

UPGRADE YOUR MPT NETWORK – YOUR WAY





It's a fact that circuit-switched analog networks are becoming obsolete, as agencies move to IP-based networks. 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-Classic operators face a challenge. How to take your legacy MPT-1327 radio network into the future 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 continue to operate on their existing MPT-1327 radio networks while migrating to MPT-IP or DMR Tier 3 at their pace. In this way, you can fully capitalize your existing analog system for as long as you need, before moving towards the rich benefits of a digital platform.

Tait is committed to helping you make that transition. With Tait as your 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 at any time in the future to suit your business objectives and budget.

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

MIGRATING 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 without a well-defined technology pathway, you risk stranding your investment.

Specifying Tait MPT-IP as a pathway to your digital future means you can make the infrastructure upgrades you need right now. TB9300 Base stations and TN8291 MPT-IP core infrastructure will operate smoothly across the TN9500 Inter-Network Gateway to your existing MPT-Classic network until you choose 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 subscriber terminals can operate seamlessly across analog and digital trunked sites, without any user involvement.

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 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 work safety applications ensure workers are accounted for, emergency responses are immediate, and ultimately, accidents are avoided.

MPT1327 feature parity plus

The overhead involved with any technology upgrade should not be underestimated – engaging workers with new devices and processes can be challenging. Tait 9300 range of infrastructure and terminals have all the familiar features and functions that made our MPT1327 products so enduring, plus new 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

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.

TAITNET ANALOG MPT-IP TRUNKED NETWORKS

MPT-IP is an MPT-1327 trunked radio network that provides IP and digital functionality, without compromising on the scalability, flexibility, functionality, or cost-effectiveness that classic MPT-1327 networks enjoy. As a cost-effective VoIP communications system, it provides the enhanced digital connectivity you need today, with a clear upgrade pathway to future digital communication.

Advanced functionality

TaitNet MPT-IP delivers functionality for today, with the flexibility to migrate to digital technologies tomorrow. It provides integrated IP, a range of connection methods, advanced group calling, mission-critical and geographically redundant infrastructure, as well as a range of other benefits.

Investment protection

Because TaitNet MPT-1327 networks are modular, you can add functionality, capacity, and enhancements seamlessly, to meet changing requirements. The Tait MPT-IP migration solution allows sites and channels to be added without the large (often hidden) costs of interconnection upgrades.

Future migration path

By providing a seamless migration path to digital radio technologies such as DMR in the design, Tait MPT-IP can support MPT-1327 customers now, and provide a seamless migration to digital DMR Tier 3 technology when you need it.

Multiple call types

A range of call types and call features means that your network users can communicate how and when they want.

- > **Radio-to-radio:** users can communicate privately in a one-to-one call, without the rest of the fleet listening in.
- > **Radio-to-telephone:** calls can be made between radios on the network and landline telephones on PABX or PSTN networks.
- > **Group:** group calls have been enhanced to offer faster group call setup, providing radio users with conventional-like calling, such as conference calls, broadcast calls, late entry, dynamic re-grouping, local groups and registration based groups.
- > **Emergency:** emergency calls clear down normal priority calls if there are no free channels. The network highlights emergency calls and sends out alarms via dispatch and consoles.

“Rock solid hardware”

Engineer, Minnesota Power Inc.
Researched by Techvalidate



UPGRADING TO DIGITAL MOBILE RADIO

DMR Tier 3 is the logical successor to the MPT-1327 trunked radio networks that have served operators well for many years. Like MPT-1327, 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

DMR virtually doubles the frequency capacity of existing analog systems – and some competing digital standards. Spectrally efficient 12.5 kHz TDMA (time division multiple access) technology give 6.25 kHz equivalency, meeting future FCC narrowbanding regulations, 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 multi-vendor DMR Association.



FOUR STEPS TO UPGRADING YOUR MPT NETWORK

What makes the Tait migration strategy so innovative?

Flexibility. That means the priorities and the timeframe are yours. The four components of the Tait migration solution offer genuine flexibility and scalability, so you can migrate to DMR your way.

1. Multi-mode terminals

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

2. Multi-mode base stations

When connected to a Tait MPT-IP Node, Tait TB9300 and TB7300 Base Stations can replace existing site equipment right now. A TN9300 DMR node and DMR software license additions to the TB9300 and TB7300 base stations are all that's needed, to upgrade to a spectrally-efficient DMR system.

3. Tait UnifyNetwork Solution

The Tait TN9500 Inter-Network Gateway, part of the UnifyNetwork Solution, is an inter-network gateway between legacy analog systems and digital mobile radio (DMR) systems. Using built-in software vocoders, it provides a scalable solution to translate between MPT-Classic, MPT-IP, and DMR networks.



4. Comprehensive migration services

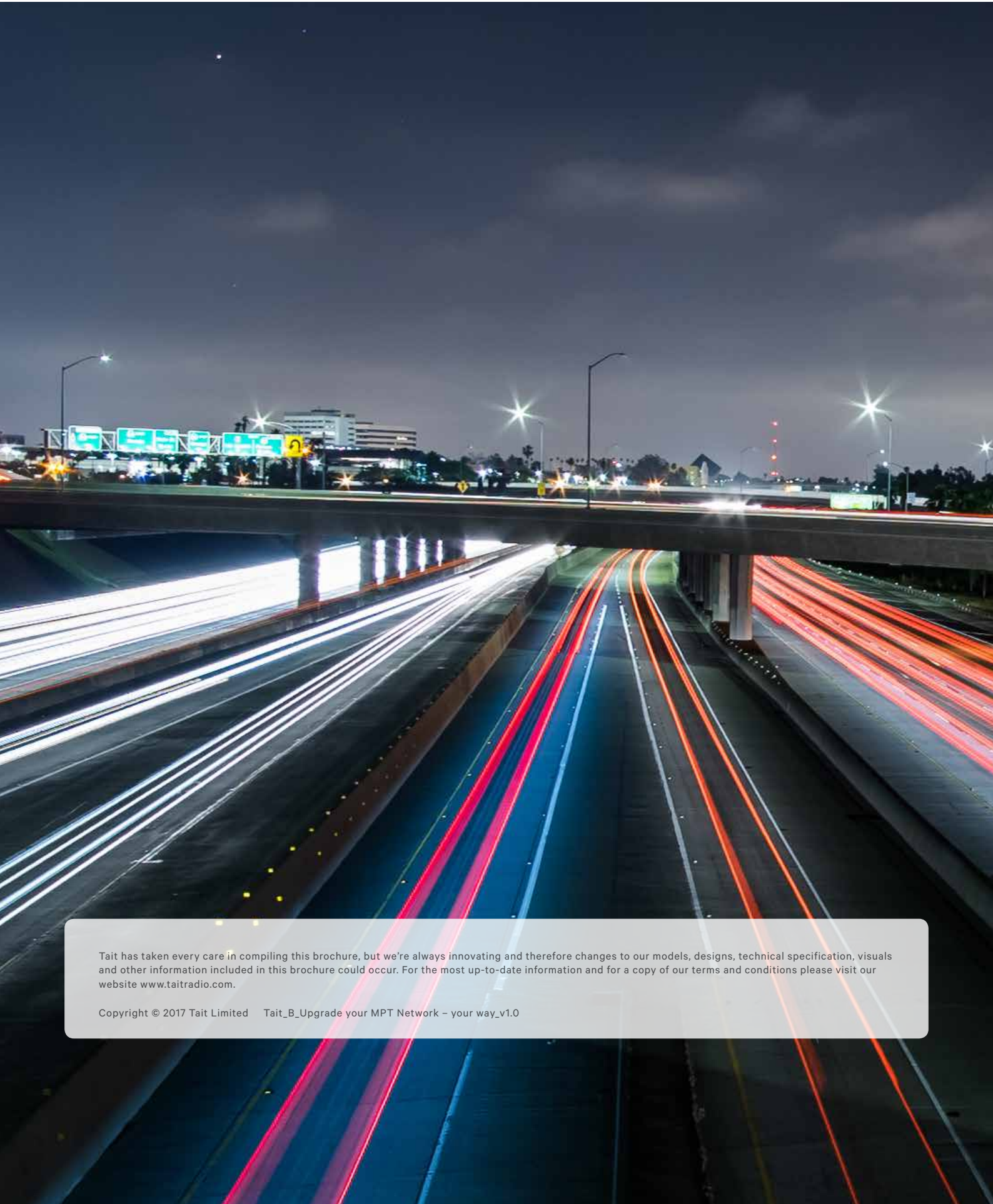
To offer a complete migration solution, services play a key role. Based on decades of experience in the field, Tait has developed and defined a comprehensive suite of migration services to support our customers throughout the migration project, and beyond. Working within your timelines and priorities,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

- > **Assessing** Business requirements, operational requirements, change management, terminals capabilities, 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 new product integration and new site deployment.



**It's time to begin your upgrade to IP.
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.

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