L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers’ mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.
FLEXIBLE MIGRATION

Advance Business Efficiencies and Worker Safety

Circuit-switched analog networks are becoming obsolete as agencies move to IP-based systems. At the same time, the significant advantages of digital mobile radio become more evident, improving organizational flow through double channel capacity, new, sophisticated capabilities and more consistent coverage.

L3Harris Digital Mobile Radio (DMR) Tier 3 and MPT-IP Solutions

As analog systems near end of life, the time and cost-intensive process of a forklift changeover to DMR and IP-based systems can be an organizational nightmare. L3Harris has dedicated our trunked radio expertise to create flexible, staged migration solutions that minimize downtime, costs and inconveniences.

We believe our customers should be able to continue operating on their existing MPT1327 radio networks while migrating to MPT-IP or DMR Tier 3 at their own pace. This allows organizations to fully capitalize their existing analog system for as long as needed before moving toward the rich benefits of a digital platform.

With L3Harris as your partner, you can refresh your fleet, double your capacity and get your infrastructure ready for the future. You can make the upgrade to DMR at any time to suit your business objectives and budget.

Whatever your change drivers are, you choose your own pathway forward, using the L3Harris solutions powered by Tait and services that work for you.

INVEST IN YOUR FUTURE TODAY

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.

Choosing L3Harris 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, L3Harris multi-mode TB9300 series subscriber terminals can operate 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 L3Harris migration solution is customized to your timing and is managed by experts. Your upgrade pathway is clear.

Flexible timing to suit your business needs

Access greater data capability

Along with the rapidly growing range of digital tools on the market, L3Harris integrates applications to improve your network performance. Administrators 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.

Uncompromising safety focus

Voice and data communications, location notification and work safety applications enable workers to be accounted for, emergency responses to be immediate and accidents to be avoided.

MPT1327 feature parity plus

Engaging workers with new devices and processes can be challenging. The L3Harris TB9300’s range of infrastructure and terminals has the familiar features and functions of our MPT1327 products, plus new features that workers will find extremely valuable. This support reduces transition time and overhead.

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 overhead, the upgrade minimizes disruption and may be done remotely.

Reduced overhead

Every organization strives for reliable communications without disruption. But maintaining operational continuity and minimizing expensive downtime may be challenging as your organization grows. DMR Tier 3 is a high performance solution that supports continuous communications with multiple levels to guard against a Single Point of Failure. Our simplified network architecture and site equipment provide equivalent – or greater – coverage with reduced operational and maintenance overhead.

INVEST IN YOUR FUTURE TODAY
L3HARRIS ANALOG MPT-IP TRUNKED NETWORKS

MPT-IP is an MPT1327 trunked radio network providing IP and digital functionality without compromising scalability, flexibility, functionality, or the cost-effectiveness of classic MPT1327 networks. As an economical VoIP communications system, MPT-IP delivers the enhanced digital connectivity you need today, with a clear upgrade pathway to future digital communications.

Advanced functionality
L3Harris MPT-IP supports 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, along with a range of other benefits.

Investment protection
L3Harris MPT1327 networks are modular, allowing you to smoothly add functionality, capacity and enhancements to meet your changing requirements. Our MPT-IP migration solution supports the addition of sites and channels without the large and often hidden costs of interconnection upgrades.

Future migration path
By including a migration path to digital radio technologies (such as DMR) within the network’s design, L3Harris MPT-IP can support MPT1327 customers now and as they migrate to digital DMR Tier 3 technology in the future.

Multiple call types
A range of call types and call features allow network users to communicate how and when they need:

- **Radio-to-radio**
  - Private communications in a one-to-one call, without the rest of the fleet listening

- **Radio-to-telephone**
  - Calls can be made between radios on the network and landline telephones on PBX or PSTN networks

- **Group**
  - Group calls are enhanced for faster group call setup providing radio users with conventional-like calling, including conference calls, broadcast calls, late entry, dynamic re-grouping, local groups and registration based groups

- **Emergency**
  - Emergency calls clear normal priority calls if there are no free channels. The network highlights emergency calls and sends out alarms via dispatch and consoles

UPGRADING TO DIGITAL MOBILE RADIO

DMR Tier 3 is the logical successor to MPT1327 trunked radio networks. Like MPT1327, DMR is a mature, well-defined and trusted open standard, with an increasing presence around the world.

DMR Tier 3 delivers full-feature parity, so the familiar trunked radio functions you rely on are available, making it easy to integrate DMR into 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 Time-division Multiple Access technology (TDMA) provides 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 increases business value and provides greater insight over multiple, interconnected systems. Our solutions easily integrate with enterprise platforms, resulting in greater capabilities including notifications and messaging, location awareness, billing, asset management, outage and fault detection and packet services.

Clear, reliable voice calls
DMR Tier 3 technology delivers reliable voice communications that are available to the edge of coverage.

L3Harris embraces DMR because it’s a proven, modern digital radio standard highly compatible with the latest ICT architectures. Its open interface delivers 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

Flexibility and scalability are hallmarks of the L3Harris migration strategy. Priorities and time frames are set by you, so you can migrate to DMR your way.

1. Multi-mode terminals
L3Harris digital-ready, software-upgradable terminals and base stations allow you to spread capital expenses and balance operating costs. L3Harris 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 L3Harris MPT-IP node, L3Harris TB9300 and TB7300 Base Stations immediately replace existing site equipment. A TN9300 DMR node and an additional DMR software license for the TN9300 and TB7300 Base Stations are all that is needed to upgrade to a spectrally-efficient DMR system.

3. UnifyNetwork Solution
The L3Harris TN9500 Inter-Network Gateway works as part of our UnifyNetwork Solution to provide a pathway between legacy analog and 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
Whether your move is driven by increased demand, budget cycles or equipment obsolescence, our experts work with you to develop and manage the transition to digital. We have a comprehensive suite of services and time-tested, five-step processes to develop and deliver a plan that works best with your timeline and priorities.

- **Assessing**  
  Business requirements, operational requirements, change management, terminal capabilities, infrastructure and applications

- **Planning**  
  Sequence and priorities for fleets, coverage and capacity, geographic and workgroup approach, network addressing, fleet requirements and migration priorities

- **Designing**  
  Coverage, linking, network assets (antenna/tower/power), utilization and growth, capacity, future growth, voice/data and user expectations

- **Deploying**  
  Fleet migration, infrastructure installation, configuration and testing, terminal programming, base station upgrades and replacements and technical training

- **Managing**  
  Remote and/or network management service for the transition and beyond

It’s time to invest in the future. Talk to L3Harris.