

FiReControl and critical infrastructure

On January 29th an unprecedented number of BAPCO members congregated at the newly built Regional Fire Control Centre, Taunton. The theme of the day was – rather fittingly for the location – Protecting our Critical National Infrastructure, and the FiReControl Programme.



Each of the nine RCCs will be a carbon copy of each other, with the Taunton RCC covering the South West from Gloucestershire to Cornwall and Wiltshire, including the Isles of Scilly.

In the control centre's main room with its 20 foot-ceiling and commanding gigantic central screen delegates were able to get a flavour of both what it will be like to work in a Regional Control Centre, as well as experience the truly ambitious nature of the FiReControl program. Although many of the desks were still empty and the hardware still in its packaging, it wouldn't be long before this relative calm would be but a distant memory, as emergency calls from the South West begin to flood in come 2011.

Regional Chair Peter Prater began proceedings and reminded the audience that the day was all about critical national infrastructure and FiReControl – and that this was not just about terrorism.

The Centre for the Protection of National Infrastructure (CPNI): Critical national infrastructure – what is it, what are the threats, and what is being done to protect it?

(Note from the Editor: at the request of the CPNI, BAPCO Journal has altered the original presentation.)

The speaker introduced the Centre for the Protection of National Infrastructure (CPNI), which was established in 2007 and whose activities constitute part of the UK's strategy to counter threats from terrorism. There are a range of covert threats to national security. The threat to the UK and to UK interests overseas from international terrorism is serious and sustained, and has been judged by the Security Service to be "severe" and likely to persist for some considerable time

The UK's counter-terrorism strategy, known as CONTEST, has four main areas of activity. First is terrorism prevention, which includes tackling radicalisation in the UK and abroad, for example by challenging ideologies that extremists believe justify violence. This also entails taking appropriate action such as strengthening the legal framework and supporting structural reform.

Second is pursuit of terrorism by means of disruption, using intelligence gathering on terrorist activities and their means of operations.

The third area is that of reducing vulnerability to terrorist attack. This covers strengthening border security



to prevent terrorists from entering the country, as well as protecting national infrastructure and people in crowded places.

The fourth area is about ensuring the UK is properly prepared for any consequences of terrorist attack. This entails identifying key risks, assessing the impact of such an attack and having the necessary responses, as well as testing and planning through exercises and live events.

The CPNI speaker then used a simple but effective analogy to explain what is meant by national infrastructure. "For me, it is the things you take for granted living in the UK. I travelled here yesterday. I stayed in a hotel, which had energy available for light and heat. I could listen to the TV and I had a laptop. The food was plentiful, and next day I paid the bill with a secure credit card service. I did not experience any problems travelling here, but if an accident had occurred, the emergency services would have come on the scene. This is just a brief example of the services that underpin normal daily life."

There are nine categories that comprise the national infrastructure; communications, energy, finance, government, water, health, emergency services, transport, and food. The government sector includes all central government departments. Not everything is critical and it is impossible to protect everything.

CPNI work with owners, operators and sponsor government departments to identify which elements of the national infrastructure are critical. The assessment is driven by likely impact (regional, national, length of disruption, availability of back up, impact on life), vulnerability-focussed, and is informed by threat. The scale of protective security measures has to be proportional.

CPNI also provides integrated protective security advice, covering physical, information and personnel security. An example of physical security is taking a layered approach to prevent access to critical assets. This could entail intruder detection, closed circuit TV, and access control systems such as swipe cards.

Next is personnel security. Good pre-employment screen is vital, as is an ongoing security regime for employees. It is important to look at protective security measures in place, identify any gaps, and then address how these can best be mitigated.

Finally, there is the third aspect of information security. Maintaining the confidentiality, integrity and availability

of data is crucial to business effectiveness. Threats are constantly evolving and organisations need to stay ahead, whether the source is from terrorists, espionage or criminals.

Q&A

One delegate asked how easy it was to get the private sector to follow CPNI advice on security measures. The advisor replied by reiterating that CPNI didn't have any powers to impose measures on organisations, but that it worked closely with government departments who could liaise with the owners of sites. "They usually action the advice, and realistically they see the value in protecting their assets. And also it is an opportunity to work with the regulators. I've never heard of any organisation that has turned round and said it couldn't afford the measures. For some it may just be about gaining a better understanding of a CBRN threat, and that can often just dovetail into existing plans."

BAPCO President Ian Readhead raised the issue of intra-Europe co-operation, in the light that for example the UK relied on France for much of its electricity. The speaker said that CPNI had a work stream that included European partners, both in sharing intelligence and delivering advice.

Chris Hartrick and Colin Rockey, Devon & Somerset FRS Special Operations: *An overview of New Dimension (Special Operations)*

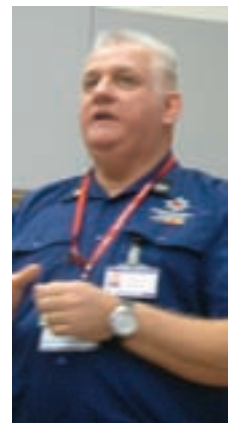
Chris Hartrick began his presentation by talking about the background to the local resilience forums, and how due to the two police authorities Devon & Somerset FRS served, they sat on two local resilience forums.

Hartrick outlined the varied responsibilities and activities of the Special Operations team, including preparations for mass fatalities, warning and informing, cliff rescue, and training and exercising with other blue light organisations.

"New roles are emerging. We can see a whole new world of more complex incidents emerging that are happening more often. Climate change is having its effect so we have to be prepared for more dislocated incidents."

Colin Rockey, also of Special Operations, took the mantle from Hartrick to speak about Special Operations and the New Dimension project.

"We still refer to it as the New Dimension but over the next 12 months it will take on its new title, National Resilience. National Resilience is about maintaining this capability for another 16 years."



Colin Rockey, Devon & Somerset FRS Special Operations. Top of the page: the impressive main room of the South West RCC in Taunton – delegates were given a flavour of what it would be like to work in such a high-tech environment.

Regional Chair Peter Prater began proceedings by reminding delegates that critical national infrastructure was not just about terrorism.

"In our world it is less about enemies of the state and more about natural disasters and human frailty – a majority of the time."

➤ Graeme Pauley, National Business Relationship Manager, FiReControl project team.



USAR is part of the New Dimension, and Rockey explained how it came about. "Why do we deliver USAR? Well, in 911 there were two types of responders, firefighters and to put it crudely, guys who looked like Bob the Builder. They too are firefighters, from FEMA – the Federal Emergency Management Agency. The US has FEMA and we did not, so after 911 we delivered that type of asset. USAR became recognised as a sharp end capability."

Today there are 19 national teams of USAR specialists to deal with collapsed structures, heavy rescue transport, and anything else which firefighting colleagues cannot deal with or don't have the equipment for. Rockey also outlined some of the national assets available under National Resilience, including the mass decontamination vehicles and high volume pumps. "This year will see the delivery of canine to DS FRS, one of 23 in the country."

Graeme Pauley, National Business Relationship Manager, FiReControl project team: *The FiReControl project and how it supports resilience as part of the critical national infrastructure (CNI)*

Pauley's presentation revolved around three questions: what is FiReControl; how it supports resilience as part of the CNI; where we are on the FiReControl journey.

He began his presentation by highlighting the increasing challenges being faced by the Fire Service, including climate change and terrorism. He explained how Communities and Local Government had responded by investing £1bn in enhanced capability through Fire and Rescue Resilience programme :

- Providing specialist equipment and training to deal with major emergencies (New Dimension)
- Secure, resilient, national radio system – enabling emergency services to communicate with each other (Firelink)
- Working in partnership with Local Authorities, FRSs, and suppliers to deliver national network of nine, resilient, Regional Control Centres. These will receive calls, mobilise and co-ordinate resources across the country (FiReControl).

Currently the FRAs in England operate 46 separate control rooms to answer calls and mobilise resources, explained Pauley. Each control room has a back-up facility – typically a room equipped for fallback, eg County Council basement, and a wide variety of technologies and operational procedures reflecting different levels of investment by local authorities. "Staff do an excellent job in delivery core services within limitation of current arrangements," but, added Pauley, there were significant opportunities to improve service delivery and outcome, eg:

- Most control rooms were small, and could be easily overwhelmed with calls. When a member of the public called 999, an operator tried to connect to the primary line in an FRA control room. If a line was busy calls queued and an operator switched to alternative lines, then to an alternative control room. Accepting that the control room had to pass details back to the original control room for mobilisation to take place, if no calls could get through then an alternative method of communication had to be found, for example fax.
- Large incidents close to FRA boundaries could be difficult to coordinate because more than one control room will be taking calls, eg motorway incidents.
- And risk of multi-agency confusion when information was passed from a number of FRS control rooms to police and ambulance services.
- Currently coordination of CBRN incidents was located in a single FRA.

The new network will address the above weaknesses:

- Local Authority control services will be brought together at regional level. Large networked controls will enable flexing of call handling and mobilisation capacity to cope with local peaks in demand, largely eliminating call queuing.
- Common call handling and mobilisation processes, common technology and common training will enable callers to be transferred between centres. This will enable resources with shortest journey time to be

mobilised, regardless of boundaries.

- Better more timely information will enhance firefighter safety, and communications will be based on data rather than voice.
- New risk management tools integrated into control infrastructure, directly supporting formulation of integrated risk management plans by local authorities.
- Network will house national coordination functions including management and deployment of New Dimension assets.

Pauley went on to dispel common myths and misunderstandings about FiReControl, such as the nature of the threat being responded to. "We can see flu pandemic, major industrial accidents, coastal and inland flooding all have higher impact than attacks."

"In our world it is less about enemies of the state and more about natural disasters and human frailty – a majority of the time."

Pauley highlighted the fact that the network would enable local call handling and mobilisation to overflow to locations which are least busy. "In addition the service will be less likely to fail because of the ability to fall back and restore service with no loss of data or service, if the unthinkable happened and an RCC failed."

In addition, enhanced technology infrastructure will

improve delivery of risk and safety information for firefighters. Project Firelink is installing mobile data terminals and FireControl is developing the software to provide timely digital information on the way to a scene eg, information on how to extricate individuals from specific makes of cars.

"Response times will be minimised through real time appliance location monitoring and route planning."

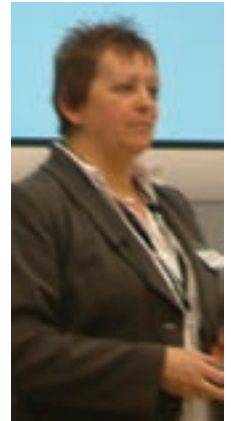
Every FRA will benefit from at least one of these improvements, and the working environment for many control staff will also be enhanced.

Pauley concluded by saying how following a review last summer with supplier (EADS), CLG concluded it was necessary to reschedule elements of the project to reflect a number of technical challenges which had arisen.

"Updated plans are being delivered in close partnership with local authorities, the Fire and Rescue Service, and Suppliers – and they will be subject to regular review to ensure they are on track and deliverable."

The Project now aiming to cut over first three RCCs in North East, East Midlands and South West by the summer of 2010, with final FRSs cutting over early 2012.

"A final thought before questions – are networked controls the future for all emergency services, or just the Fire and Rescue Service?"



Chief Executive, South West Fire Control, Julie Burnett, is confident that the project will succeed if everything that has been promised is delivered.

Letter to the Editor – FiReControl interoperability concerns

Dear Sir,

The Regional Members Meeting of BAPCO held at the new regional Fire Control Centre at Taunton was impressive, both in the content of the day with quality speakers and of course the venue itself, a state of the art facility of which the Fire Service have every right to be very proud.

Graham Pauley from Communities and Local Government (CLG) carried out a detailed description of the background, purpose and progress of the FiReControl. This was very reassuring in that the capacity of the facility was very real whilst sat in the high tech environment with the sparkling new facilities. However there was one small area that caused me just a little concern.

I think it would have to be accepted by everybody at the event that there are very few incidents – either day-to-day bread-and-butter incidents or the larger scale critical or emergency incidents – that involve just the Fire Service. Police and Ambulance colleagues in the room will, I am sure, all have been thinking along the lines of: "Exactly

how will we fit into the processes that support the control of incidents from this exciting new facility?"

For me that naturally raised the question, "What work is being done to make sure that the interoperability exists between at least the three primary emergency services; Fire, Ambulance and Police, to ensure the transition from the current set up to the new facility will be seamless and, importantly, effective?" No one at Taunton that day seemed to be able to answer that.

A whole host of different processes and communication lines currently exist in the South West between the three services and indeed other partner agencies and these will quite naturally change as the new facility comes on line. Experience has shown that one agency making significant moves either through a change in process or a change in location, or even both, can have a huge knock-on effect with the other two agencies if this transition is not managed in a fully informed manner.

The concern that I would have to raise therefore would be over the

apparent lack of communication between the three agencies with regards to the implications of this significant move for Fire. It would not be a case of simply diverting the phones and giving the partner agencies a new number to remember but there would be a whole raft of implications including new relationships to build up, working processes, expectations of the agencies moving outside of their "comfortable" local arrangements and just general day-to-day working practices that have enabled the three agencies to work together in such an extremely effective manner thus far.

So, overall a very impressive morning at the conference with, as I said, great reassurance regarding the ability of Fire to carry out their functions with their excellent new facility, but just that one area of concern around impact and interoperability.

Mark Organ,
Chief Inspector,
Contact Management
Department,
Gloucestershire Police.

Sean Tregonning, Communications Manager, EADS, explains to delegates some of the technical benefits that the FiReControl Project will deliver.



“At the beginning we will be staffing to a higher-than-needed level of staffing and, by the time the final wave of control rooms cut over, we’ll be at our steady state level.”

➤ Julie Burnett, Chief Executive, South West FiReControl.

Julie Burnett, Chief Executive, South West FiReControl: Delivering FiReControl in the South West

Julie Burnett has been based in the South West Regional Control Centre, Taunton, for 12 months, and has a small team comprising a senior operations manager, a building support manager and an office manager.

“The project is challenging to say the least,” admitted Burnett, outlining how each of the nine RCCs will be a carbon copy of each other, with the Taunton RCC itself covering the South West from Gloucestershire to Cornwall and Wiltshire, including the Isles of Scilly. “However, I am confident that if everything that has been promised is delivered, this project will succeed.”

The seven control rooms currently serving the South West will close and the services will move to Taunton. “That may mean there will be some job losses but we are working closely with the fire and rescue services on this area and trying to provide as much information as possible to staff to assist them in making a decision.”

The SW RCC will be amongst the first three to go live in July 2010, along with the North East and West Midlands. The three were chosen for the fact that they received the least number of emergency calls. Burnett explained how the RCC will be staffed prior to steady state: “At the beginning we will be staffing to a higher-than-needed level of staffing and, by the time the final wave of control rooms cut over, we’ll be at our steady state level. During the transition period, we will also have an additional nine control room operators to provide extra support where required.”

The company that operates the SW RCC is South West Fire Control Service Ltd, a local authority-controlled company wholly owned by the fire authorities in the South West. “We were incorporated in September ‘07 and we started from a blank sheet of paper. We have a board of directors representing each of the region’s fire authorities and they meet on a monthly basis. Since our inception, we have made progress in many areas and continue to do so.”

Some of the key issues facing the SW RCC are people-related, triggered by the region’s geography. The fact that the South West RCC covers a geographic area of nearly 24,000 km², with a distance from end to end of over 350 km, means that a daily commute will be impractical for some people.

“Unfortunately, control room operators in the South West, who do an excellent job, do face having to make a decision as to whether they wish to transfer to the RCC. Geographically, the South West covers a large area, and it may not be possible for some people to move to the Taunton area or to commute to the RCC. I am keen to ensure we have as many experienced control room operators as possible joining the team, but also appreciate it may not be possible for everyone.”

Another issue facing those who do decide to move is the fact that working for the SW RCC will mean taking a step back from the fire and rescue service. “Once here, they won’t be employed by the FRS, although they will be continuing to provide a service to them and we understand people are keen not to lose those links.” Burnett clarified, however, that the SW RCC was not a case of “privatising fire”, because the organisation was still wholly owned by the local fire authorities.

There are a high number of stakeholders in the enterprise, and during her presentation, Burnett outlined a few of them, including: FRS, control room staff, CLG, other RCCs, politicians, suppliers, agencies, representative bodies, members of the public.

“We welcome the opportunity to take part in events like this, not least because it can help to dismiss rumours. No, we don’t have a tunnel to the motorway. There won’t be any fire appliances based at the RCC.”

Burnett summarised by saying that everyone was working to have all the answers in place by 2010. “We would have been ready delay or no delay in October this year, but the delay means we can ensure we get it absolutely right, with additional time for testing and training.”