

## Delivering collaboration and interoperability for UK Fire and Rescue Services

"One system,  
many opportunities"



### Networked Fire Control Services Partnership



**DEVON &  
SOMERSET**  
FIRE & RESCUE SERVICE



**DORSET & WILTSHIRE**  
FIRE AND RESCUE



**HAMPSHIRE  
FIRE AND  
RESCUE  
SERVICE**

“ Because all three fire and rescue services have the same Capita technology in their Control Centres we will have far greater resilience. If one service is under pressure the others will be able to provide full support.

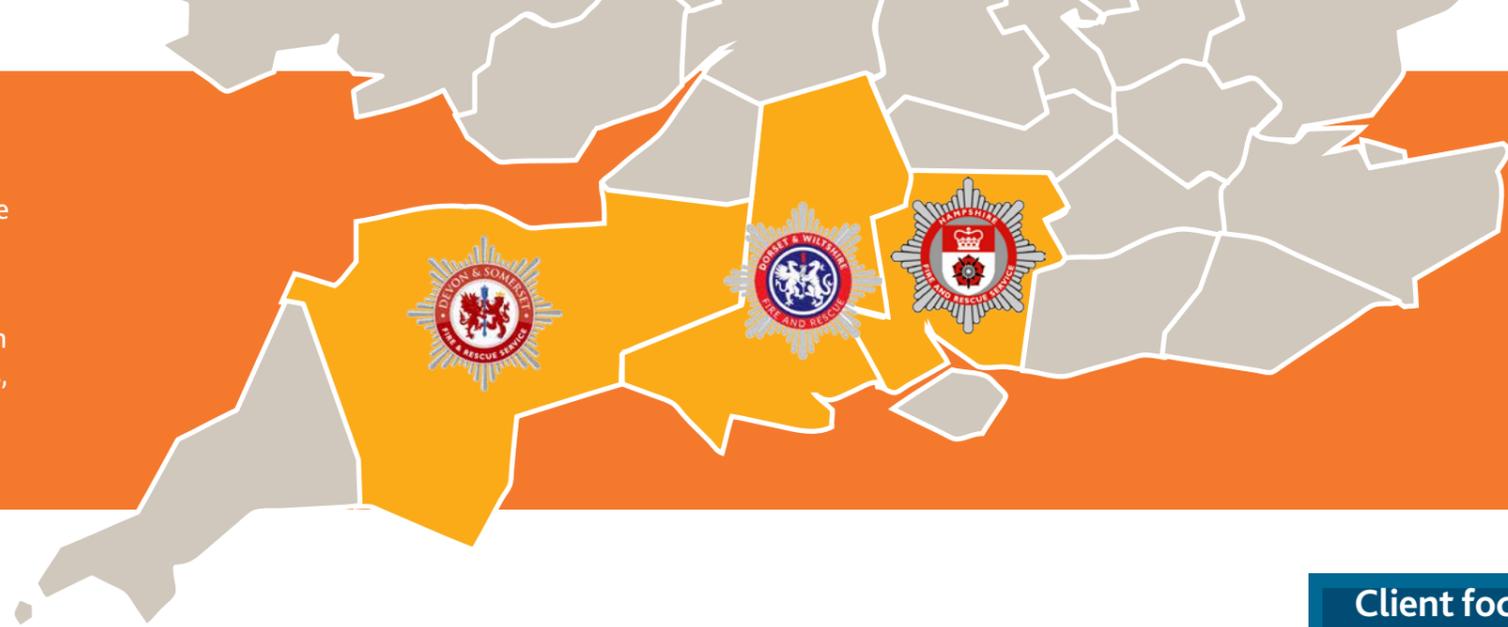
This integrated system will allow us to work together even more effectively than we do at the moment, and that can only be good for public and firefighter safety. ”



John Aldridge, Chair,  
NFCSP Strategic Board

In 2013, Capita was awarded the contract to provide a new Command and Control solution to the Networked Fire Control Services Partnership (NFCSP), a consortium of Fire Services comprising of Hampshire Fire and Rescue Service, Dorset & Wiltshire Fire and Rescue Service and Devon & Somerset Fire and Rescue Service.

Working with the NFCSP Capita has deployed the latest **VisionDS** solution; comprising **Vision** Command and Control and the **DS3000** Integrated Communications Control System (ICCS). **VisionDS** provides a fully integrated solution, distributed across three control rooms, to not only support the individual services but also to meet the operational requirement for interoperability and resilience across the partnership using the wide area network.



## Key Benefits

**Collaboration** – The approach taken by the NFCSP was based not only on the strong political and economic drivers for collaboration and interoperability through reduced costs by sharing system procurement but also on the single systems capability to provide:

- A Common Operating Picture across the partnership - a live view of operational activity and resource information in the FRS Control Rooms and more widely via desktops, tablets and smartphones using BOSS (Browser for Operational System Status) and BOSS Mobile.
- Attribute mobilising, using an agreed common list, provides the right equipment, skills and number of personnel needed to deal with emergency responses and mutual support arrangements whereby each Control can take calls, mobilise and manage incidents on behalf of partners during busy periods.

Combined Operator training has also reduced costs, standardised working practices and produced a wide support network of knowledge, skills and experience.

**Technology Innovation** – Using the latest, integrated Command, Control and Communications platform from Capita the networked solution, shared securely using Public Safety Network (PSN) compliant networks, provides greater resilience, particularly during periods of increased demand on services. Specialised functionality has also been provided for:

- Electronic information transfer between other bluelight and local authority services using the latest Multi-Agency Incident Transfer (MAIT) protocols.

- Introduction of new services, for example around co-responding.
- Increased use of mobile devices so that Officers can be informed of and mobilised to incidents via a range of devices including Android and Apple Smartphones, TomTom SatNavs, Airwave Radios, Pagers and Mobile Data Terminals.
- Dynamic Group Number Allocation (DGNA) automatically switches radios to incident talkgroups.
- Dynamic mobilising using AVLS and road routing to calculate quickest response.
- Telephony/Radio computer integration so that operation using both touch screen (Hard ICCS) and keyboard/mouse (Soft ICCS) is available.

**Project Delivery** – Dedicated teams from NFCSP and Capita worked closely throughout project design and delivery to ensure requirements were fulfilled using a workshop-led approach to elaborate requirements and develop user functionality. Phased training and delivery across the three Control Rooms also de-risked the Go Live programme to ensure continuity of service.

**Transformation** – One of the main drivers of the NFCSP was to take this unique opportunity to change the way that the partner FRS operated. During the programme the solution design was adapted to move from a 4 to a 3 centre solution to accommodate the combining of Dorset and Wiltshire Control Rooms into a single Service Control Centre. The adoption of a single platform has allowed the NFCSP to transform operations through an Operational Efficiency and

Alignment Group, working towards common Standard Operating Procedures and attendances to operational incident and to work towards common call, incident handling and handover business processes have been developed, supported by a robust audit mechanism.

**Improved Public Safety** – At the forefront of the partnership's operations is the need to improve public safety. Capita's solution has helped ensure that the communities served by the NFCSP are better protected as a result of resilient, mutually supported emergency call handling and mobilising:

- Geographical spread reducing the likelihood of environmental conditions affecting all areas in a given period.
- Quickest, appropriate response mobilised, regardless of boundaries.
- Local knowledge of locations and risks is retained, whilst widening the geographical and operational awareness of service personnel.
- The quality of service to the public will benefit from adoption of collaborative, best practice initiatives.
- A single geographical gazetteer using AddressBase Premium supports pinpointing of incidents for emergency calls and incident management.
- The ability to operate in fall back mode is enhanced considerably, ensuring continued high standards of emergency call handling provision and quality.

**Improved Firefighter Safety** – Improved firefighter safety formed part of the user requirements with a dedicated partnership resource appointed to explore and develop this aspect. Automatic Vehicle Location System (AVLS) technology tracks the current location of appliances and officers, so the partnership should always know where their resources are when needed or in times of need. Crewing is now managed and recorded on an individual basis, so that the partnership has much better information about who is being deployed to incidents.

**Improved Efficiency** – Whilst 'business as usual' continues to be provided by the 'home' FRS the network, with its fallback capability, has removed the need to maintain a costly and generally unused local Secondary/Standby Control. Operational benefits and efficiencies have been realised through the deployment of a secure, shared infrastructure for telephony, Airwave radio and data centres. For example:

- CCI Ports used for connection to the Airwave network are pooled for shared use.
- Interfaces to a variety of local systems (Crew Availability, Asset Tracking, Management Information, etc.) provide automatic updates to the Command & Control system.
- The increased use of data throughout the system, and associated reduction of voice transactions, assists Control Operators to focus on priority tasks in the Control room.
- System alerts provide immediate warning when action is required.

## Client focus

The Networked Fire Control Services Partnership (NFCSP) has been established to provide a collaborative approach to the future provision of fire control services for Devon and Somerset, Dorset and Wiltshire and Hampshire Fire and Rescue Services.



Covers a total area of 20,785 km<sup>2</sup>



Serves a population of 5,125,000



Three local Control Centres in Exeter, Devizes and Eastleigh



## Solution features

Alongside the core functionality expected of a leading Command & Control platform the solution delivered for NFCSP had to provide for the specific needs of each individual FRS and the aspirations of the partnership.

### Collaboration



By providing systems hosted at individual sites, with the capabilities to take emergency calls, create incidents and mobilise locally, each FRS can operate independently from each other but when networked can provide the most extensive collaborative infrastructure.

### Telephony Integration



The prime call handling for the entire solution was a resilient Avaya system, interfaced to the ICCS. By using a single system across the entire solution, enhanced resilience can be offered for incoming 999 calls and resilience through the interface to the call takers position. Aggregating all calls centrally within the ICCS allows calls destined for any geographical area to be initially only taking by the respective call taker, but in any scenario where this is not possible, for any other operator to take the call.

### Fall-Back



The solution needed to be capable of providing local functionality but are also able to provide full 'Fall-Back' capabilities for each FRS. This includes call taking, mobilisation at both a technical and operational level. Should a local system become unusable or the control room become uninhabitable, other FRS within the solution can assume a call taking and management role.

### Robustness



Two key attributes of the proposed solution are Resilience and Redundancy. Each FRS benefits from a locally resilient and redundant solution, with robustness offered at every level from hot/standby servers to multiple points of network access.

### CCI Port Pooling



CCI Ports, used for connection to the Airwave network, exist in a virtual pool providing a mass of ports available at all times rather than being limited by quantities of those locally accessible. Access to CCI ports can be partitioned so that a port is only available to operator from a single Service or can be made available to operators within multiple Services for shared use.

### Data Resilience



Using a cross site fallback solution allows a great level of resilience allowing day-to-day operations to continue during catastrophic outages but also provides a secure storage solution for vital data for the entire solution. Using off-site storage, completely independent to all three control rooms enhances that capability further.



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