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POLICE**



Planning for the worst

The BAPCO Journal talks to Motorola Solutions about the rollout and use of Airwave during Her Majesty the Queen's funeral in September last year

The UK underwent a seismic shift in public life in September of last year when the Queen sadly passed away at the age of 96.

Needless to say, the impact on the mood of the British people by the death of the Queen was profound, as encapsulated by the subsequent – much-needed – 10-day period of national mourning.

Important events taking place during this time included a six-day lying in state, which was notable not only in and of itself but also for the level of commitment demonstrated by members of the British public wanting to pay their respects. As no-one will need reminding, around 250,000 people eventually visited Westminster Hall, with queues famously stretching back as far as 10 miles up the banks of the River Thames.

The culmination of the mourning period, meanwhile, was the state funeral, which took place in Westminster Abbey on 19 September. This huge event – the first of its kind since the death of Sir Winston Churchill in 1965 – attracted global interest, while essentially also bringing the centre of London to a halt.

Needless to say, Her Majesty's funeral required massive involvement from the UK emergency services, which were integral in making sure the unprecedented plans went smoothly, while at the same time keeping the public safe. In order to accomplish this, public safety personnel needed high-performance, fully integrated communications technology.

Years in the planning

The plan for the Queen's funeral was known as Operation London Bridge. It had, according to a well-known online encyclopaedia, been in existence "as early as the 1960s" and "been revised many times" until Her Majesty's death last year.

An integral part of that plan was emergency services communications, which in large part meant the provision and use of Airwave. For the very few readers who might not be aware, the latter is a TETRA-based digital narrowband technology, provided to the UK emergency services by Motorola Solutions.

Giving a broad overview of the emergency services presence on the day, Motorola Solutions' UK and Ireland head of sales, Fergus Mayne, says: "The state funeral of Her Majesty was the first in Britain since the death of Winston Churchill, and it was a huge undertaking.

"To give some idea of scale, as a policing operation, it was double the size of the 2012 Olympics or Notting Hill Carnival. Obviously, it was a huge event for us as the supplier of Airwave."

He continues: "On the day, we had over 12,000 end-users across the blue-light emergency services, military and other supporting public safety organisations using the network. To provide a different context, that's twice as big as any of the other major operations which Airwave has ever been involved with."

“We had people in the control room, helping, assisting and giving advice on the best way to handle the network”

“The whole operation was years in the planning, while at the same time we obviously had to be ready to take account of any changes that might have happened at a moment's notice. Once the operation was under way, we only had about 10 days to put our side into place.”

Teressa Latimer is Motorola Solutions' head of business relationship management for Airwave. Giving an overview of the logistics of the operation, particularly around last-minute plan changes, she says: “As mentioned, just like the emergency services themselves, we have been planning for Operation London Bridge for the last 10 years. Those plans were very much in place.

“However, sometimes plans change; the only option in situations like that is to be agile and adapt quickly in order to meet the users' required needs on the day.”

She continues: “When it became apparent that something might be imminent [in regard to the Queen's health], the operation's major incident team went to their designated post in order to support the emergency services for the duration of the event.

“As we at Airwave only focus on the needs of emergency services and public safety organisations, we appreciate their requirements. Indeed, some members of our teams are actually former emergency services staff.

“From an operational point of view, if emergency services change their procedures for these events, we try to mirror that in our approach as well.”

Going back to the arrangements for accompanying the Queen's journey from Scotland to London, Latimer says as they learned about the situation, one of her team was immediately dispatched to the police control room located in Glasgow. From there, they were able to give feedback to central Airwave control about all aspects of the operation in relation to the network at that point, as well as any further requirements.

Once Her Majesty left Balmoral – according to Latimer – around 50 Airwave terminals were used by the emergency services personnel who accompanied her. After she reached Edinburgh, meanwhile, the number of Airwave users increased from the normal 1,000 to around 3,500. In this instance, that also included non-blue-light Airwave users, with Latimer liaising with the local authority to

make sure they had the sufficient number of devices.

At the same time, other team members were liaising with Thames Valley Police and the Met regarding arrangements for when the Queen reached the capital. “We were all working very closely,” says Latimer, “planning what was going to happen when the Queen arrived in London.

“In Thames Valley, again, we had people in the control room, helping, assisting and giving advice on the best way to handle the network. We were embedded right until the end of the operation.”

Network management

While obviously no small feat given the circumstances, supply of the requisite number of radios (alongside constant communication with the client) could be considered a baseline for what might be expected from a supplier in a potentially high-impact situation on the scale of Operation London Bridge.

Where the story gets really interesting, however, is the challenges which had to be overcome when it came to Airwave as a network, which had the potential, as might be expected, to be put under a considerable level of strain.

According to Latimer, a variety of





The operation brought the centre of London to a standstill

measures were put in place in order to provide the requisite coverage and keep the network working at maximum efficiency. As it turns out, this required a certain amount of agility on the part of Motorola Solutions as well.

Discussing this, she says: “In the first instance, we had to put in extra capacity at critical sites such as RAF Station Northolt, as well as some sites on the London Underground, with the help of Transport for London, because of the number of users anticipated to be using those stations.

“Special solutions were put in place to cover the hotels where the various dignitaries were staying, as well as monitoring the route of the procession incredibly closely.”

She continues: “Without giving too much detail about the locations involved in providing extra coverage, the deployment of auxiliary base radios and base sites is essential. With the predicted number of users, it is possible to ascertain the base sites and base radios required, again, working alongside the customer.”

She adds: “We moved engineers into specific areas, so if anything happened to a base site, they could get there quickly in order to attend to it. A regular lead time for planned special events that need extra capacity is normally around 30 days. For Her Majesty’s funeral, everything was done within 10 days or less.”

Mayne rejoins the conversation, elaborating on coverage strategy for potentially high-risk sites. This always involves what he calls an “over-calculation” of what might be required.

Returning the conversation back to the hotels where dignitaries were staying, he says in the case of those sites, it would be necessary to anticipate real-world emergency services response in the event of a serious incident. That could include the number of police officers – armed and unarmed – that might be required, as well as ambulance access, and the potential role of dignitaries’ own

security guards.

With such a considerable increase in users, another crucial factor which needed to be taken account of at a network level was radio discipline. With that in mind, while she can’t go into detail, Latimer does confirm the presence of customers’ own Airwave Tactical Advisors across the piece.

Another crucial aspect, according to Motorola, was the ability to carry out what it calls dynamic network management. Adjusting capacity enabled its network management team – and emergency services users themselves – to implement necessary changes throughout the event.

According to figures issued by the company, over 850 user talk groups were used in order to “facilitate the substantially expanded number of users and mobility”. More than 61,000 changes were implemented during the 10-day period, meanwhile.

Discussing this, a spokesperson says: “By adjusting the network resources dynamically to the exact needs of the users and movements, better traffic and user management was enabled. [This was] not only for activities for Operation London Bridge, but also to ensure the continued seamless network service for the emergency services overall.”

Operation London Bridge is a good example of the continuing effectiveness of Airwave. According to Motorola, planning is now also well under way – in collaboration with public safety organisations – for the UK’s next major public event: the coronation King Charles III, taking place in May. 🇬🇧