



**AIRWAVE**

Critical communications  
for a changing world.

# **Critical communications services overview.**



**We operate the world's largest multi-agency TETRA public safety network for public service agencies globally. Our intimate knowledge of the public safety user environment and its associated technology has enabled us to develop tailored services, which are supported by highly trained staff.**

**From working directly with over 300 public safety agencies, we have also gained an understanding of your operational imperatives. The result has been the implementation of an ISO20000-accredited, service delivery model developed to address the specific requirements of the public safety market.**



## **Programme Management Office Set-Up**

Over half of all public sector projects are said to exceed their budget, complete late or don't meet their initial objectives. This can have serious consequences for public safety organisations: you will miss your targets or be unable to meet government mandates; new services or technology will be delayed or fail to work properly; and ultimately the public and stakeholders will lose their trust in you.

If your programme is suffering from delay or poor performance, then you can benefit from our Programme Management Office (PMO) consultancy. As part of our service we will undertake a review of your existing programme governance to create an effective delivery organisation for your programme. We will help you build a PMO that meets best practice in key areas including: schedule management; risk management; resource management; and change management.

We refined our programme management skills through the deployment of our TETRA network, which is the largest in the world, and are now able to share our experiences and lessons learned. We use PRINCE2 project management standards and have developed our own best practices around the deployment of TETRA networks.

### **Benefits include:**

- Efficient resource allocation
- Effective management of time and budgets
- Clear view of project interdependencies
- Improved customer and shareholder satisfaction
- Strategic objectives met



## Programme Recovery

There are a wide range of potential problems that you can face in any public safety network roll-out, but it can be difficult to recognise when the programme is in serious trouble. Acting before you miss any important project milestones will ultimately save you money and time.

Our Programme Recovery service is an extension of our Programme Management Office (PMO) consultancy specifically targeted at turning around a failing network build programme. Time, cost and quality are the three main factors in any programme and will look at all three in detail to see how we can modify your plans to help your programme meet its objectives. Our experts in public safety communications technology, finance and scheduling will take a deep dive into your programme, look at its constituent parts and how the network is engineered.

This service was born out of our own successful recovery initiative, which led to our network being delivered six months early and on budget. Our project was delayed and we had missed important milestones, so we stripped everything down to basics, analysed what was going wrong, and created a new delivery programme and organisation to recover from the failure. The key was to stop failing milestones and to deliver the project on time.

### Benefits include:

- Turn a failing project around
- Access expertise in technology, finance and scheduling
- Receive objective external analysis of programme failings
- Benefit from rapid deep dive and recommendations



## Security Management

Ensuring the confidentiality, integrity and availability of your data and communications is essential for public safety. But without a proper security management framework in place there is a risk that both could be under threat. Have you considered the possibility of a denial of service attack taking down your network or an unauthorised person gaining access to confidential records? Without a formal risk analysis being conducted it is difficult to define the impact any security breach will have on your organisation.

We provide a Security Management consultancy service to help you understand the risks your information faces. We can assist you in establishing, implementing, monitoring and continuously improving a management control framework for information security. The end result is a sustainable security policy linked to an information security management system that helps maintain availability and keeps your information safe, while balancing risk and cost.

We have more than a decade of security experience in public safety environments – in both implementation and security management. As a full ISO27001-certified organisation, we are ideally placed to advise you on implementing an information security management system. And our role in managing the world's largest public safety TETRA network can give you the confidence that we maintain the highest standards of information security both for ourselves and our public safety customers.

### Benefits include:

- Confidentiality, integrity and availability of information
- Confidence in asset control
- Reduced data and information leakage
- User appreciation and employee awareness of security policy
- Improved trust from stakeholders
- Cost-effective risk management



## Transmission Consultancy

Have you considered the impact that a failure in the transmission network will have on your public safety network? By its very nature the transmission network is the one element of the system that is exposed to an environment outside of your control and is at danger of being affected by events such as breaks due to road repairs or even vandalism. If your transmission network isn't robust enough to survive these events, then the service quality provided by your network will suffer and it could lead to long, widespread and costly outages.

At whatever stage of your network build, we can help you ensure that you have the most robust and cost effective transmission network possible. Whether you would like us to analyse and report on your existing transmission network or assist you in designing a new one, we can help with our market-leading consultancy. To understand your potential network weaknesses, we will carry out an extensive failure analysis on the design and provide recommendations based on best practice and our public safety network deployment experience. We can offer advice to ensure that you have the appropriate levels of redundancy, diversity and surveillance throughout your entire transmission network.

By building the largest TETRA network in the world, we have more experience than anybody of building highly-available public safety transmission networks. Our network serves some of the most difficult environments possible, from remote Scottish islands to dense urban areas and we have continually upgraded our transmission network to ensure the highest levels of service availability.

### Benefits include:

- Extensive failure analysis of network design
- Cost-effective design to meet availability requirements
- Meet contractual requirement for service level
- Draw on our extensive transmission experience
- Achieve the highest levels of customer satisfaction



## Quality and Service Management

The development of international standards in quality and service management means that organisations now have two cross-industry best practice standards upon which to base the development and improvement of an effective management system. If you are not using ISO9001 for quality management or ISO20000 for service management, the chances are that you have inefficient processes and your customer satisfaction could be suffering. Perhaps you can't get new handsets to police officers when they need them or fix a network fault within four hours.

We can help you incorporate best practices principles and techniques in quality and service management into your organisation. This will allow you to benefit from consistent and effective processes that support how you both develop and manage services. To achieve this, our consultants will examine your business operating model and structure, assess your existing business processes, identify process gaps or duplicates, implement new processes as necessary and implement a governance structure to support continual improvement. We will align your processes with best practice in quality and service management and build an effective management system that aids the provision of product and service to the customer.

We have extensive experience in both quality and service management in public safety networks environments. We gained our company-wide ISO9001 Quality Management certification in 2002 and our ISO20000 Service Management certification in 2006. The UK is one of the pioneering markets for service management using the IT Infrastructure Library (ITIL) best practice framework and together with the ISO20000 standard, we have embedded quality and service management principles throughout our organisation.

### Benefits include:

- Better quality of services
- Continual improvement of process
- Measureable and cost-efficient processes
- Improved customer satisfaction
- Meet service level agreements (SLA)



## OSS/BSS Consulting

Operational support systems (OSS) and business support systems (BSS) are crucial tools for network operators. Without them operators would find it difficult to provision services, manage faults, process bills or collect payment. The TETRA public safety network is unlike GSM networks, both in terms of its size and higher security requirements, and this has an impact on the OSS/BSS tools and processes that are suitable.

As part of our consulting service, we will evaluate your existing OSS/BSS systems and processes, or advise you if you are setting up your network for the first time. Even if you have a fully-functional OSS/BSS system, it is possible to add functionality to make it more efficient or better suited to public safety networks, and our consultants will advise you on the best approach. OSS systems help you understand your network integrity and what is happening both on the network and in the user base; while BSS systems will improve your efficiency and give you much improved business intelligence.

As the operator of the largest TETRA network in the world, we pride ourselves in our public safety network OSS/BSS expertise. We have moved our OSS/BSS systems through multiple technology refreshes and understand the complexities of rolling out additional functionality in the network with minimal service disruption. Our experience in this area is second to none and we are happy to share it with you.

### Benefits include:

- Improved service and satisfaction
- Meet customer needs
- Operational management of network and improved business efficiency
- Supporting best practice processes (such as the ITIL framework)
- Better business intelligence to understand your and your customer's operation
- Improved financial control



## Resilience Design

Business continuity is an essential part of public safety network design. These networks are expected to operate in the most challenging conditions to give the emergency services access to key communications and secure data at all times. You need business continuity to maintain operations in the event of any failure with minimal interruption to your operations or loss of data – whether the failure is a major disaster such as a data centre flooding or problems such as your email system going down for eight hours.

Through our Resilience Design consultancy, we can help you design and implement support systems that will ensure continuity of service in all scenarios. As part of the service we will analyse your network configuration and systems that you have in place. For example, we will check your network resiliency, off-site systems and fail-over procedures to ensure that you have no single point of failure.

We have proven experience in resilience design through operating and designing the Airwave network in the UK. This involved implementing high availability and resilient solutions, which are proven and have been used in real emergencies. Our experience with public safety networks means that we understand what you need to do to ensure business continuity, and we can advise you on the different techniques and technologies that can help you meet your goal.

### Benefits include:

- Seamless business continuity in face of disaster
- Verification that network and services are operating correctly under disaster conditions
- Always able to configure network correctly
- Monitor service level agreements (SLA) continuously
- Retain revenue generating and audit capabilities

## Systems Integration

Combining multiple technologies into a coherent system is an essential part of information communications technology (ICT). However, lack of experience in systems integration poses a serious threat to projects, with real risks of cost and time overruns. This is exacerbated by increasingly larger and more complex systems involving many more new technologies and suppliers based across the globe.

If you do not have systems integration skills or want to avoid the risk of undertaking projects yourself, then consider our systems integration services. We manage the entire systems integration task, including managing and supervising subcontractors, testing subcomponents, building the system, and testing its overall function. Systems integration is a challenging task and we can help your system meet all your requirements and be delivered on time and on budget.

We are focused on systems integration for public safety services and have experience in projects for both network operators and their customers. Our experience ranges from the very large with our own network deployment, to smaller projects for our customers, such as control room systems. Our experience in the public safety area means that we are fully apprised of their life-critical, security-sensitive nature, and all our work is guided by those principles.

### Benefits include:

- Transfer project risks
- Integrate new technologies
- Access specialist skills
- Keep to schedule and on budget
- Successfully manage multiple suppliers

## About Airwave

Public safety and communications technology is all that we do. We have invested significantly in systems and processes that closely match our public safety customers' operational needs. Our solutions are designed to help deliver maximum performance, maximum effectiveness and greatest return on investment. And we understand the operational needs of the emergency services and the impact that service failures have on police officer safety, ambulance reaction times and patient care, fire tender reaction times and personnel safety at the incident.

We own and operate the world's largest TETRA public safety communications network, which covers 100% of the population and 99% of the land area (230,000 square miles) of the UK using 3,800 base stations. We designed and built this secure mission-critical digital radio network for the UK Government and it is dedicated for the exclusive use of the UK's emergency services and public safety organizations. This national communications network was delivered six months early and on budget.

Over 300 public safety organisations and approximately 250,000 users now use us for their critical communication needs. We have unrivalled public safety experience of offering design, development, project management, implementation, maintenance and support of mobile communications solutions across multiple network bearers (TETRA, GPRS, GSM, etc.). Our comprehensive product portfolio includes radio and telephony services – voice, data, short messaging, devices, gateways, applications and air-to-ground communications.

## Find out more

To talk more please get in touch:

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