REDUCE COMPLEXITY WHILE ENHANCING SYSTEM AND SERVICE PERFORMANCE

MOTOROLA MANAGED SERVICES FOR MISSION CRITICAL COMMUNICATIONS

Your organization would not send first responders out into the field alone. You prepare and equip them by providing the two-way communication they need to do their jobs. There is the never-ending search for better and faster tools to keep them safer with more effective real-time, mission-critical voice and data solutions.

So who supports you in delivering these solutions?

Where do you turn when the rapid forward march of technology requires more of your attention every day, taking away focus from your core mission? Who can help you deal with the ever-shrinking budgets, the never-ending demands on your limited resources, and the skill gaps that seem to keep getting in the way of your day-to-day operations?

More and more, you are expected to provide communications that are as rock-solid and accessible as a utility — just plug it in and it works — while behind the scenes, you must simultaneously manage the dozens of issues of an increasingly complex operating environment. When your front line can't afford to be off-line, how can your organization stay ahead?

Motorola can help you manage the complexity and the risk.

THE CHALLENGES

You already know what it takes to operate a complex two-way radio communication system today – everything you have ... and then some.

You are tasked with running a reliable radio system that is well integrated with your organization's mission and priorities. All that would be more than enough to keep you thoroughly occupied, but you also have additional complex challenges to address:

- **Rapid technology advancement:** Nearly every type of voice and data transmission is carried over IP networks today, including two-way radio. The quick adoption of IP is only the beginning of the technology changes you will face. While you scramble to keep up with immediate technical demands, you also need to be ready with effective long-term migration plans.

- **Budget constraints:** At every level, in every region, government budgets are under close scrutiny. Because new capital is scarce and securing funding is difficult, many agencies are looking for creative ways to meet their advanced communication needs while staying within tight budgets.

- **Resource demands:** Rapid advances spurred by the move toward converged technology place heavy demands on technical skills, which in turn challenges short and long-range training and staffing programs. The problems are often exacerbated by an aging government workforce.

- **Increasing complexity:** According to the Gartner Group, for every 25% increase in functionality of a system, there is a 100% increase in complexity. As you bring more advanced features and capabilities to more users, your organization must work harder than ever to keep an increasingly intricate system consistently available and secure.

- **Rising expectations:** Your staff, like the citizens you serve and the decision-makers who fund your organization, all use advanced devices and applications every day. Increasingly, they expect your network and devices to deliver the same reliability and convenience that they enjoy with their personal devices and more – and the special challenges you face in operating a mission-critical network don't temper those expectations.

THE SOLUTIONS

Motorola Systems Operation and Management Services are designed to ensure you have a reliable and available high-performance radio communication environment, so you can get the most out of your technology for the benefit of your mission. Motorola will engage and collaborate with you to build an operations and management plan to achieve goals that matter to you while addressing your specific pain points. We help enhance the way you work today, while ensuring you have the flexibility you need for tomorrow.

We can operate, optimize, host and simplify your communications environment — the combination of services we provide depends on your goals and how you want to use your resources. To learn how managed services might work for your organization, consider these examples of how Motorola is using its extensive experience and deep bench of technical experts to meet a variety of customer needs.

ENSURE COST-EFFECTIVE INTEROPERABILITY, REDUCE RISK, SUSTAIN NETWORK AVAILABILITY

The Customer: Midwestern U.S. Statewide Public Safety Radio Network
With aging infrastructure, inadequate coverage and the need for seamless collaboration between agencies, this Midwestern State needed a private communications system that would give them statewide coverage and interoperability but did not have the means or resources to fund the purchase of such a system.

The Solution: Motorola Owned, Motorola Managed
Motorola proposed a true public and private partnership — Motorola owns the infrastructure, takes responsibility for operations and support, and provides user access to the system through per-unit usage fees. This Build/Own/Operate solution addressed the State's challenges by:

- Offering a means to fund a public safety-grade communications system, providing interoperable access to many small local agencies that would not otherwise be able to afford or operate such a system
- Providing the ability to collaborate with surrounding agencies in emergency situations, as well as effectively support day-to-day operations
- Furnishing the resources to provide 24x7 system operations and management
- Supplying the expertise to ensure system expansion as needed
- Ensuring that the system keeps pace with evolving technology
- Shifting operations, service level commitments and support to Motorola

The Results:
Today the state uses a 700/800 MHz IP based radio system with over 270 radio tower sites across the state. More than 36,000 subscribers enjoy highly reliable high-speed mobile connectivity in every corner of the state for a fraction of the cost of building individual networks. The system provides greater than 95% statewide mobile coverage with 8 db portable coverage in major cities. Coverage and interoperability leverage ASTRO® 25 technology that is also designed for redundancy and maximum availability.

The system can easily expand as usage increases and Motorola keeps it up-to-date with current technology. Most important, city, county and state agencies of every size have access to an affordable, reliable and interoperable advanced communication network without having to purchase or operate that network. Users enjoy easy shared communications without taking on the risks or responsibilities of its management.

MINIMIZE THE COST AND RISK OF MIGRATING TO NEW TECHNOLOGY

The Customers: Multiple Counties and Cities in a Southern U.S. State

A group of counties and cities with existing Motorola SMARTNET™/SMARTZONE™ systems were finding that parts and components for their systems were becoming obsolete and unsupported, making it hard to keep their legacy systems running reliably. All wanted to migrate to the latest P25 systems, but they had a number of concerns.

To meet long-term goals, interoperability with neighboring systems was a key requirement, though how to assign responsibility for managing such a complex, interagency IP network was an issue. So was budget, as none of the interested parties had the large amounts of ready capital needed to upgrade all their systems at once. In fact, the communications directors reported that even their operating budgets were under pressure, as they were already being asked to do more with fewer dollars.

The Solution: Motorola Hosted Master Site

Motorola consultants showed the counties and cities that they could preserve their capital by keeping their existing infrastructure assets (backhaul, RF sites, dispatch consoles) and migrating to P25 by using the SmartX solution. Each agency would connect to a Motorola Hosted Master Site, paying an access fee for use of its advanced capabilities.

Because the Master Site is owned and operated by Motorola, no one would have to worry about the complexities of operating an IP-based core. Motorola would partition the system amongst different agencies, ensuring that the shared system would not be accessed by any unauthorized users but could provide interoperability with other agencies on an as-needed basis.

Using a Motorola managed solution met the customer's needs by:

- Providing affordable access to the advantages of advanced radio technology
- Reducing the technical demands on customer's staff while ensuring reliable access to a communication system with guaranteed levels of availability
- Allowing the customers to preserve capital for other purposes by providing a "pay-as-you-use" funding model for the hosted technology
- Extending the life and value of the customer's legacy infrastructure investment while allowing them to adopt a gradual phased approach for technology refresh as budgets became available.

The Results:

Using the Motorola-hosted Master Site, the customers and Motorola were able to devise a cost-effective migration path to P25. As with all our managed services, Motorola provides technology refreshes to the core network, ensuring that the customers are always using a supported technology platform. In addition, the agencies can focus on their organization's missions without having to worry about the management and operation of the radio network. They can upgrade their systems at their own pace while still staying on a supported radio system platform.

KEEP YOUR TECHNOLOGY INVESTMENT, BUT GIVE UP THE RISKS OF MANAGING ITS COMPLEXITY

The Customer: Northern European Nation

The customer desired a nationwide voice and data communications system. They had strict coverage and operational requirements, including excellent coverage over challenging terrain, as well as the flexibility to scale the system to accommodate multiple agencies. The customer had invested significant capital in their radio system infrastructure, but knew they did not have the resources for high-tier 24x7 operation and management of a large network.

The Solution: Motorola Deployment and In-country System Operations and Management

Motorola Managed Services proposed to deploy, operate and manage the national system, allowing users to focus on other missions. Motorola would provide a turnkey service offering wherein the nation would own the system infrastructure and subscribers, while Motorola managed it. Motorola's System Operations and Management Solutions met the country's needs by:

- Determining how to best deploy and scale the system to support more than 1500 sites and 40,000 subscribers, based on our extensive, global experience with large system management

- Developing, contracting and meeting needs-driven service level agreements and key performance indicators to ensure the system's reliable availability and consistent performance

- Providing 24x7 network operational and management support in country

- Providing a predictable and committed fee structure by subscriber that supports utilization of the existing capital investment by many agencies

- Offering transparent reporting on system's operations and usage, ensuring both accountability for current management and intelligence for future planning

The Results:

An in-country Network Operations Center (NOC) was built as part of the management of this system. The Motorola-staffed NOC provides 24x7 system and service availability, performing to strict SLA requirements throughout the country. Motorola's managed services capabilities has enabled nationwide confidence in its communication reliability. Meanwhile, Motorola experts help keep a finger on the pulse of the system's operations and usage, proactively watching for changes in usage or utilization in order to help the Country avoid potential issues and plan for evolving future needs.

MOTOROLA MANAGED SERVICES: EVOLVING TO MEET YOUR NEEDS

Two-way radio systems operate in the most challenging environments. To achieve optimal reliability of today's two-way radio systems requires a clear understanding of how to operate and manage their complexity. That understanding is at the core of Motorola Managed Services – it is the reason we have developed our tools, our processes and the expertise of our employees.

In order to serve your mission and meet your goals, you require reliable levels of performance and availability from your communications systems. That's why our various services are built around Service Level Agreements (SLAs) you determine and we contractually commit to meet. To help you monitor ongoing performance, we keep you fully informed with regular reports on your network. We don't ask you to simply "trust us" – Key Performance Indicators (KPIs) quantify your organization's specific goals and expectations and become our measure of success.

Because your communication goals and the technology that supports them are constantly evolving, you cannot afford to work with a partner who stands still. Constantly streamlined processes are needed to proactively identify, isolate and correct system issues, maximizing your equipment uptime. In addition, your partner must be able to continuously invest in advanced tools, software and resources in order to offer you the best capabilities and outcomes. Motorola's teams of engineers, system analysts, technicians and suppliers understand these needs and vigilantly refresh the processes and technology you depend on without interrupting your critical system communications.

PREPARE FOR THE MOMENTS THAT MATTER

In a mission-critical situation, an underperforming communication system can have significant consequences, costing time, money, and even lives. But you cannot realize your long-term mission strategies if your communication strategy is hindered by looming uncertainty. Motorola Managed Services can help minimize the risk for you, allowing you to focus on your core objective.

Of course, your objectives are unique to your organization. So you need a services partner who is not only prepared, capable and ready to help with complex systems, but who has the flexibility to adjust their services and capabilities to meet your needs.

Motorola has a proven track record in successfully delivering Mission-Critical Managed Services, on a 24x7 basis for many years, against the most stringent SLAs and KPIs, in a variety of ownership and management scenarios. Motorola is willing to take on the responsibility of guaranteeing system reliability and performance, while also relieving you of the financial risks associated with technology management.

Organizations constrained by budget or hampered by lack of resources often long for flexibility – some way to stretch toward an ideal solution while still bending to recognize real-world limits. Motorola makes flexibility practical, offering you a number of ways to access the operational services you need, as well as a variety of realistic financial models to fund them. Let us show you how we can help ensure that your advanced communication system is more affordable, more reliable and more available … for the moments that matter.

For more information on Motorola Managed Services, please visit us on the web at www.motorolasolutions.com/run or access our global directory at www.motorolasolutions.com/contactus.

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