



MAIT: an urgent need

The Home Office talks to **Philip Mason** about how the Grenfell Tower Inquiry recommendations have influenced the decision to roll out the control room solution to all English fire and rescue services

In February of this year, BAPCO ran a roundtable event focused on the future of Next Generation 999 technology.

A large proportion of the day – which took place in The Rag Army & Navy Club in London – was devoted to the various new ways in which members of the public can now get in contact with the emergency services. That could be via social media, newly developed emergency apps, innovations such as eCall and so on.

As well as exploring ‘public facing’ technology, however, considerable time was also spent discussing how UK emergency services can share information more efficiently among themselves. A key piece of that conversation is MAIT (aka Multi-Agency Incident Transfer), the central aim of which is to enable control rooms to exchange incident information in more or less real time without the use of voice.

For those who don’t know, MAIT has had an interesting history up until this point, with the concept having first been developed by BAPCO itself. This work was carried out in 2016 in partnership with the Cabinet Office and emergency services partners, with the solution subsequently existing in the intervening years as “as an open standard for government”.

To quote the organisation itself on the need for the standard: “Many of us have experienced the issues caused by the need to share accurate information, at speed, often with many partners, during an emergency incident.

“Even today, the solution for many organisations is to make a phone call. This ties up a control room operator at both ends and, even with direct lines, it can cause queues and further delays.”

Skip forward nearly a decade and MAIT is currently at one of the most important moments in its history, with funding for the technology signed off by government, with the eventual aim of rolling out across the Fire and Rescue Service in England. The process of finding a supplier is also well under way, with a decision on procurement expected in June.

The reason for this recent burst of activity is not difficult to understand, with the Grenfell Tower Inquiry having made several important recommendations around emergency services comms. This included the ways in which separate agencies and services ‘talk’ to each other in times of crisis.

Grenfell recommendations

Keith Donnelly is the Fire and Rescue Service (FRS) comms advisor at the Home Office. Discussing the recent history of the project, he says: “BAPCO originally wrote the standard, with only limited agencies using the technology at the moment.

“Up until now, it’s been rolled out with the Welsh Fire and Rescue Service, police and ambulance, but nowhere else. London Fire Brigade



was part of a pilot project, but they've never gone live with it. That's been the situation up until the Grenfell Tower Inquiry recommendations were published."

The recommendation specifically relevant to the development and use of MAIT is known as 33.16. This refers to the sharing of information between control rooms, with the document explicitly stating its expectation that "steps be taken to investigate methods by which assisting control rooms can obtain access to the information available to the host control room."

According to Donnelly, three methods of doing this were subsequently identified, in order to fulfil the above obligation. He continues: "In the Home Office, we've obviously been involved in the [implementation of] the Grenfell recommendations. Part of that was 33.16, which we looked at very closely. The work was ultimately split into three."

The first part of the programme involved what Donnelly calls the creation of a "broadcast talk group", allowing information from the effected control room to be broadcasted to every other control room, using Airwave. This is now in place and has been used several times.

The second part meanwhile was the instigation of what ultimately became known as Operation Willow Beck, which the National Fire Chiefs Council website refers to as a "national fire service 999 call redistribution scheme."

Donnelly explains this as a kind of fire control room mutual aid, through which services are able to take the pressure off their own staff by distributing 999 calls to other FRS control rooms. This too is also currently in place, with organisations now having the ability to invoke Operation Willow Beck during large scale incidents, via BT.

Contextualising these two initiatives in relation to Grenfell itself, he says: "On the night of the Grenfell Tower fire, LFB were getting quite a lot of 999 calls about [the incident] and encountering delays in answering queuing 999 calls. Prior to the introduction of operation Willow Beck, BT would call on the assistance of other FRSs to take 999 calls for a service that was experiencing delays in answering 999 calls.

"This happened during Grenfell, with around six other services taking 999 calls from inside the tower. The main challenge was keeping these assisting control rooms up-to-date with situational awareness from the incident. This can be an issue with a fast-moving incident where information is coming quickly.

"In that scenario now, the FRS can put out an immediate announcement to all control rooms and give full details relating to the incident. Invoking Willow Beck meanwhile enables calls to be redistributed according to capacity and size of assisting FRS control rooms.

"The latter runs on an algorithm which generates who to put the call through to next, depending on the percentage of calls previously agreed upon and who took the last call."

The final piece of the puzzle

While the broadcast talk group and Operation Willow Beck are clearly crucial, neither address the central problem of how to get incident information back to the affected control room. This is where MAIT comes in.

Donnelly explains: "The third piece of the jigsaw is MAIT. The

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first two initiatives helped the assisting control rooms to get the information. But then the problem was getting it back to the effected control room during the incident, because all the operators are busy on the phone taking 999 calls."

Discussing the planned roll-out itself, he continues: "Clearly, we're not able to mandate anything, but with the recent government funding for the technology we can now provide the resources for each English FRS to adopt it.

"Government funding will pay for MAIT to be installed, and for the running costs, for a period of time. Once MAIT is up and running, the individual services will continue running it themselves."

As mentioned, procurement for a preferred supplier is now well under way, with the bidding process having finished earlier in the Spring. Once the preferred supplier is chosen, the roll-out across English FRSs will begin in earnest.

As someone who's written about MAIT a few times, it's difficult not to be struck with just how long it's taken for the vast majority of UK emergency services to adopt the solution. The benefits of it are obvious after all, with the technology already having proved itself for the best part of half a decade in Wales.

For Donnelly, this somewhat glacial pace of change can be explained by governance, as well as the sheer number of public safety organisations existing outside of the Welsh border. The Grenfell recommendations meanwhile have provided exactly the kind of incentive required for the adoption of potentially life-saving (comparatively) new technology.

"I think there have been a variety of factors," he says. "Services always have competing demands for finances, but following Grenfell, this is now a priority. Every chief fire officer will want to make sure they have the most up-to-date technology in their control rooms to make the transfer of critical information as quick and efficient as possible."

The plan to roll-out MAIT to all English FRSs is now underway, with the hope that every emergency service adopts the technology in the future. Discussing the potential evolution of the technology itself meanwhile, Donnelly believes that the next iteration could involve something like tracking to monitor available assets.

But this apparently isn't something that anyone's seriously considering quite yet. As he says: "Let's get the roll-out finished first!" 