

# UPGRADE YOUR MPT NETWORK TO DIGITAL MOBILE RADIO – YOUR WAY



DMR Tier 3 is the logical successor to the MPT trunked radio networks that have served operators well for many years. Like MPT, DMR is a mature, well-defined and trusted open standard, with an increasing presence around the world.

It delivers full feature parity, so the familiar trunked radio features and functions that you and your workforce rely on are available, making it easy to integrate DMR into your workplace processes.

### Double channel capacity

Trunked DMR virtually doubles the frequency capacity of existing analog systems - and some competing digital standards - with TDMA (time division multiple access) technology. So your current frequency licenses will meet both current and future communication needs.

### Data applications

DMR brings increasing business value and greater insight, from multiple, interconnected systems. Tait DMR integrates easily into enterprise systems, with applications including notifications and messaging, location awareness, billing, asset management, outage and fault detection, and packet data services. Voice is simply one application.

### Clear, reliable voice calls

DMR Tier 3 technology delivers uncompromised voice communications that is undiminished, right to the edges of coverage.

**Tait embraced DMR because its proven, modern digital radio standard is highly compatible with the latest ICT architectures. Its open interfaces deliver innovation and ease of integration, while interoperability between different manufacturers' equipment is validated through the active, multi-vendor DMR Association.**



# DMR TIER 3 – THE FUTURE OF DIGITAL TRUNKED RADIO

**It's a fact that analog communications are reaching the end of their economic and technological life, and many old faithful networks will be obsolete or unsupported in just a few years. At the same time, the very real advantages of digital mobile radio beckon – doubled channel capacity, sophisticated data capabilities, and consistent coverage that bring a new world of business efficiency opportunities and workplace safety for your people.**

MPT operators face a challenge. How to take your legacy MPT network to trunked DMR without disruption to your business?

The prospect of a forklift swapover is every organization's worst nightmare. Tait has committed our trunked radio expertise to the task of creating flexible, staged migration solutions that work for our customers, without the downtime, cost and inconvenience.

Our focus is to help our customers to integrate their existing systems and processes and migrate to digital platforms at their pace. In this way, you can fully capitalize your existing analog technology while taking advantage of the rich benefits of a digital platform.

Tait is committed to helping you make that transition. With Tait as your digital communications solutions partner, you can future-proof your communications infrastructure, refresh your fleet, even double your capacity right now. You can make the upgrade to DMR later – managed and timed to suit your business objectives and budget.

Whatever your change drivers are, you choose your own pathway to digital trunked radio, using the Tait solutions and services that work for you.

**“Our job is to keep the lights on. The Tait system allows us to communicate faster with the field during storm situations, to restore power, get problems fixed, and keep the lights on.”**

Tina Andrews – Supervisor, Distribution System Operations Control Center, KCP&L



# BENEFITS OF MIGRATING TO DMR WITH TAIT

## Protect against stranded infrastructure investments

You might need more channel capacity right now. And it might be tempting to look to the technology you already know and trust to get the capacity you need. But no matter what analog technology you choose, you risk stranding your investment.

Specifying Tait DMR Tier 3 for your digital future means you can make the infrastructure upgrades you need right now. Base stations and core infrastructure will operate smoothly across your existing MPT network until it's time to make the software-only upgrade to digital.

## Refresh your fleet

Expand your fleet, upgrade work groups or replace legacy radios, Tait multi-mode 9300 series can operate seamlessly across analog and digital, trunked and conventional sites, without any user involvement. Indeed, roaming is so seamless they are unlikely to notice as they move between sites.

## Flexible timing to suit your business needs

In business, timing is everything. Whether your move is driven by increased demand, budget cycles or looming equipment obsolescence, a Tait DMR migration solution is customized to your timing. Your upgrade pathway is clear, agreed and managed by experts.

## Access greater data capability

Alongside the unprecedented (and rapidly growing) range of integrated digital tools on the market, Tait has developed specific applications that can map the location of workers and vehicles, monitor and manage power usage, control machines and devices over wider areas, and monitor, diagnose and remediate network issues, all from your back office.

## Uncompromising safety focus

Voice and data communications, location notification and biometric health monitoring help to ensure workers are accounted for, emergency responses are immediate, and ultimately, accidents are avoided.



## MPT feature parity plus

The overhead involved with any technology overhaul should not be underestimated – engaging workers with new devices and processes can be challenging. Tait DMR Tier 3 infrastructure and terminals have all the familiar features and functions that made our MPT products so enduring, plus new DMR features that workers will love. This reduces the time and overhead involved in making sure everyone is on board with the changes.

## Minimized disruption with software-only upgrades to DMR

The final step to full DMR operation is a software-only upgrade of terminals and base station equipment. While this is not without overheads, the upgrade minimizes disruption and may even be executed remotely.

## Reduced overheads

Every organization needs around the clock communications without disruption, but maintaining operational continuity and minimizing expensive downtime becomes more challenging and more costly, as your organization grows. DMR Tier 3 is a high performance solution that guarantees continuous communications, with multiple levels of resilience to ensure no single point of failure. And the simplified network architecture and site equipment provide equivalent – or greater – coverage with reduced operational and maintenance overhead.

**“Having a quality product to count on during normal work as well as emergency situations provides a level of comfort that increases morale in the users.”**

Medium enterprise energy and utilities company. Researched by Techvalidate



# THE PATHWAY TO YOUR DIGITAL FUTURE

What makes the Tait migration strategy so innovative?

**Flexibility. That means the priorities and the timeframe are yours. The three components of the Tait migration solution offer genuine flexibility and scalability. So you can migrate to DMR your way, not ours.**

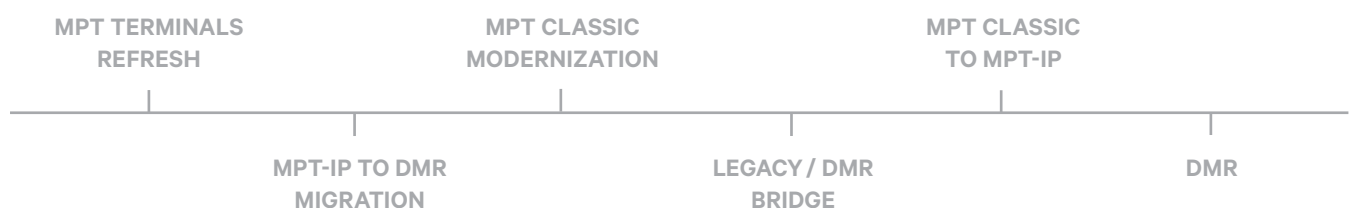
## 1. Multi-mode terminals and base stations

Tait digital-ready, software-upgradable terminals and base stations mean you can spread capital expenses and balance operating expenses. Tait quad mode TP9300 and TM9300 portable and mobile radios can refresh your fleet now, and continue to operate in analog trunked (or conventional) mode. Then it's a simple software upgrade to digital later.

Tait TB9300 Quad Mode Base Stations can replace failing or obsolete analog site equipment right now, with software-only upgrades to digital as required. Working with the innovative TN9500 Inter-Network Gateway, these resilient base stations can function across MPT and DMR systems, as you gradually transition to full DMR operation.

## 2. TN9500 Inter-Network Gateway

The Tait TN9500 Inter-Network Gateway is an inter-network gateway between legacy analog systems and digital mobile radio (DMR) systems. Using built-in DMR-specified AMBE 2+ vocoders, it can operate seamlessly between analog and digital voice formats so that businesses can transition to DMR gradually.





### 3. Comprehensive migration services

To offer a complete MPT-to-DMR Tier 3 migration solution, services play a key role. Based on decades of experience in the field, Tait has developed and defined a comprehensive suite of migration services to support our customers throughout the migration project, and beyond. Working within your timelines and priorities, each migration follows a five-step process, which is fine tuned and customized to specific requirements.

- > **ASSESSING** Business requirements, operational requirements, change management, DMR capabilities, terminals, infrastructure and applications.
- > **PLANNING** Sequence and priorities (fleets, coverage, capacity), approach (geographic, workgroups), network addressing, fleet requirements and migration priorities.
- > **DESIGNING** Coverage, linking, network assets (antenna/tower/power), utilization and growth, capacity, future growth, voice/data, user expectation.
- > **DEPLOYING** Fleet migration, infrastructure installation, configuration and testing, terminal programming, base station upgrades and replacements, technical training.
- > **MANAGING** Remote and/or network management service for the transition and beyond.



Other services include change management, radio deployment service, extending numbering schemes, new product integration and new site deployment.

**It's time to begin your MPT upgrade to DMR Tier 3. Talk to the experts. Talk to Tait.**

Tait has taken every care in compiling this brochure, but we're always innovating and therefore changes to our models, designs, technical specification, visuals and other information included in this brochure could occur. For the most up-to-date information and for a copy of our terms and conditions please visit our website [www.taitradio.com](http://www.taitradio.com).