

IMPROVING RESILIENCE 01



The FiReControl project

A national network of nine Regional Control Centres

This will be the first of three special features on resilience projects.

FiReControl will deliver an integrated network of nine Regional Control Centres in England. But what does that mean and why do we need it?



Photo: West Yorkshire FRS

Regional Control Centres will bring the latest proven technology together in one system.

Now...

Currently, there are 46 control rooms in England – one for each Fire and Rescue Service (FRS). They provide a good service to the public now, but:

- the 46 control rooms are not connected, and fallback arrangements are not ideal;
- high call volumes, whether from one incident or a prolonged period of spate conditions, can overwhelm the existing control rooms;
- currently, if four control operators are on duty and five calls come in at once, one emergency call may have to fall back to another fire and rescue service;
- the current control rooms are not sufficiently resilient to power failure, flood, surges in demand or terrorist incident;

- several existing facilities are overdue for replacement or rationalisation;
- there is a wide range of different systems and technology used across the country, which cannot communicate with each other; and
- control staff currently have to carry out non-core and administrative duties that need not be carried out by staff with their specialist training or expertise.

The time is right to modernise.

The future...

England's fire control service will be delivered through a national network of nine Control Centres, one for each region, which can all

support each other. These Regional Control Centres (RCCs) will bring the best of the latest proven technology together in one system. This will be integrated with the Service's new digital radio system – Firelink.

All control operators will benefit from a system providing automatic caller location, including from mobile phones. The system will allow them to mobilise dynamically, ie to the nearest suitable appliance, even if it's on the road. The nine RCCs will back each other up automatically in the case of spate conditions or technical failure. This will iron out local peaks in call volumes which can currently overwhelm individual control rooms, forcing calls from the public to queue or fall



Photo: Norfolk FRS

What an operator's screen might look like: the system will allow them to mobilise the nearest suitable appliance, even if it's on the road.

back to other adjacent controls, which may also be facing peaks in demand. This new arrangement will also mean that RCCs will be better able to manage disruptive challenges such as widespread flooding or large-scale incidents, since they will be automatically routed into a less busy RCC.

Control staff will work in purpose-built, secure buildings designed to provide a light, attractive working environment. They will still be an integral part of the Fire and Rescue Service working in the public sector. And they will be better able to focus on dealing with emergency calls and incidents – their core work.

Mobile data means that crews on appliances will be able to receive information about the incident location, type, risks, building plans and chemical hazards even if they are not at a station.

Firelink and FiReControl

Firelink will provide a number of features essential to the operation of the new RCCs. Control staff will communicate with appliances over a whole region (and even nationally) from any single RCC. They will be able to send and receive data to and from mobile data terminals. A number of Fire and Rescue Services already use mobile data: Firelink will make this available nationwide. Control staff will be able to see on their screens where resources are in real time at all times, and will be able to send the best resource to deal with the type of incident every time.

The people working on FiReControl and Firelink are working closely together to take both projects forward.

What will the RCCs be like?

Design

The new RCC buildings will all have the same basic design (which keeps design costs down and will give consistency across the regions). They will be three storeys high, on sites of at

least one hectare. The hub of each RCC will be the control room itself: a double-height space, which is expandable to cope with spate conditions and major incidents. The room has been designed to have a light and airy feel, maximising natural light.

The control room

We have worked with control staff from across the country to ensure that the control room is a comfortable and pleasant working environment. We have held two rounds of ergonomic trials: the first to determine the optimum team size and to work on how the desks should be set up in teams, and the second to look at the layout of the entire control room. We plan to involve control staff in further evaluations of the proposed solutions for furniture and equipment.

Other parts of the building

A separate operations room with a direct view of the control room and its wall display will provide a command facility if there is a major incident. Outside the control room, there will be a variety of other rooms, including offices, a quiet

room, a TV room, a staff restaurant, changing rooms, showers and a locker room. There will also be an external screened terrace, accessible from the restaurant, which will provide a pleasant outdoor area for staff and visitors to eat or relax in. It will be a non-smoking building, but a sheltered smoking area with recall facilities will be provided.

We are choosing the developers for the buildings through a rigorous procurement process, following EU law, with representation from the regions during shortlisting, assessment and final selection.

RCC security and resilience

Security and resilience are key priorities for the design and locations of the new RCCs.

A resilient network will continue to provide an excellent service even in the event of damage or failure. The RCCs will be resilient in a number of ways.

The buildings

They will have dual uninterrupted power supplies, dual emergency generators with enough fuel for a week on site and fire suppression by gas rather



Photo: CCD

Ergonomic trials in progress to ensure that the control room is a pleasant working environment.

than water in critical areas of the building. We have developed a fire strategy for the RCCs that meets or exceeds fire protection requirements.

The technology

The potential suppliers who will be bidding to provide the technology must propose a solution to meet all our requirements. We are looking for an integrated system which is thoroughly tested

and accredited before it goes live, including tests for what happens when parts of the system fail. The system must include security barriers (such as virus and intruder detection) on all external interfaces to the internet or other organisations' networks, and internal controls to reduce the risk of viruses.

To further minimise risk, we will insist upon a strict change management process for all mission-critical systems. No changes to IT systems will be allowed unless they are rigorously tested in a separate environment. All this will be supported by a comprehensive Business Continuity and Recovery Plan.

Security

As part of the Critical National Infrastructure (CNI), RCCs must be secure and will therefore have a strong perimeter fence, lighting in car parks at night, CCTV cameras and zoned entry systems. All facilities will be designed to protect staff, to provide a sustainable, safe working environment in all conditions, and also to serve the RCC and its systems.



Photo: CCD

The hub of each RCC: a double-height control room, which is expandable to cope with spare conditions and major incidents.



Photo: CCD

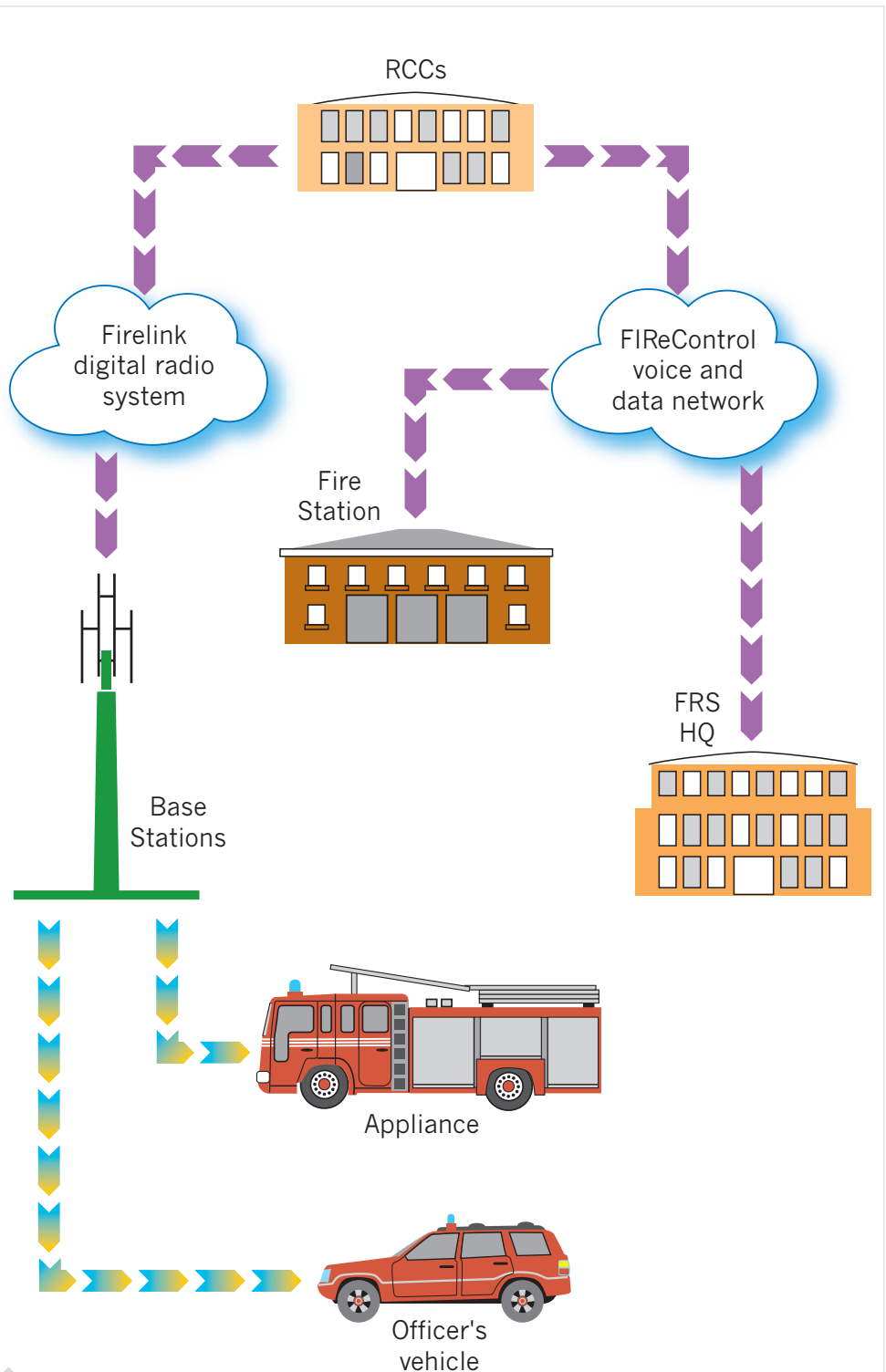
The control room will have a light and airy feel, maximising natural light.

FiReControl – a summary

- Better service and more lives saved
- National network of nine RCCs
- Best available technology
- Dynamic mobilising and caller location identification
- Attractive, purpose-built, secure buildings
- Resilient system
- Savings to invest in community fire safety
- Planned to be up and running by the end of 2008 (outside London)
- Focus on core business

FiReControl: the chronology

- 2000 Mott McDonald's report *Future of Fire Service Control Rooms and Communications* is published, favouring nine RCCs.
- 2003 Mott McDonald's *Future of Fire and Rescue Service Control Rooms in England and Wales: Update* clearly endorses nine RCCs.
- 2003 The White Paper *Our Fire and Rescue Service* details proposals for FiReControl to proceed.
- 2003 A draft national framework for the Fire and Rescue Service is published.
- 2003 The decision to proceed with FiReControl is confirmed in consultation.



How RCCs will communicate with FRS HQ, fire stations and appliances.

Critical National Infrastructure (CNI)

CNI consists of those parts of the United Kingdom's infrastructure for which continuity is so important to national life that loss, significant interruption, or degradation of service would have life-threatening, serious economic or other grave social consequences for the community, or any substantial portion of the community, or would otherwise be of immediate concern to the Government.