

SERVICES



**Designing, deploying and supporting world class communications solutions.**



# SERVICES

## DESIGN

Expertise, technologies, tools and ideas

**Business environments, regulation, expansion and obsolescence are drivers that dictate change in the way your organization communicates. When it's time to consider a new or upgraded radio network, Tait has the expertise, technologies, tools and ideas to deliver a communications solution that guarantees the outcomes you seek.**

### **EXTEND THE LIFE OF EXISTING EQUIPMENT**

The flexibility at the core of every Tait system design can mean significant savings on capital expenditure.

Legacy equipment can be retained and reused, with custom interfaces and gateways between existing and new technologies. Staged migration keeps legacy equipment in operation for a longer useful life, delaying capital expenditure and aligning with budget and funding cycles.

Optimally-positioned sites can significantly reduce capital expenditure. Tait coverage experts will accurately assess your coverage needs for a more cost-effective solution that requires fewer sites and less infrastructure.

Customized equipment can operate according to familiar processes and protocols, reducing training requirements and increasing user adoption and acceptance.

### **ALIGN YOUR COMMUNICATIONS WITH YOUR ORGANIZATIONAL OBJECTIVES**

Tait Design Engineers engage with your organization to analyse and specify requirements that can contribute directly to strategic objectives. As a result, your radio communications can produce measurable performance efficiencies, increased productivity and safety.

### **IMPROVE COMMUNICATIONS FOR A SAFER, MORE EFFICIENT WORKFORCE.**

Deep industry understanding and four decades of system design experience inform every solution design. Optimized availability, stability and performance across the communications network means workers are safer and more efficient, and communities are protected, with reliable communications they can trust.

### **DESIGN SERVICES:**

- ▶ **System Design** – scopes, defines and delivers a full communication solution.
- ▶ **Coverage Design** – ensures your people have communications availability and reliability wherever you need it.
- ▶ **Network Migration** – delivers a seamless transition to your new network.
- ▶ **Customization** – specifies the design of each element of your radio network based on your requirements.
- ▶ **IP System Design** – scopes and defines system loading and capacity planning for a fully efficient network design.
- ▶ **Network Analysis and Optimization** – aligns network requirements with organizational objectives and critical performance parameters.

## KEY DESIGN SERVICES

### System Design

Expert System Design is where Tait demonstrates deep industry understanding and expertise to significantly improve your operational processes and exceed your network performance expectations.

Tait System Engineers engage with you and your preferred suppliers, to understand your requirements precisely. They will analyse your performance criteria and benchmark key parameters to deliver the right network architecture, products, services and applications for a solution that delivers measurable performance benefits across your organization.

### Coverage Design

Vital communications rely on coverage reliability and availability. Planning and predicting network performance through coverage modelling, then validating and verifying it on a live operating system represents a challenge that is likely to fall outside your core business scope.

Tait coverage design experts understand coverage issues and have the right tools to predict, plan and verify a network coverage plan that meets – or exceeds – your organization’s performance measures.

Tait will deliver a robust coverage design plan, addressing geographical diversity, meeting regulatory challenges within your operating environment and ensuring efficient allocation of your capital and operating expenditure.

### Network Migration

Understanding your future communications needs and successfully implementing a new communications solution involves a complex web of logistical and technology projects.

Tait Network Migration combines expert planning, industry experience and extensive radio communications knowledge in a migration plan for a seamless transition to your new communications network. Migration specialists assess technologies, align your budget constraints, meet critical timeframes and mitigate outage risk to ensure continuity of communications throughout the critical changeover process.

Upgrading your communications network with Tait is based on a staged, seamless upgrade path. Tait will plan and execute a transition that minimizes complexity, risk and operational impact. As your trusted partner, we can negotiate with industry regulators and your chosen suppliers.

### Customization

The significant investment you make in your radio communications network must return improved efficiency, cost-effective communication and greater safety of your workers.

Unlike radio solution vendors that offer pre-packaged or one-size-fits-all solutions, Tait Customization designs radio system elements that precisely fulfill your requirements, adhere to your constraints, and work within your budget. Tait Customization puts your organizational requirements at the forefront.

Tait can design and build custom components and deliver a network in line with your specified outcomes, tailoring every aspect, irrespective of the challenges you face. This can mean retaining legacy equipment, with innovative integration solutions ensuring that communication is not compromised.

Committed to rapid turnaround, the experienced, multi-disciplined team has specialists in hardware, software, mechanical and technical publications.

#### SITUATION

A national fire service needed to upgrade their obsolete fire truck radios to P25 digital. A decade earlier, Tait had customized their analog radio controlheads with large keys for the fire crews to operate while wearing thick gloves. It was critical to maintain familiar functionality on the radio interface, while future-proofing the network with digital technology.

#### RESPONSE

Tait developed new controlheads with an identical profile and user interface, to operate with new digital or analog radios. As the fleet updates their radios, the controlheads remain consistent.

#### OUTCOME

Fire crews experience a substantial increase in radio performance and functionality from their new P25 digital radios, while still using familiar controlheads. The fire service avoided expensive training overheads and potential risk to their critical communications because familiar controls were retained.

# SERVICES

## DEPLOY

Seamless, streamlined and trouble-free

Between understanding your future communications needs and successfully implementing a new communications solution is a complex web of logistical and technology projects. To achieve seamless, streamlined and trouble-free implementation, Tait has the expertise to integrate and deploy your radio solution.

### REDUCE THE TIME TO PRODUCTIVITY WITH EFFICIENT PLANNING

Earlier go-live means you start returning on your communications investment sooner. Industry-leading expertise delivers well scoped, defined and managed projects that are delivered within budget and scope of change requests.

Based on multi-project knowledge and experience, Tait can reduce issues and manage project-related risks during migration to your new network.

### IMPROVE USER ADOPTION RATES AND SATISFACTION LEVELS

When new technology is introduced, workers who are confident and informed will adopt the new system more readily, engage sooner and deliver operational benefits earlier. Every Tait expert that works with your people is committed to familiarizing and informing them, saving time and reducing frustration.

Trained workers can operate and maintain systems without error, and can resolve issues before your communications network is impacted. Contractor callouts are reduced, because your people can perform critical tasks.

### DEPLOY SERVICES:

- ▶ **Project and Program Management** – your network is installed and operational on time and within budget.
- ▶ **Commissioning** – installs, tests and optimizes for a seamless transition.
- ▶ **Technical Training** – the right knowledge to gain the greatest value from your radio network.
- ▶ **Works/ Site/Tower Works Supervision and Acquisition** – manages and supervises site suitability and customer requirements specification.
- ▶ **Acceptance Testing:** Factory, Site, Customer, User – function and performance tests at each milestone.
- ▶ **System Integration** – ensures all equipment and links are integrated as specified.
- ▶ **System Documentation** – provides information you can trust, for day-to-day and mission-critical events.
- ▶ **Installation:** Communications Equipment, Terminals, Lines/ Antennas – installs, connects and tests, for full operability.

## KEY DEPLOY SERVICES

### Project and Program Management

For many organizations, managing a network deployment process falls outside core business scope and represents a significant challenge. The technologies may be unfamiliar and the management activities may require resources that are unavailable within your organization.

Irrespective of your project complexity or size, Tait Project and Program Management helps you accomplish your communication objectives sooner. Tait Project and Program Management knowledge and expertise reduces project-related risk through every phase of your project and results in a faster return on your investment.

### Commissioning

Commissioning is the final, critical stage before your radio solution goes live and your organization begins to realize the benefits of its radio solution investment. Not having your communications investment professionally commissioned could result in unnecessary risks, delays and budget overruns. You need confidence that every network element is correctly installed, tested and optimized.

Tait Commissioning will fulfil the scheduling, cost, safety and quality control requirements of your new or upgraded network. We will integrate and test third party or legacy equipment and work with your preferred equipment and service providers for trouble-free go-live as planned.

### Technical Training

Placing trust in your radio operators, systems administrators, maintenance technicians and network engineers is vital to maximize the economic returns and operational efficiencies from your new radio network.

Tait Technical Training ensures everyone in your organization who maintains, configures, troubleshoots or operates any aspect of your network has the skills and confidence to perform these critical tasks. While often delivered at the time of installation and commissioning, you can choose standard or customized Technical Training programs at any stage, enhancing and updating your people's skills as required.

### System Documentation

Tait System Documentation retains complete and correct information about your organization's radio network, the build configuration as commissioned, as well as system-specific functional information.

Tait System Documentation is unique to your system, describing exactly how each element is positioned, configured and operates. It is vital for system upgrades or expansion and can form the basis of internal training material. Accurate and up-to-date System Documentation means your organization can better receive efficient and effective support, when you need it.

#### SITUATION

Critical trunked radio infrastructure behind this large telecommunications business was becoming obsolete and required urgent upgrading to Tait trunked technology. The organization was operating a mixed fleet of 30,000 radios from multiple vendors.

#### RESPONSE

Tait developed a complex series of custom gateways to keep communications flowing to all terminals - regardless of technology or vendor - across both the legacy and new trunked networks.

#### OUTCOME

The organisation avoided the upfront cost of upgrading their extensive radio fleet and enjoyed consistent, robust operation during the deployment of the new Tait trunked network.

# SERVICES

## SUPPORT

Ongoing assurance and expert support

The value from your communications investment is realised in the months and years that follow handover. That's when the enduring relationship with your communications provider really pays off. Tait Support Services deliver continued, ongoing assurance and expert support for your people and your equipment – for the life of your network.

### PREDICT, PREVENT AND RESOLVE ISSUES BEFORE THEY IMPACT

Regular, scheduled maintenance and real-time monitoring means proactive intervention before issues escalate. Even minor downtime decreases productivity and operational efficiency, increases costs and heightens risk to your workers and your community.

Tait support provides proactive, priority attention and commitment at the level you require, for each aspect of your network. Experts take care of software compatibilities, hardware maintenance and monitoring performance to substantially reduce outages.

### REDUCE RESPONSE AND RECOVERY TIMES IN AN EMERGENCY

Today more than ever, network operators must prove that they are prepared. Critical communications require expert support that guarantees response and recovery times and support your performance parameters. You choose the level of response you need, confident that Tait experts will resolve critical performance issues and communications outages more efficiently and quickly than in-house staff.

### REDUCE MAINTENANCE, REPAIR AND INVENTORY OVERHEAD

Regular, scheduled maintenance carried out by certified technicians can measurably extend the economic life of your radio equipment. Tait can manage your hardware more effectively, with an upfront, predictable cost and guaranteed time to repair. We can free up your back-office resource for more important duties, and manage your inventory and spares overhead more effectively than you can in-house, or with third party contractors.

### OPTIMIZE YOUR NETWORK AS NEW FEATURES BECOME AVAILABLE

Remote system monitoring, regular system and network performance checks and proactive software updates all contribute to optimized network performance. However, as digital radio technology continues to develop, new applications and opportunities become available. Tait is committed your communications future, continually striving to deliver advanced solutions that are relevant to your organization.

### TAIT SUPPORT SERVICES:

- ▶ **Support Agreement** - supports your back office and keeps your network optimized with the level of support you choose.
- ▶ **Health Check** – provides confidence that foreseeable risks are identified and your network performance is optimized.
- ▶ **Extended Product Warranty** – configurable product warranty for your Tait radio equipment.
- ▶ **Software Upgrades and Updates** – advanced features and functions that enhance network performance and extends the life of your network.
- ▶ **Integrator Support** - supports integrators with information to interface to Tait products.
- ▶ **Repairs** – hardware repair services for Tait-supplied equipment, regardless of vendor or warranty.

## KEY SUPPORT SERVICES

### Support Agreement

Even minor network downtime decreases productivity and efficiency, increases costs and heightens the risk to your workers and your community. You need to monitor your network and all its elements, maintain equipment, prevent outages and in a crisis, troubleshoot and resolve issues fast. workers and your community. You need to monitor your network and all its elements, maintain equipment, prevent outages and in a crisis, troubleshoot and resolve issues fast.

A Tait Support Agreement allows you to choose the support configuration that precisely matches the needs of your network. We work with you to understand your support requirements to help you select the right level of support within each of the five support categories.

The result is a support structure that fits your current operating environment and technical resource, while maintaining flexibility for the future.

### Software Upgrades and Updates

Is your current radio network delivering maximum functionality for your organization? Are there new features that would increase operating efficiency or worker safety?

Software enhancements improve equipment operation, increasing network performance and improving worker safety and efficiency. This can add significant value and decrease your operational costs so you can achieve more with your current equipment, extending its useful life and delaying the capital expenditure associated with obsolescence.

Tait software is continuously evolving as the needs of our customers change and we continue to seek ways to increase features and performance.

### Health Check

The impact and consequences of losing communication can range from lost productivity, inconvenience to endangering the lives of radio users, customers and the public.

A Tait Health Check gives you the confidence that foreseeable risks and issues are identified and mitigated to guarantee your communications reliability. It provides network operators with recommendations

### Extended Product Warranty

When radio equipment fails, the consequences for your organization can go far beyond inconvenience. Workers may be unable to communicate effectively and productivity can decline. Your technical resources may be consumed in problem solving outside their capability, compromising safety and increasing costs.

A standard warranty does not necessarily fit all organizations and budgets. Tait Extended Product Warranty provides flexible hardware cover options beyond the Standard Warranty for all Tait equipment. The experts who designed, built and installed your communications equipment provide factory-specification repairs or full replacement.

In addition to the standard two year product warranty, all Tait equipment can be covered for up to five more years, securing an unbeatable seven years' peace of mind cover.

#### SITUATION

Committed to upgrading to P25 technology, this national police force acknowledged that their its communications expertise did not readily transfer to digital communications. They required support to keep their critical communications flowing, during the lengthy 10 year digital migration and beyond.

#### RESPONSE

Tait identified, resourced and trained communications specialists to work within and alongside the Police communications teams, providing day-to-day network management and support for their critical communications.

#### OUTCOME

Police communications are more secure, with potential issues identified and resolved faster by Tait specialists. The police communications team continues to develop confidence and expertise in the new technologies, through this ongoing partnership.



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And the ISO statement is updated to: Tait International Limited facilities are certified for ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) and BS OHSAS 18001:2007 (Occupational Health and Safety Management System) for aspects associated with the design, manufacture and distribution of radio communications and control equipment, systems and services. In addition, all our Regional Head Offices are certified to ISO 9001.

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