

## Case Study

# Metropolitan Police Service – MetRadio



## SOLUTION

As part of the largest outsourcing arrangement of its kind, in 1999 Arqiva took responsibility for the operation, maintenance and enhancement of the MetRadio UHF-FM trunked divisional radio scheme, the VHF-FM mobile system for the main force, and various smaller systems. The strong relationship that has developed makes Arqiva's experience and resources available to help MPS implement its challenging communications strategy effectively, and provides for immediate response and fast resolution of problems.

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*Kevin Taylor, Communications Client Unit,  
Metropolitan Police Service*

### Business issue

The Metropolitan Police Service needed to ensure the quality and continuity of its large, VHF and trunked UHF analogue radio schemes, while establishing a technology partnership to assist with the move to new technologies such as mobile data and digital radio.

## BENEFITS

- High-quality, resilient communications for operational policing that meets the demands of a capital city.
- Experienced technology partner that combines technical know-how with an understanding of operational policing and so is able to help implement MPS communications strategy in the most effective way.
- Fast and instinctive 'no quibble' response from Arqiva, backed by committed service and support levels (99.98% availability).
- Arqiva takes responsibility and cost risk for maintaining the network.
- Arqiva has introduced network improvement at zero net cost to MPS.
- Access to technical expertise and new technologies without R&D investment.
- Excellent working relationship built on mutual trust.
- Performance reporting recognised as 'best of breed'.
- Improved visibility and consistency of costs.

## Stepping into outsourcing

Operating in a high-density population of over seven million people, London's Metropolitan Police Service (MPS) has one of the most challenging law-enforcement, public order and security tasks in the world.

The Service first issued personal radios to officers in the 1960s, but as demand built up over the years, radio service inevitably suffered. To restore the high-quality radio communications and support that it needed, in the 1990s the Service began one of the largest radio communications projects in the history of public safety, eventually awarding a turnkey project to Motorola that resulted in the ground-breaking trunked personal radio system 'Metradio'. By the late 1990s, the scheme covered 85 base station sites, over 27,000 hand-portable units, and hundreds of ancillary units.

This massive analogue radio scheme was the legacy handed to Arqiva in 1999 when MPS began to outsource various communications and IT functions. With the award of a five-year, £75 million radio communications contract, MPS made Arqiva responsible for the operation, maintenance and enhancement of the MetRadio UHF-FM trunked divisional radio scheme, the VHF-FM mobile system for the main force, and various smaller systems.

Kevin Taylor, now head of Communications Services Support for the Metropolitan Police, was contract manager for the first outsourcing contract, and oversaw the transfer of the radio service. "We were very pleasantly surprised with the way that Arqiva handled it – taking up the reins in a very abbreviated transition period of one week instead of two months. This was outstanding, and since then there has been no major user complaint. There is no question that in terms of support, Arqiva has been excellent from day one."

While Arqiva's original remit was largely to 'look after' radio communications, the role has evolved substantially during the contract period. This has enabled Arqiva to use its understanding of both radio and operational policing requirements to develop a technical infrastructure that helps MPS put its communications strategy into action in the most effective way. Discussions are now under way to extend the contract for a further period, and to widen it to cover additional work that Arqiva is already involved with (such as mobile data and preparing for the move to Airwave, the TETRA based digital radio system).



## PRODUCTS AND SERVICES

- Outsourcing agreement
- Terminals Managed Services (TMS)
- 24x7 Help Desk Services
- Control room installation, commissioning and maintenance
- Network design and installation
- Planned/unplanned event support
- Product assessment.



### Getting more out

As radio outsourcing was new to the Met Police, at the start there was close attention to managing the contract to ensure that service was at least as good as before. Keen to ensure continuity, MPS based the original outsourcing contract on established practices. But over time much more flexibility has been introduced so that Arqiva can give MPS more of what it does want (like fast response to problems), and less of what it doesn't (certain types of reporting, for example, have proved unnecessary).

Interfacing processes and protocols have been refined and bedded down as both MPS and Arqiva gained experience, and as relationships have stabilised, all parties have developed a mutual understanding of each other's operations and business needs.

MPS has always retained its responsibility for communications strategy, but Arqiva has been able to add value by supporting the MPS strategy with a combination of thinking ahead and technical innovation. For example, to build extra resilience into the pan-London radio scheme, Arqiva took the initiative of introducing dual-link microwave systems. This is an Arqiva capital asset, so involves no extra cost to MPS.

### Can do, will do

Through Arqiva's experience with other police forces and organisations in which communication is critical, Arqiva people instinctively go to solve problems regardless of red tape or which contractor is responsible for that area of the system. Conscious that the customer wants a solution without having to read a contract or discuss the process, the Arqiva response is typically to understand the problem, scope it, and deal with it. Because of this, Arqiva is viewed not only as a 'can do' organisation, but essentially as a 'will do' one.

The relationship with MPS is such that Arqiva is highly sensitive to the operational need for immediate support, knows through experience what needs to be done, and adopts a 'fix now, paperwork later' attitude – confident that commercial agreements can be sorted out when the emergency is past. There have also been occasions when Arqiva engineers have spotted a potential failure in a non-Arqiva system, and – knowing that failure would be catastrophic for MPS – have taken the initiative of keeping the system going until the relevant contractor can take over.

"A major power failure in the system underlined Arqiva's responsiveness," Kevin Taylor comments. "The radio service was brought back very rapidly, earning Arqiva great praise from the highest levels in MPS. We have a particularly good working relationship in terms of the continuity of the service and Arqiva's willingness to do whatever it takes to keep the service running. We deliberately asked for that level of support because it's vital for officers to have radio service when they need it," he adds. "It has been very satisfying to see how Arqiva has embraced this."

### Seizing the opportunity for change

In the Met Police's vision of its communications future, it plans – in this first decade of the new millennium – to make the move from analogue to digital radio, and so benefit from the vast new functional capability that digital technology allows. With this major change now approaching, MPS is seizing the moment to overhaul and optimise the entire network. In common with most large organisations – whether public or private – MPS has some older systems that make it difficult to share data held at different sites. Because of this, the communications overhaul will include crucial links to strengthen its ability to share information, and to locate and mobilise the right resources at the right time for the job in hand.

Along with managing the analogue systems, Arqiva is facing the challenges of helping MPS prepare for digital communications on both radio and IP networks. “Arqiva procured the first Airwave terminals for us,” says Kevin Taylor. “And is supporting the 900-plus terminals that allow access to areas outside of central London where Airwave is already live. As part of its service support, Arqiva liaises closely with the service support centre of O2, the network operator.”

### Trusting Arqiva’s experience

The widening of Arqiva’s outsourcing responsibilities has seen MPS moving the management of service delivery and subcontractors to Arqiva. For example, contracts that MPS holds with Motorola for trunked radio system support; with BT for ground-based radio networks; and with a range of suppliers for project engineering and systems maintenance; are all now managed by Arqiva in a one-stop-shop arrangement.

Other radio communications requirements have also been passed to Arqiva as additions to existing services. Mobile data is one of the areas where the value of Arqiva’s experience has been recognised, and the company has been working on a large-scale project that will form the basis for making police mobile data available across its substantial vehicle fleet.

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Arqiva’s grasp of both radio and operational policing aspects of the project helped smooth the way for the first-phase operational roll-out during 2002/3. With this phase successfully completed, Arqiva is now planning the ongoing programme.

This involves not only looking after what is in place today and ensuring that systems are fully functional from both hardware and integration standpoints, but also laying the foundations for introducing mobile data across the whole MPS area when hardware evaluations are complete.

### If it’s radio, it’s a job for Arqiva

The main role for which Arqiva is contracted is to run the MPS radio communications system to deliver near-100% (99.98%) system availability. To achieve this, Arqiva engineers clear faults within targets defined in Service Level Agreements, regardless of the number of people and resources it takes. This means that in shouldering the responsibility for delivering the required level of service, Arqiva also accepts the cost risk associated with making sure that targets are met.

As well as managing the logistics of delivering services and maintaining individual-user radio units,

Arqiva manages the third-party contractors who make a substantial contribution to the radio service. The whole contract is managed through more than 80 different service templates covering all levels of service – from mission critical and strategic through to end-to-end managed services (including subcontractor management) and routine maintenance.



Arqiva also assesses and tests new products. For example, in evaluating units for acoustic trauma, Arqiva establishes that when operating as part of a system, the units' audio output falls within MPS-defined noise parameters.

"Arqiva has also been involved in our assessment of terminal equipment for TETRA," Kevin Taylor notes. "It has also provided a lot of information on equipment that has been very useful for our own decisions within MPS, and also for the recommendations that the Group Procurement service provides to forces around the country."

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In addition, requests for specific add-on radio facilities (such as marine radio, in-building/shopping mall coverage and mobile data) are also handled by Arqiva. The company brings together the right package of services and skills, and manages the project through to completion. One important project managed by Arqiva was the creation of fallback control centres designed to restore radio systems immediately following a disaster.

In addition, because MetRadio is a dynamic tool and MPS' needs are constantly evolving, there is a continuous requirement for configuration management. Because of this, Arqiva brought its expertise in trunked radio talk-group and configuration management into a centre of excellence that serves MPS – for example to provide secure and reliable communications between individuals in defined talk groups working in specific functions or one-off operations.

As MPS gets ready to 'go digital' with the Airwave system, it can benefit from Arqiva's practical experience. The company was a pioneer in digital technology, and with MetRadio, already manages one of the largest public-safety trunked radio networks in the world. For a successful move to digital, it's vital to understand what MPS needs in its day-to-day operations, so the Arqiva teams that have delivered MetRadio service and looked after some 27,000 users over the years of the outsourcing contract are the same teams that will be moving MPS onto the Airwave programme.

### **Respect is mutual**

The excellent relationship between MPS and Arqiva teams has no roots in historical alliances, and has been built up entirely on the basis of respect for each organisation's professionalism. Among the factors that



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MPS acknowledges have helped to build this mutual trust are the ease of doing business with Arqiva, the company's understanding of MPS operations, and the smooth integration of former MPS communications engineers into the Arqiva team as part of the outsourcing arrangement. Towards the end of the five-year contract, over 90% of the staff who transferred to Arqiva from the former MPS Communications Unit are still in place.

One of the first moves Arqiva made early in the initial contract was to move key support teams into purpose-built premises in Central London. This brought all management and engineering activities into one Customer Support Centre, and physically close to the customer. But arrangements are flexible enough for radio communications specialists to work where they're needed as circumstances dictate – so that Arqiva may assign staff to work alongside MPS teams in MPS facilities, and vice versa.



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“The introduction of the Support Centre has made an important addition to service continuity,” says Kevin Taylor. “Arqiva has ‘mirrored’ the previous control system at Scotland Yard – so if close support became necessary for any reason, the team has the option of moving back and activating the dormant system.”

### **‘Best of breed’ reporting**

The contract is very tightly managed through monthly reports and reviews that examine all aspects of service delivery and performance.

Every month, Arqiva provides statistical data detailing performance against target SLAs, project progress, and use of resources. The MPS head of radio services chairs a monthly meeting at which these reports are reviewed. Other meetings with Arqiva are scheduled as appropriate – including meetings with senior users of the radio service – but at a less formal level, Arqiva and the MPS Radio Services team are constantly in touch.

Overall strategies are reviewed several times during the year, with Arqiva and MPS senior management meeting to discuss and share MPS’ communications strategic planning and Arqiva’s strategic developments. “MPS outsourced radio,

telephony and computing services all at the same time in the biggest public sector outsourcing initiative of its type,” says Kevin Taylor. “The Arqiva contract that forms part of this is considered to be extremely strong, and as a result we are often asked by other forces for advice on outsourcing, and especially for ‘statistics on service’ information. The Arqiva monthly report to MPS is recognised as excellent, and has been made available to other forces as an example of ‘best of breed’.”

### **Moving forward together**

The MPS Directorate of Information is committed to a very stretching technology strategy for the Force, so in moving forward together, both Arqiva and MPS are constantly expanding their technical capabilities. The outsourcing relationship assists this process, because while excellent radio communications and support are the main goals of the contract, it also leaves Arqiva free to use its technical and practical know-how to help MPS put its strategy into action in most effective way. Further, since costs are agreed at the start, it makes budgeting easier. A third advantage is that it helps MPS stay at the leading edge of technology, without having to invest independently in R&D: since communications technology is Arqiva’s core business, MPS can have access through Arqiva to new developments as they become available.



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