection was 31 December 2014).
The first Go Live – Hertfordshire – is expected in October. Provisional Go Live dates for the remaining three services are then during December, January and finally February 2017. Detailed assessment of remaining tasks will be undertaken to investigate if any of these dates can be brought forward.

### Additional benefits

In-house ICT support will be provided for the consortium by three of the four fire and rescue services where applicable, with Lincolnshire providing 'local hands and eyes support'. A virtual IT service desk now exists, acting as the single point of contact for users to access IT support, fault reporting, access to user reports, incident reporting and monitoring, performance reporting, etc. This achieved a significant cost saving by not going down the fully managed service route (around £1million for the Wide Area Network alone). Costs will be significantly less than this and are currently being absorbed by each Fire and Rescue Service, with the future cost apportion mechanism under discussion.

Savings on the Capita service level agreement are being negotiated as the Consortium will provide first and second line maintenance in-house. First Line Maintenance training has been received to support this.

Options identified on the telephony configuration could provide a fit for purpose solution with significant savings, ie utilisation of direct session initiation protocol trunks into British Telecom/Kingston Comms network as opposed to the current Integrated Services Digital Network (ISDN) 30e lines. This offers a modern solution to line provision with an enhanced feature set such as line diversion and enhanced flexibility with dynamic channel allocations so that during peak times the number of channels can be increased. It is envisaged that, initially, a mixture of provision will be deployed where tried and tested technologies can be provided alongside new technologies enabling a simple upgrade and therefore future proofing of the solution.

A proposal has been agreed to conduct 'non-core' call handling for County Council agencies within Norfolk which will achieve efficiencies and income generation. Further opportunities are being investigated.

Work with the consortium has already extended into other arenas within the four Services, eg incident command. Principal Officers have met on several occasions to discuss other areas of potential collaboration. Also inter-service discussions are ongoing, particularly around shared accommodation which have an impact on the Consortium.

# Kent and Medway

***High Level Summary*** **Grant: £1,800,000**

**This project has completed and has gone live.**

Kent and Medway Fire and Rescue Authority co-located its control function with Kent Police Control at the Kent Fire and Police Control Room, based at police headquarters in March 2012. Prior to relocation, the control room underwent a restructure, moving to a twelve hours shift pattern over four watches. The Authority has also reduced watch strengths and removed station managers from watches, creating ongoing base savings.

The second phase of the project involved the migration by Kent and Medway Fire and Rescue Authority to the multi-agency system used by Kent Police. The replacement enabled the provision of a common gazetteer (using the national address gazetteer) which will enable Kent and Medway Fire and Rescue Authority and Kent Police to share operational and risk information, as well as common telephony.

For communications, the control room uses the fully networked Airwave system (Service Access Node G), with real time incident messaging, already in use by Kent Police.

The original grant funding was intended to cover costs associated with the replacement of the Service's mobile data terminals hardware and software as well as the replacement of the mobilising system. This is no longer the case as all grant funding used in the move to co-locate with Kent Police into the joint Control Room facility and the migration of the Authority's mobilising function to Kent Police's platform. All resilience benefits have been delivered using legacy equipment and the replacement of the mobile data terminals hardware and software will now be funded locally and had no adverse impact on the benefits already delivered by the Control Rooms project.

In relation to call handling fallback arrangements, e.g. during spate conditions, Kent Police take any overspill emergency calls and pass them back to the Authority's 999 staff to mobilise resources. However, Kent Police will not deploy Fire resources directly. In the future, the calls will be passed via the Steria system to Kent Police and back to the Authority automatically. Essex Police will also be able to do this as the Authority's secondary control function if Kent Police is not available for any reason, with the same pass-back arrangements being used. This was a change to the original project plan.

Kent Police is the Authority's flood buddy. This arrangement worked well during the Christmas 2013 flooding and there are no plans to develop a further flood buddy arrangement at the current time.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Kent and Medway October 2009 baseline | ✓ | × | ✓ | ✓ | ✓ | ✓ | ✓ | × | × | × |
| Kent and Medway position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × | × | ✓ |

## Projected savings

Kent and Medway Fire and Rescue Authority projects savings totaling £1.7 million by the end of 2020-21, a decrease of £1.277 million from the last report. The changes to the savings profile are as a result of a decision by the project to change crewing within the Control Room, following a review of staff wellbeing. This has subsequently reduced the savings profile.

## Project completion date

Project completed on 31 July 2015.

# London

## *High Level Summary*

**Grant: N/A (see below)**

**This project has completed and has gone live.**

London did not submit a bid for the future control room services grant as alternative arrangements had previously been agreed.

The London Fire Brigade operates its own Fire Control service, call handling and mobilising system and maintains a hot-standby fallback control room at a separate location away from its Primary Control.

The London Fire Brigade control has operated from the former London Regional Control Centre building in Merton since February 2012 and awarded a contract for a replacement mobilising solution later that same year. The replacement solution has delivered a premise based gazetteer and enable the geographic mobilising of operational resources, i.e. the nearest appropriate resources by their predicted travel times. The accommodation available in the Regional Control Centre building has allowed London Fire Brigade to locate additional functions at Merton. One of those functions is the Fire and Rescue Services National Co-ordination Centre. The successful response to the widespread flooding in 2014 and also in 2015 was co-ordinated from Merton and the facilities in the Regional Control Centre were key to the Fire and Rescue Services National Co-ordination Centre support for the Fire Service's sustained operations throughout these periods.

Partnering with automatic system failover was not in scope of this project. However, London Fire Brigade continues to maintain automatic system failover between its own servers located at its Primary and Fallback control centres. In addition, London Fire Brigade has established tri-partite arrangements for fallback, spate and spike conditions with Staffordshire and West Midlands and the North West Fire Control Services. These arrangements proved to be effective during the 2015 floods.

London Fire Brigade is seeking to improve its working arrangements with the Metropolitan Police Service and London Ambulance Service by using data exchange and work is in progress to develop interoperability using the Multi Agency Incident Transfer protocol. A bid for transformation funding from DCLG to establish technical interoperability between the London Fire, the Metropolitan Police and London Ambulance Service was successful.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| London October 2009 baseline | × | × | ✓ | × | ✓ | ✓ | × | × | × | × |
| London position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | partial | × |

## Projected savings

Not applicable. London Fire Brigade did not submit a bid for the grant for future control room services as alternative arrangements had been agreed previously.

## Project completion date

Project completed 17 November 2015.

## Additional benefits

The successful completion of this project will enable a technical solution for collaboration and interoperability between the London Fire Brigade, the Metropolitan Police Service and the London Ambulance Service to be delivered using the transformation funding provided by DCLG. The overall benefits of implementing these arrangements will be to provide an improved service to the users of the London Emergency Services and to reduce operating costs

# Manchester, Cheshire, Lancashire and Cumbria

## *High Level Summary* Grant: £8,400,000

**This project has completed and gone live.**

Greater Manchester, Cheshire and Lancashire Fire Authorities and the County Council of Cumbria have made a significant amount of progress since the initial approval of their business case in 2012/13. Between 14 and 28 May 2014 the four Authorities successfully transferred their control room functions and a number of staff from their existing fire and rescue service control rooms to a fully integrated solution in Warrington. All command and control functions along with other ancillary services are now being operated from a single purpose built centre, namely North West Fire Control (North West Fire Control Ltd).

The collaborative project has included the procurement and installation of a state of the art mobilising system with full voice and data communications capability through Airwave and other networks. Additional convergence work has been undertaken to streamline and standardise existing operating procedures across the four Services to further enhance and influence centralised mobilising and interoperability. Work has commenced with suppliers to scope plans for the implementation of Dynamic Group Number Allocation (DGNA) on Airwave and the provision of Multi-Agency Incident Transfer (MAIT). Automatic Call Distribution (ACD) was successfully implemented on 1October 2015.

It is the intention of North West Fire Control Ltd. to offer its services to other Fire and Rescue Authorities to generate additional revenue which will either increase profitability for the Company or reduce future contract costs to the individual North West Fire and Rescue Authorities and Cumbria County Council. This is in addition to the significant savings in staffing, systems and estate costs already realised. North West Fire Control is already providing resilient fall back for Warwickshire, Northamptonshire and Merseyside Fire and Rescue Control Rooms.

In addition to the financial benefits, the project has also delivered improved resilience and interoperability through the implementation of buddy Agreements between Staffordshire and West Midlands and London Fire Brigade Control Rooms. While the resilient buddy arrangements have been in place since 28 May 2014 the formal Agreement was completed and signed in December 2014. This additional resilience is supplementary to a ‘secondary control’ facility operated by North West Fire Control Ltd. on a remote site that has a multi-functional purpose as a fall back control, additional capacity to supplement main control or as a training venue.

Service delivery has been improved particularly in regard to the mobilisation of nearest available resources across borders and greater collaboration with other emergency services has also been achieved. On 24th August 2015 and the 15th September 2015 Lancashire and Greater Manchester Fire and Rescue Services respectively went live with co-responder mobilising pilots in collaboration with North West Ambulance Service. Cheshire Fire and Rescue is expected to implement similar arrangements later this year.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Manchester October 2009 baseline | × | × | ✓ | × | × | × | × | × | × | × |
| Cheshire October 2009 baseline | ✓ | × | × | × | × | ✓ | × | × | × | × |
| Lancashire October 2009 baseline | ✓ | × | × | × | × | × | × | "G" with voice and data | × | × |
| Cumbria October 2009 baseline | ✓ | × | × | × | ✓ | ✓ | × | × | × | × |
| Manchester, Cheshire, Lancashire, Cumbria position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Partial | ✓ |

## Projected savings

The four Fire and Rescue Authorities projected savings totaling £19.616 million million by the end of 2024-25 (no change from previous report).

## Project completion date

The project completed on 28 May 2014.

While the system has been effectively handling calls and mobilising resources since this date, a number of system changes and enhancements have been implemented since the go live.

# Merseyside

## *High Level Summary*

## Grant: £1,800,000

**This project has completed.**

With the new Fire and Rescue Control, the Authority has reorganised staffing to deliver savings of £400,000. As well as achieving improved efficiency and resilience, the Authority is confident that the arrangements and enhancements will enable them to meet specific demands for interoperability and collaboration, e.g. delivering against the considerations listed for the Joint Emergency Services Interoperability Principles and contained within the national framework, with the ability to respond to emergencies rapidly and to accurately share and disseminate information between command levels and organisations. The new Merseyside Joint Control Centre is now part of the National Critical Infrastructure and continues to deliver considerable benefits around:

- sharing of early situational awareness;
- joint dynamic risk assessments;
- joint response plans;
- joint command, control and coordination arrangements;
- effective Airwave communication;
- joint testing and exercises, shared procurement of training materials

### Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Merseyside October 2009 baseline | × | × | × | ✓ | ✓ | ✓ | ✓ | × | × | × |
| Merseyside position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × | × |

## Projected savings

Merseyside Fire and Rescue Authority projected savings totaling £3.584 million by the end of 2020-21 (no change from previous report).

## Project completion date

The project completed on 15 July 2014 when the Fire and Rescue Control went live in the Merseyside Joint Control Centre.

Merseyside Fire and Rescue Authority is ‘system-ready’ to deliver Multi Agency Incident Transfer when available. While the project has completed without Partnering with Automatic Failover being delivered, this remains an aspiration and they continue to investigate potential partnerships with other Fire and Rescue Authorities for both spate and fault conditions. In the meantime, the secondary control location can be utilised when required. The existing arrangement is that calls are diverted to Mersey Police or North West Fire Control during spate or fault conditions before relocation to the secondary control.

# Northamptonshire and Warwickshire

## *High Level Summary* Grant: £3,600,000

Since 2012 the two Authorities have been working in partnership to deliver a transitional programme of change with regard to control rooms. The aim is for both services to share common operating platforms which will allow the introduction of a new operating model and improved resilience.

The project is to install a Capita Vision 4 command and control mobilising platform. The system has been installed and networked to serve the two fire authorities' control rooms in Northamptonshire and Warwickshire

The system and network architecture will allow greater flexibility in the way both authorities can operate, in that controls can:

- Operate as a combined fire control from two locations.
- Serve both authorities from either location.
- Operate independently if required.

This set up will significantly improve resilience in that each Authority will be able to take each other's calls and mobilise each other's resources in a seamless fashion for protracted periods. These arrangements will complement and enhance existing long distance buddy arrangements with North West Fire Control.

Emergency call handling is primarily managed via a shared integrated communications control system; which also provides call line identification capability.

A five-fire and rescue service partnership agreement has been entered into between Oxfordshire, Royal Berkshire, Buckinghamshire and Milton Keynes (the Thames Valley Fire Control Service partners), Northamptonshire, and Warwickshire, for the provision of a 20-port SAN H and for resilience, a fallback Control Link solution.

The SAN H is located at the Thames Valley Fire Control in Calcot, near Reading in Berkshire and the Control Link is located within the Warwickshire Fire and Rescue Control at Leamington Spa. These were commissioned in September 2014 and November 2014 respectively.

The SAN H is being used by all partners and facilitates voice communications, automatic vehicle location systems to support nearest resource mobilising and status messaging with the Control Link being used as back up for automatic vehicle location and status messaging.

This common operating platform allows the introduction of a new staffing model with implementation planned for later this year, following a proof of concept period. Having introduced a common operating platform will provide opportunities to present wider strategic options such as a move to a single joint control room, in order to realise greater efficiencies in delivery of services.

Both Authorities completed a joint mobile data terminal procurement process and both services are currently mobilising direct to these terminals. In addition, an upgrade of station end equipment was carried out.

The joint procurement for ongoing GIS mapping tile updates is both complete and ready for use within the new command and control solution.

### *Resilience benefits compared to baseline in 2009*

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Northamptonshire October 2009 baseline | ✓ | × | × | × | × | × | × | × | × | × |
| Warwickshire October 2009 baseline | ✓ | × | × | × | ✓ | × | × | × | × | × |
| Northamptonshire current position 31 Oct 2016 | ✓ | × | ✓ | ✓ | ✓ | × | × | ✓ | ✓ | ✓ |
| Warwickshire current position 31 Oct 2016 | ✓ | × | × | × | ✓ | × | × | ✓ | ✓ | ✓ |
| Northamptonshire & Warwickshire position on completion | ✓ | × | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

### *Projected savings*

Northamptonshire and Warwickshire Fire and Rescue Authorities project savings circa £2.269 million by the end of year 2020-21. Whilst this is an overall reduction of £482,000 against the original projections within this time frame, it is expected that the full original savings forecasted (£2.751 million) will now be achieved by end of year 2021-22. The main reasons for this, are delays to the project as a result of protracted contract negotiations with the suppliers for the Vision 4 upgrade and defining the additional technical solution requirements. In addition, there is a need for a proof of concept period,

before new staffing models are introduced and potentially higher than anticipated costs to cover pay protection rights. Additional delays are due to the complex nature of the system.

Real time incident messaging (Multi Agency Incident Transfer) is dependent on achieving Public Service Network accreditation and along with alternative solutions for the mobilising of officers, interfaces with the Emergency Services Mobile Communications Programme and the opportunities for integrated solutions that it will bring. These products will now be delivered at a later date.

### *Project completion*

31 March 2017 (from previous reports of 31 March 2015, and May 2016. Original date was December 2014). Assurances have been provided by Capita that the project completion date will be 31 March 2017. All of the hardware is in place and the majority of the configuration work is complete. Initial stages of formal testing identified some issues in performance and incorrect software configuration. Work is currently underway to address these issues. All the resilience benefits have been delivered and following a proof of concept period and further training it is planned to introduce new staffing models in the financial year 2017.

### *Additional benefits*

Warwickshire and Northamptonshire are now working from new control rooms, since May and September 2013 respectively, with Northamptonshire's being completely relocated. These locations provide suitable accommodation for the new systems, improve the resilience of the function, and provide the capacity to manage combined call levels. These moves were funded outside of the DCLG Grant.

Where possible, both services have sought and entered into joint procurement processes to make better use of resources available such as:

- 5-way joint procurement of SAN H and Control link, resulting in savings of around £100,000 (compared with a Northamptonshire and Warwickshire joint purchase of an eight port variant B over five years).
- Joint Warwickshire and Northamptonshire procurement of an integrated communications control system, saving around £17,000 on the purchase price.
- Joint procurement of mobile data terminals resulting in a joint saving of around £24,000 as a result of discounts received for bulk purchase.

# Oxfordshire, Royal Berkshire, and Buckinghamshire and Milton Keynes

## *High Level Summary*

## Grant: £5,400,000

**This project has completed and gone live**

Oxfordshire and Royal Berkshire Fire and Rescue Authorities operated their own control rooms and call handling and mobilising systems. Each had a secondary off-site control facility and a manually operated fallback arrangement with each other. Buckinghamshire and Milton Keynes Fire Authority operated its own control room and call handling and mobilising system, a secondary off-site control facility, and an overflow call handling arrangement with Bedfordshire Fire and Rescue Authority.

The three Fire and Rescue Authorities worked together to implement a single joint control room function based in Calcot, Berkshire, with a secondary Control function in Kidlington, Oxfordshire, a new fallback arrangement with North Yorkshire Fire and Rescue Service, and with capacity for other fire and rescue authorities, clients or partners to join.
The plan was implemented in phases, and final cutover to the Thames Valley Fire Control Service from the three separate services took place 21-23 April 2015, delivering common mobilising procedures and alignment of operational policies and procedures.

Thames Valley Fire Control Service staff were selected from the pool of staff available from the three Fire and Rescue Services. Where it was identified that there would be insufficient staff at a level within the Thames Valley Fire Control Service, external recruitment took place with new recruits receiving induction in the Thames Valley Fire Control Service and training on the appropriate systems. To ensure the recruits had as much experience as possible at the time the Thames Valley Fire Control Service went live, they were allocated onto the watch system of one of the partner fire and rescue services.

As part of the delivery, the contract for the new mobilising system for the Thames Valley Fire Control Service was awarded to Capita Secure Information Solutions Ltd after a robust tendering process.

Network infrastructure has been installed to enable the three Thames Valley Fire Control Service partners to connect to and access systems. This includes primary and secondary routings for resilience purposes. Part of this network installation, and the work on existing and new installations, was to ensure Public Services Network compliancy for the Thames Valley Fire Control Service systems at the point of go-live.

A five-fire service partnership agreement has been entered into between Oxfordshire, Royal Berkshire, Buckinghamshire and Milton Keynes (the Thames Valley Fire Control Service partners), Northamptonshire, and Warwickshire, for the provision of a 20-port SANH and a fallback Control Link solution. The SANH is located at the Thames Valley Fire Control Service at Calcot, near Reading. It was commissioned in September 2014 and is available for use by all partners. All Thames Valley Fire Control Service partners are now using the SANH for radio traffic. The Control Link is located within the Warwickshire Fire and Rescue Control at Leamington Spa. It was commissioned in November 2014 and is available for use by all partners. Thames Valley Fire Control Service are now using the Control Link connection for automatic vehicle location system and status messaging.

The three Fire and Rescue Authorities adopted existing operational policies and procedures, and these are currently being developed by a wider consortium of fire and rescue authorities, thereby providing for improved cross-border incident management, interoperability and intra-operability. The new mobilising system provides a full voice and data communications capability using the Airwave network, an enhanced information service and an automatic location service for emergency calls, which will reduce emergency call handling times. The introduction of an automatic vehicle location system also ensures the nearest appropriate resource is mobilised to an incident.

## Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Oxfordshire October 2009 baseline | × | × | × | × | × | Partial | × | × | × | × |
| Royal Berkshire October 2009 baseline | ✓ | × | × | × | × | ✓ | × | × | × | × |
| Bucks and Milton Keynes October 2009 baseline | × | × | × | × | ✓ | ✓ | ✓ | × | × | × |
| Oxfordshire, Royal Berkshire and Bucks and Milton Keynes | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| position on completion | | | | | | | | | | |

## Projected savings

Oxfordshire, Royal Berkshire, and Buckinghamshire and Milton Keynes Fire Authorities project savings totaling £13.733 million by the end of 2024-25. This is a reduction of £2.139 million on the previous projection of £15.872 million. The revised savings figures are due to an improved budget estimation following a period of eight months post-'go live' and a review of staffing and support requirements for the Thames Valley Fire Control Service. This entailed a number of personnel with fixed term contracts being made substantive, although this will be kept under regular review as the on-going demand on Thames Valley Fire Control Service develops over the life of the partnership.

## Project completed

Project completed 30 April 2015.

The cutover by the three fire and rescue services took place 21-23 April 2015 (from previous projection of 31 December 2014, and original projection of 31 March 2014), and the Thames Valley Fire Control Service is now live.

## Additional benefits

The technical solution that is being implemented to enable the remote buddy (North Yorkshire Fire and Rescue Service) to call handle and mobilise on behalf of the Thames Valley Fire Control Service has introduced a further level of technical resilience into the architecture. A replicating server for the mobilising system has been installed at North Yorkshire with the effect that, should the servers at the primary and secondary sites experience issues, then the Thames Valley Fire Control staff will be able to access the server located at North Yorkshire and be able to maintain operations.

# South Yorkshire and West Yorkshire

## *High Level Summary*

## Grant: £3,600,000

**This project has completed and has gone live.**

Both Fire and Rescue Authorities have now installed the fundamental elements of the new Command and Control system procured from Systel S.A. and the system is live in both Authorities. The system delivers a shared call handling and mobilising function based on a distributed infrastructure offering increased resilience for both Services. Whilst go-live was achieved within the aspirational timescales, a number of required elements are still to be delivered outside of the improvement scheme but within the contract with Systel S.A. The new system is data-centric and provides a full voice and data communications capability using the Airwave network, enhanced caller identification to reduce emergency call handling times, and an automatic vehicle location system to help ensure the nearest appropriate resource is mobilised to an incident. Real time incident messaging is included to enable the Fire and Rescue Authorities to interoperate more efficiently with other emergency services. The new system enables the Services to take each other's calls and mobilise their resources seamlessly. There is no longer a requirement for each Fire and Rescue Authority to maintain a secondary control facility. The two Fire and Rescue Authorities have undertaken a risk assessment and have identified that the resilience within the system has negated the requirement for another fallback arrangement. However, both Fire and Rescue Authorities are willing to enter into discussion with another authority to support their fallback requirements.

At initiation the programme had a detailed governance structure as follows:

- Joint Control Collaboration Project – this is the collaboration project between both Authorities for the procurement of the Command and Control information and communications technology solution.

- New Control Premises Project – this was the relocation of West Yorkshire Fire and Rescue Authority's control function to a new site that has been extensively altered to meet the new control needs. The build was completed six weeks ahead of schedule and within budget. This project is closed.

- New Control Ways of Working Project – this involves the complete revision of the West Yorkshire Fire and Rescue Service Control room working practises, including a new duty system and alignment of training, policy and procedures accounting for the new building, internal restructure and system implementation. This project reports through a collaborative Joint Ways of Working group that has members of both South Yorkshire and West Yorkshire Control staff. Both organisations are

continually identifying opportunities to align operations and ways of working. This will deliver future efficiencies and improve service delivery standards.

The programme has been implemented through the West Yorkshire Fire and Rescue Service bespoke project framework based on PRINCE 2 principles. The programme has been running since June 2011 and is subject to continuous external audit for governance, and financial structures and procurement processes.

### *Resilience benefits compared to baseline in 2009*

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| South Yorkshire October 2009 baseline | ✓ | × | ✓ | × | × | ✓ | × | × | × | × |
| West Yorkshire October 2009 baseline | ✓ | × | ✓ | × | × | ✓ | × | × | × | × |
| South and West Yorkshire Position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

### *Projected savings*

South Yorkshire and West Yorkshire Fire and Rescue Authorities project savings totaling £6.57 million (no change from previous report).

### *Project completion date*

This project completed on 31 May 2015.

The system became operational in South Yorkshire Fire Service Control room on 9 July 2014 and West Yorkshire Fire Service Control room on 12 November 2014.

All resilience benefits funded through the Fire Control Improvement Scheme have now been delivered in line with the approved bid for funding. The project completed the last of these benefits in May 2015 with the delivery of Automatic Vehicle Location Service,

although further improvements will be delivered with enhanced hardware and further software developments later in the year.

The contract with Systel SA included additional functionality to that detailed within the original bid to DCLG and these continue to be developed within the contract but outside of the functionality funded by the improvement scheme.

# Staffordshire and West Midlands

## *High Level Summary* Grant: £3,600,000

**This project has completed.**

Staffordshire and West Midlands Fire and Rescue Authorities previously operated their own control rooms, call handling and mobilising systems, and had secondary controls and fall-back arrangements. The mobilising system used by West Midlands Fire Authority was originally installed in 2008, whereas the one used by Staffordshire had been subject to contract renewal since March 2013.

The two Fire Authorities have developed a partnership to combine the provision of fire control services using a shared call handling and mobilising system. This was achieved on 31 March 2014 with go-live of the shared fire control centre operating from a single premise in the West Midlands and a single set of staff mobilising for both Fire and Rescue Services. This new shared fire control centre is governed by a collaborative governance board that will also be responsible for other future collaboration between the two Fire and Rescue Authorities. A secondary fire control will be maintained for resilience, thereby reducing the overall number of control sites that have to be maintained from four to two. West Midlands and Staffordshire have established tri-partite resilience arrangements for the management of fallback, spate and spike conditions with London Fire Brigade and North West Fire Control. This has replaced the previous arrangements Staffordshire had with Shropshire Fire and Rescue Authority, and those West Midlands had with Staffordshire. Outside the scope of this project, the existing Capita Vision 3 Command and Control system is being upgraded to Vision 4 which will be compatible with Multi Agency Incident Transfer to provide real time incident messaging and will further enhance the tri-partite resilience arrangements.

The shared call handling and mobilising system incorporates a single integrated communication control system, providing full voice and data communications capability using the Airwave network, and will extend to mobile data terminals. It enables seamless mobilisation and management of both Fire and Rescue Authorities' resources and provides a holistic approach to asset and resource management. Common operational procedures and ways of working continue to be developed. The management of data is now shared, which has led to an increased understanding of risk across the area covered by both Authorities, thereby improving community and fire-fighter safety.

**Resilience benefits compared to baseline in 2009**

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrate Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Staffordshire October 2009 baseline | × | × | ✓ | × | ✓ | ✓ | × | × | × | × |
| West Midlands October 2009 baseline | ✓ | × | ✓ | ✓ | ✓ | ✓ | × | × | × | × |
| Staffordshire and West Midlands position on completion | ✓ | partial | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Partial | ✓ |

### *Projected savings*

£13.382 million by the end of 2021-22 (no change from previous report).

### *Project completion date*

The project completed on 31 March 2016. (The overarching and key objective of combining both control functions into a single shared operation was delivered on schedule on 31 March 2014).

### *Additional benefits*

Both Fire and Rescue Authorities are continuing to align ways of working to improve and harmonise operational practices across both Fire and Rescue Services.

# Surrey and Isle of Wight

## *High Level Summary*

## Grant: £3,000,000

**This project has completed.**

Surrey and Isle of Wight Fire and Rescue Authorities now operate a single Joint Emergency Communications Centre based at Reigate which provides 999 call taking and mobilising. The centre provides immediate assistance and a managed mobile data service to both the Isle of Wight and Surrey.

In March 2012 the Isle of Wight Fire and Rescue Authority's mobilising control function transferred along with some of its staff to the newly formed Joint Emergency Communications Centre. At the same time, Isle of Wight station-end equipment and the mobilising system was upgraded to deliver enhanced mobilising, communications and command and control capability. In closing down its control room facility the Isle of Wight created an incident command suite and developed its mobile command unit to incorporate the appropriate technology and integration with Surrey. Similarly, Surrey also upgraded its operational command and control capability that met the perceived 2012 Olympics requirements by building an operations room, situation room, a mobile main incident command unit for major incidents, a mobile forward command unit (for medium-sized incidents – four pumps plus) and two mobile rapid command units (for support and two-four pump sized incidents). Joint mobilising was successfully achieved and has been operating well for some years. A further upgrade to the mobilising system and other facilities has now been completed (Capita Fortek Vision) in common with the majority of regional partners in London and the South East. This also included the relocation of the primary control to a new building in Salfords and the provision of a full voice and data communications capability using the Airwave network with continued and expanded use of the automatic vehicle location system. This will be overlaid by a dynamic cover visualisation software tool by April 2016 – Phase 1. The current on-call availability systems have been replaced in both the Isle of Wight and in Surrey with one that gives improved access and visibility of resources.

The Isle of Wight Fire and Rescue Service has already upgraded its station-end equipment and aligned the technical specification with Surrey. Surrey Fire and Rescue Service station-end equipment replacement programme was completed in 2013. A new, more resilient network solution (Unicorn) is now also in place. Surrey plans to upgrade its physical fallback secondary control facilities at the former control centre at Reigate at the same time as the primary control is established at Salfords. As this solution uses cloud based network technology from secure servers, the ability to stand up a control at other locations is also possible. There has been an agreement in principle for Surrey to fall back,

including spate and spike conditions, to Merseyside Fire and Rescue, and additional fall back options with London Fire Brigade and /or another Capita Fortek Vision user(s), with whom Surrey are in discussions.

### *Resilience benefits compared to baseline in 2009*

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Surrey October 2009 baseline | F/line appliances | × | ✓ | ✓ | ✓ | partial | ✓ | × | × | × |
| Isle of Wight October 2009 baseline | partial | × | × | × | × | × | × | × | × | × |
| Surrey and Isle of Wight position on completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | × | × | ✓ |

### *Projected savings*

Surrey and Isle of Wight Fire and Rescue Authorities project savings totaling £5.056 million by the end of 2020-21, as reported in the previous report.

### *Project completion date*

The project completed on 31 December 2015.

The new Capita Integrated Communication Control System (upgrade from previous CYFAS system) which is compatible with local Police Forces, was delivered in November 2015. Completion is without Partnering with Automatic Failover being delivered. However, this remains an aspiration and the Services are working with other Fire and Rescue Services to enable networked solutions. As noted above, there has been an agreement in principle for Surrey to fall back to Merseyside Fire, with the potential for further fall back arrangements to be developed with other Capita Fortek Vision users.

### *Additional benefits*

The Fire and Rescue Authorities continue to make improvements to their systems and ways of working, which include the physical relocation of the Joint Emergency

Communications Centre  to a new site, development of Intelligence-Led Mobilising, options for the introduction of a Police Service style OPS1 Role, attribute mobilising in relation to equipment, skills, etc. and the future integration of a joint single gazetteer and platform, contact, call taking and despatch facility with Surrey and Sussex Police – The latter are projects within the Surrey and Sussex Emergency Services Collaboration Partnership.

The opportunity presented by the physical relocation of the Joint Emergency Communications Centre has enabled a complete review of its resilience arrangements, in terms of infrastructure and working practices, inclusive of layout, role allocation, etc. The new Joint Emergency Communications Centre site will also include the addition of a Wallboard, twelve 55" LCD television screens, designed to provide a multitude of tools for the development of instantaneous situational awareness, e.g. the provision of Highways England Traffic Cameras to view an incident on the motorway and make accurate assessments of the necessary attendance.

By virtue of the service wide National Joint Council approved Immediate Emergency Care Co-Responder 'Pilot', Gaining Entry practices (on behalf of South East Coast Ambulance Service and Surrey Police), etc. Surrey Fire and Rescue Service are maximising the use of the multi-agency elements of the Vision 4 Mobilising System platform and further developing local working practices with emergency service partners. As an example of the closer working practices, Surrey Fire and Rescue Service are aiming to 'Trial' the Auto On-Scene capability of the South East Coast Ambulance Service, developing a process that will enable closer comparison between medical incident related response times.

As part of the work being conducted by Surrey Fire and Rescue Service with Surrey and Sussex Police within the Emergency Services Collaboration Partnership (members of the Public Service Transformation Network) the first point-to-point Direct Electronic Incident Transfer system in England has been deployed between both Services. Implementation is now underway for a Multi-Agency Incident Transfer hub which offers the ability to connect to diverse mobilising systems. Work is underway to include South East Coast Ambulance Service, Sussex and Surrey Police, and potentially East and West Sussex Fire and Rescue Services in the South-East Multi-Agency Incident Transfer hub solution. Following evidenced success, discussions will take place with Isle of Wight Fire and Rescue Service, Hampshire Police and others about how they might be included in this initiative which virtually eliminates call handling delays.

The new control room being constructed in Salfords is a flexible design and will be able to accommodate a number of possible future convergent business functions that will add value to the asset. Maximum opportunity will come from the large space provided, i.e. longer term business and partnering opportunities for assisting relevant partner agencies in the joined up delivery of, e.g. TeleCare, highways monitoring, adult social care out of hours response management, etc. are all being investigated.

The longer term future for Surrey Fire and Rescue Service 999 call taking and mobilising (2018 onwards) is in line with the Surrey and Sussex Emergency Services Collaboration

Partnership  within the Public Service Transformation Network programme. This sees Surrey and Sussex Police, Surrey Fire and Rescue Service and potentially East and West Sussex considering a joint contact, control and dispatch function co-located with South East Coast Ambulance Service. As mentioned earlier, Surrey Fire and Rescue Service and both Police Forces are currently working toward replacing their mobilising systems with, ideally, a joint system in 2018. A pre-cursor to this is to migrate all system held data to the Microsoft Dynamics CRM application, or equivalent, to maintain risk critical data consistency.

Isle of Wight Council has announced that the Isle of Wight Fire and Rescue Service will now be working in a partnership with Hampshire Fire and Rescue Service and that in 2017, when the mobilising contract is due for renewal, it will consider all options for the future through an independent feasibility study commissioned by Isle of Wight Fire and Rescue Authority.

# Tyne and Wear and Northumberland

## *High Level Summary*

## Grant: £3,600,000

**This project has completed and has gone live.**

Previously Tyne and Wear and Northumberland Fire and Rescue Authorities each had their own primary and secondary control rooms using outdated solutions with comparatively limited functionality. The two Fire and Rescue Authorities have worked in partnership to procure and implement a new resilient solution maintaining two control rooms, which has the capacity to accept calls, and mobilise and manage resources for both Authorities.

The solution, provided by telent consortium, went live on 25 November 2013 and enables each Fire and Rescue Authority to take the other's calls and to act as a fallback for the other, thereby negating the need for secondary control rooms. The Fire and Rescue Authorities are also planning to develop overflow arrangements with a remote fire and rescue authority.

The new solution provides each control room with access to the Airwave network via an eight port SAN H server, providing voice and data communications. Both Fire and Rescue Services also share an integrated geographic information system and use status messaging via mobile data terminals. The system also provides an enhanced information service and automatic location service for emergency calls, and an automatic vehicle location system, which ensures the nearest appropriate resource is mobilised to an incident. In the case of Priority 1 incidents this is irrespective of which Fire and Rescue Authority area the incident occurs in.

### Resilience benefits compared to baseline in 2009

| | Mobile Data Terminals | Real Time Incident Messaging | Status messaging | Automatic Vehicle Location | Call line Identification | Integrated Geographic Information System | Shared Gazetteer | Service Access Node H | Partnering with Automatic Systems Failover | Reduction in control rooms Secondary Controls |
|---|---|---|---|---|---|---|---|---|---|---|
| Tyne and Wear October 2009 baseline | Limited | × | ✓ | × | × | × | × | × | × | × |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nbland October 2009 baseline | × | × | × | × | × | × | × | × | × | × |
| Tyne and Wear and Nbland completion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Projected savings

Tyne and Wear and Northumberland Fire and Rescue Authorities project savings of around £4.438 million by the end of year 2020-21. This is a reduction of £80,000 since the previous report in recognition of the delay in the implementation of the Control staffing review, impacted upon by implementation considerations following go live. It is anticipated that the projected saving will be realised by 2021 -22.

## Project completion date

The project completed on 25 November 2013, five weeks ahead of its projected completion date of 31 December 2013.

## Additional benefits

Streamlined ways of working have increased the potential for efficiencies in Control Room Operations. New lighting and power supply arrangements will make energy savings and re-location and reduction of premises requirements will release building stock and reduce energy consumption.

# Annex A: how the grant was allocated

1. The table below shows how £81.187 million was allocated.

| Year | Product | Allocated £ |
|---|---|---|
| **11/12** | Projects | 73,000,000 |
| **12/13** | Projects | 6,200,000 |
| | Chief Fire Officers Association National Resilience Limited delivery and support | 337,000 |
| | Interoperability | 1,000,000 |
| **13/14** | Chief Fire Officers Association National Resilience Limited delivery and support | 325,000 |
| **14/15** | Chief Fire Officers Association National Resilience Limited delivery and support | 325,000 |
| **Total** | | **81,187,000** |

2. The figures above include £1 million awarded to a consortium of fire and rescue authorities (the collaborative partnership – see below) to deliver interoperability benefits by developing common operational guidance. The Chief Fire Officer's Association worked with the consortium to ensure that the work wasintegrated into wider initiatives on blue light interoperability and national operational procedures. This function is now captured within the National Operational Guidance Programme's activities

3. The following table lists the grant awarded to each project.

## Grant awarded to the 22 projects

| Project | Grant awarded £ |
|---|---|
| Avon | 1,600,000 |
| Cambridgeshire, and Suffolk | 3,600,000 |
| Cleveland | 1,800,000 |
| Cornwall, and North Yorkshire | 3,600,000 |
| Derbyshire, Leicestershire, and Nottinghamshire | 5,400,000 |
| Devon and Somerset, Dorset, Hampshire, and Wiltshire | 7,200,000 |
| Durham and Darlington | 1,800,000 |
| East Sussex, and West Sussex | 3,600,000 |
| Essex, and Bedfordshire | 3,200,000 |
| Gloucestershire | 1,800,000 |
| Hereford and Worcester, Shropshire and Wrekin | 3,600,000 |
| Hertfordshire, Humberside, Lincolnshire, and Norfolk | 7,200,000 |
| Kent and Medway | 1,800,000 |
| London | N/A |
| Manchester, Cheshire, Lancashire, and Cumbria | 8,400,000 |
| Merseyside | 1,800,000 |
| Northamptonshire, and Warwickshire | 3,600,000 |
| Oxfordshire, Royal Berkshire, and Buckinghamshire and Milton Keynes | 5,400,000 |
| South Yorkshire, and West Yorkshire | 3,600,000 |
| Staffordshire, and West Midlands | 3,600,000 |
| Surrey, and Isle of Wight | 3,000,000 |
| Tyne and Wear, and Northumberland | 3,600,000 |
| **Total** | **79,200,000** |

## The collaborative partnership

4. In July 2012, Ministers agreed to provide £1 million to a consortium of 13 fire and rescue authorities to develop common operational procedures and tactical information. Approximately £838,000 was for the consortium, representing 48% of the total costs. This grant was to support the final phases of product development, the transition to product maintenance and to seek alignment with others. The remainder of the funding supported the work of the Chief Fire Officers Association to ensure integration into wider national work on blue light interoperability and procedure development.

5. Grant funding enabled the core programme team to be established to aid the completion of the development work and put in place robust quality assurance arrangements. The consortium has also achieved alignment of operational guidance with a number of other fire and rescue authorities on a national basis.

6. 25 fire and rescue authorities worked in the collaborative partnership, developing and adopting common tactical guidance, training packages and mobilising protocols, and a common operational assurance methodology. An operational procedure framework has been developed which would link all of the products, e.g. standard operating procedures, tactical operational guidance, training packages, risk assessments, and equipment manuals, against specific incident categories and introduce a common standard of document production. All of the fire and rescue authorities in the partnership have introduced new operational procedures that have been developed through this collaboration. Benefits arising from this work programme include the potential to improve cross-border working, borderless mobilising of assets, ability to collaborate on future vehicles, equipment, training design and procurement.

7. The total number of documents produced by the collaborative partnership and issued to fire and rescue authorities to date is:

| **Guidance documents** | **128** |
|---|---|
| Training packages | 39 |
| Risk assessments | 64 |
| Task analysis | 105 |

8. The work of the collaborative partnership is now fully integrated with the National Operational Guidance Programme being managed by London Fire Brigade. This single national hub for strategic and tactical operational guidance has been in place since April 2015 and continues to develop the work started by the collaborative partnership

9. Following agreement to a funding arrangement including DCLG, UK fire services and devolved administrations, the National Operational Guidance Programme will

develop around 40 pieces of new policy guidance which they will align with detailed work on operational procedures being developed in collaboration by a number of UK fire services. This work will deliver a one-stop shop of best practice guidance that aligns with those of the other emergency services and provide a foundation for training for UK fire and rescue services.

# Annex B: benefits that will be secured by the improvements

1. The benefits that will be secured by the planned improvements are as follows:

- **Mobile data terminals** are computer terminals in fire and rescue vehicles. Some are fixed and others are demountable. They will provide a wide range of information to firefighters and officers such as maps and route information, known risks and hazards associated with specific premises and locations, building plans, chemicals information (including how to handle them safely), and vehicle information (e.g. design features and how to cut them open safely).

  Mobile data terminals can be installed to operate in a standalone mode or can be configured, to provide for data-based mobilising provided other technology has been implemented, e.g. a call handling and mobilising system that is able to transmit/receive data to/from mobile data terminals and a radio network that is able to transmit the data.

  Mobile data terminals will improve efficiency and the operational effectiveness of fire and rescue authorities by providing firefighters and officers with the information they need to deal with emergencies. They will also improve the ability of fire and rescue authorities to respond, and data transmission improves the accuracy of messages received, so strengthening the 'speed and accuracy' dimension of resilience.

- **Real time incident messaging** will enable fire and rescue authorities to exchange incident information in real time both between themselves and with other emergency services and agencies. This will help reduce delays, duplication, and communication errors. The ability to do this will be provided using the Multi Agency Incident Transfer (MAIT) protocol.

- **Data Messaging (including Status messaging)** will provide a far more efficient way of communicating with the Control Room using data instead of voice for firefighters and officers to transmit and receive updates using pre-formatted messages, e.g. to inform the control room that their status has changed from 'mobile to incident' to 'arrived at incident.' Data messaging will improve efficiency, both in terms of time and cost, by reducing radio voice traffic and avoiding delays caused by call congestion during busy periods.

- **Automatic vehicle location system** will provide for the exact location of individual fire and rescue vehicles to be identified. This will enable the mobilising system to propose the nearest available appropriate vehicles for mobilising to an emergency. An automatic vehicle location system will improve efficiency as the mobilising system will know the exact location of vehicles with no human intervention. It will also strengthen the 'speed and

accuracy' dimension of resilience by enabling the quickest appropriate resources to be identified instantaneously.

- **Eisec (including caller line identification)** will enable control room operators to confirm the caller's location swiftly. This is a critical first step in the call handling process, since the call could be dropped leaving the location unknown. The Enhanced Information Service for Emergency Calls technology provided by British Telecom plc allows the installation address of the line from which an emergency call is being made to be displayed to the control room operator and has the ability to speed up the task of confirming the caller's location. The technology, in some instances may also be used to locate the whereabouts of a mobile phone caller. This is particularly useful for when callers are reporting incidents on the road network and are unaware of their exact location. The technology also assists in identifying previous hoax callers and reducing the number of times fire and rescue authority resources are mobilised unnecessarily.

- **Integrated geographic information system** is an electronic map with a direct interface to the call handling and mobilising system. When caller line identification technology is in use the location of the caller will be displayed instantly on the map. This will help control room operators to determine the location of an incident quickly when the caller is unable to provide the exact details of an address. When installed on mobile data terminals the map will also provide for firefighters and officers to view information relating to incidents such as site specific risks and the location of hydrants. An integrated geographic information system will improve efficiency by helping to minimise dialogue between control room operators and callers. It will also strengthen the 'speed and accuracy' dimension of resilience by enabling control room operators to reach the point of mobilising the response more quickly.

- **Premise based gazetteer** is a database containing premises details for the vast majority of properties, along with other information such as data relating to streets, towns, villages, and other points of interest. The data will:

  - Improve emergency response accuracy by enabling exact address information to be relayed to firefighters and officers at the time of mobilising (a significant proportion of fire and rescue authorities currently only mobilise to a point in a road or a district which has limited accuracy, e.g. when roads are long);

  - Provide for a wide range of valuable information to be held alongside address details and points of interest (e.g. address-specific risks, plans, key holder details, road closures, etc) all of which can be included in system-generated mobilising messages;

  - Help reduce the risks faced by firefighters attending incidents, e.g. by providing them with information on the dangers they are likely to encounter at specific locations;

- Help mitigate the risk of communication errors by providing a set of common address information for control room operators to use when working in partnership with, or providing assistance to, another fire and rescue authority, or when communicating with firefighters and officers attending emergencies;

- Facilitate and improve the ability of fire and rescue authorities to interoperate among themselves and with other emergency services by providing a common set of address information.

A premise based gazetteer will improve operational efficiency and contribute significantly to strengthening the 'speed and accuracy' dimension of resilience by increasing mobilising accuracy.

- **Service Access Node 'H' (full voice and data capability)** - is the provision of a capability to communicate over the Airwave resilient radio system by voice and data, instead of voice only. Data is a far more efficient way of communicating both in terms of speed and accuracy. The capability to communicate using data will enable fire and rescue authorities to maximise the benefits of modern technology by enabling them to configure their systems to 'do the thinking' and 'transmit the answers' instantaneously.

  The capability to communicate using data will improve efficiency and strengthen the 'speed and accuracy' dimension of resilience. As the Airwave radio system is highly resilient in terms of its performance and availability, it will also strengthen the 'availability' dimension of resilience.

- **Partnering with automatic systems failover** means that:

  - Two or more fire and rescue authorities will be working in partnership to provide their control room services.

  - The system or systems they use are able to failover to a fire and rescue services fallback system automatically with no interruption to service in the case of a system failure.

  Partnering with other fire and rescue services with automatic systems failover will significantly strengthen the 'availability' dimension of resilience.

  Partnering with other fire and rescue services using systems to automatically distribute emergency calls when an individual control room is experiencing high call volume will improve efficiency by effectively expanding the pool of Control Operators to handle emergency calls. Partnering systems that also allow for other fire and rescue services to mobilise resources on behalf of the affected control room will also ensure the quickest most appropriate resources are mobilised immediately.

- **Reduction in control rooms and secondary control rooms** will be achieved by:

  - Merging control rooms; or

- Outsourcing control room services to another fire and rescue authority; or

- Partnering with one or more other fire and rescue authorities and using a shared call handling and mobilising system. While this may not reduce the number of primary control rooms and systems, it will enable the fire and rescue authorities to decommission their existing secondary/fallback control rooms/systems or close down their control room at certain non-peak times.

Each of the above changes will improve efficiency and generate significant cost savings. They are also likely to strengthen the ‘availability’ dimension of resilience. None of the changes will compromise the ability for a fire and rescue authority to handle calls and respond to emergencies in the shortest possible times, i.e. they will not increase risks.

# Annex C: the Chief Fire Officers Association Support Team

1. The Chief Fire Officers Association's support team was established in 2012 as a central peer review group and was made up of Fire and Rescue Service subject matter experts with particular experience in the emergency control room sector. As the majority of projects have now completed, the team have concluded the support and challenge role they were engaged to perform within the improvement scheme and have been stood down.

2. During their tenure they carried out visits to the projects offering support where needed. These visits assessed project progress and informed the project teams of national developments, such as the continuing evolution of the Multi Agency Information Transfer protocol. In addition to this the team provided updates on the technological developments and deliverables being employed by other control room improvement projects such as the deployment of Dynamic Group Number Assignment which is an innovative way of using the Airwave radio scheme.

3. The team shared lessons learned between projects, particularly between those who had implemented their new arrangements and those that were still in the delivery and testing phases.

4. The team worked with colleagues in DCLG to resolve issues that were escalated to them. These included problems experienced by one of the projects with the quality of service on their wide area network.

5. The team produced a range of test scripts for use by projects that procured an Airwave SAN H radio connection. The scripts were designed to help ensure that the functionality available from SAN H could be adequately tested in the Control Room environment.

6. The team contributed to the development of National Operational Guidance for Emergency Fire Control Operations and the Joint Emergency Services Interoperability Principles to ensure that these programmes were aware of the new technology and ways of working being introduced in fire control rooms and vice versa.

7. The team facilitated a number of steering groups such as the Fire Multi Agency Incident Transfer Steering Group which has ensured that the sector's requirements have been incorporated into the Multi Agency Incident Transfer protocol (that has been developed to succeed the Direct Electronic Incident Transfer protocol). These protocols will enable control rooms to exchange incident information electronically. The team also supported the Fire Geospatial Data Steering Group which provides a

forum for the sector to influence the development of the AddressBase gazetteer which is used to support premises level mobilising.

8. The team supported the development of a set of performance indicators for use in fire control rooms and worked closely with the Chief Fire Officers Association Corporate Support and Sector Improvement Directorate to make sure that these dovetailed with the a new suite of sector wide indicators. The performance indicators and quality assurance measures have been designed to help ensure that modern control rooms perform to the standards expected by Fire and Rescue Authorities and other stakeholders.

9. The team provided further support through:

- The Control Projects Knowledge Exchange, an information hub held on the Chief Fire Officers Association website, which is used to share information across the projects. The Exchange currently has around 180 subscribers.

- The revision and updating of guidance on the use of SAN H in Control Rooms – to promulgate the lessons learned from the first use of positive Dynamic Group Number Assignment. This enables Fire and Rescue Services to make more efficient and effective use of the Airwave network.

# Annex D: glossary

**Airwave -** The trading name of the company that provides the emergency services mobile radio and data services.

**Airwave short data router -** A device that forwards data packets from sender to receiver on a network.

**Call handling and mobilising system -** a computer-based system to deal with the receipt of emergency calls and alerting, dispatching and monitoring of fire and rescue authority resources within a service area.

**Communications control interface ports -** The link between the control room and the Airwave network and therefore anyone connected to it.

**Cross-border incident management -** The management of fire and rescue authority resources working outside their own service area.

**Data-integrated mobile data terminal solutions -** A vehicle mounted computer holding data synchronised with a database.

**End-to-end mobilising and communications systems -** A solution for emergency call handling, mobilising, communications and incident management. The solution will include, but may not be limited to, the provision of: computer aided dispatch system/mobilising system, a communications system, remote location communications equipment (station-end equipment), integration into fire and rescue authority mobile data terminals and the Airwave network to provide mobile data.

**Fortek Vision 4 -** A system that combines radio and telephony controls, including call line identification, caller location identification and short data messaging.

**Full voice and data communications capability -** The ability to communicate from the control room with voice and/or send data with other users on the same network and vice-versa.

**General Packet Radio Service -** A mobile data service that allows packets of data to be transmitted across networks utilising the mobile telecommunications network.

**Incident ground radios -** Radio communications used by fire authorities to communicate specifically with each other in the immediate vicinity of an incident.

**Integrated communications control system -** This equipment merges telephony and radio, and allows the control room to manage both functions.

**Operational Policy and Procedures Forum -** A group looking at the potential for the standardisation of policy and procedure to define a common mobilising and operations policy across more than one fire and rescue authority.

**SAN G** – A service access node (SAN) G. An older variation of SAN H.

**SAN I** – A service access node (SAN) type I, which provides an air interface (connection) from the fire and rescue authority's control room into the Airwave network. Essentially, a radio connection that can carry voice and a limited amount of data.

**Single virtualised data-centric system -** A common system across more than one fire and rescue authority, based on data rather than voice communications, accessible from any suitably enabled computer terminal.

**Standard operating procedures -** A procedure that informs all members of a service on a common policy of how to complete a task and the associated administration policy.

**Station-end mobilisation equipment -** The equipment that receives the dispatch and alerting message from the control room and provides information on the incident. It may also provide the data upload/download link to mobile data terminals on vehicles.